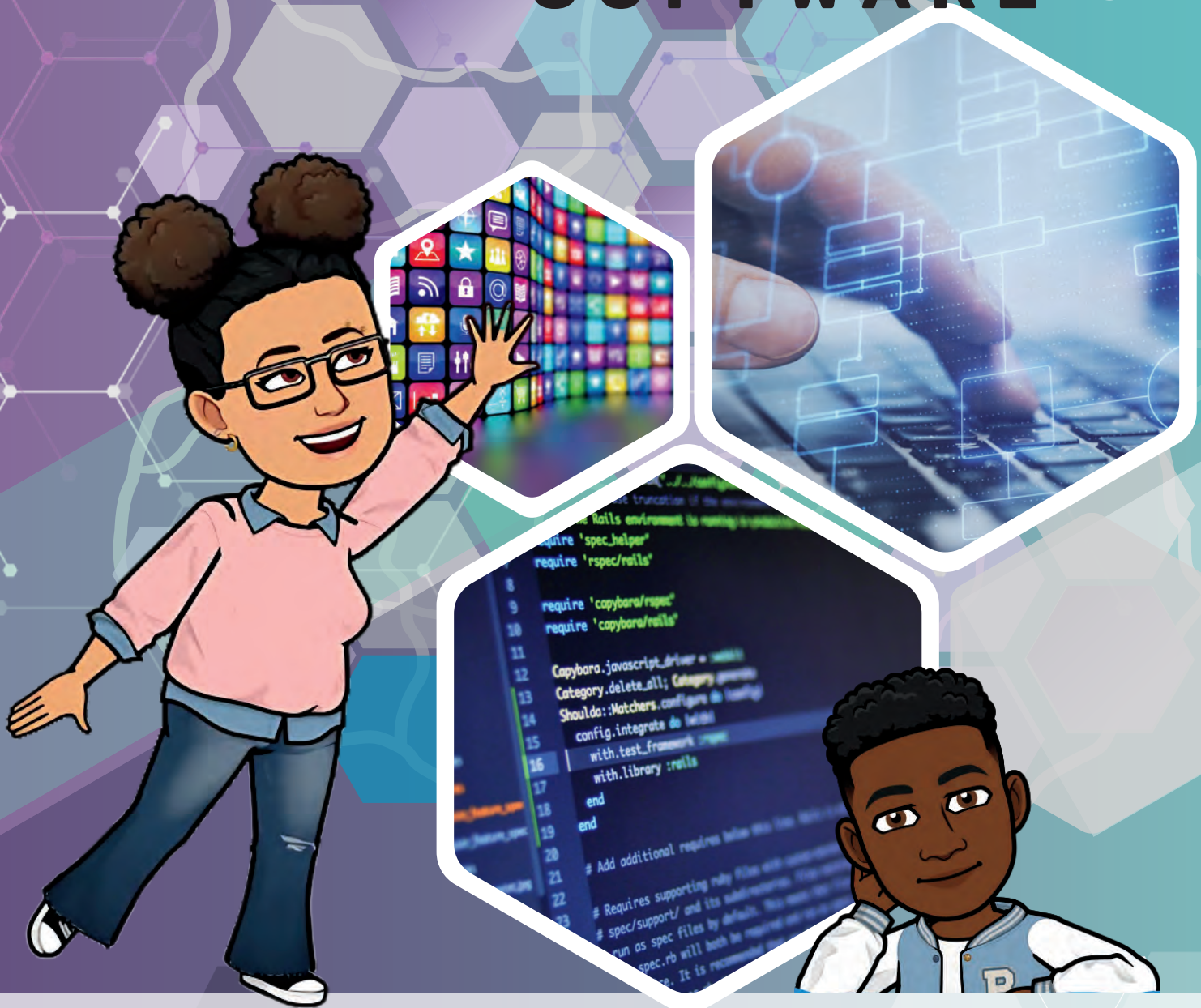
#WORKING URUGUAY

BACHILLERATO INFORMÁTICA 1

SOFTWARE



ANEP
CONSEJO DIRECTIVO CENTRAL
DIRECCIÓN DE POLÍTICAS LINGÜÍSTICAS

Autoridades

CONSEJO DIRECTIVO CENTRAL

Dra. Virginia Cáceres Batalla - Presidenta
Dr. Juan Gabito Zóboli - Consejero
Profa. Dora Graziano - Consejera
Mtra. Insp. Daisy Iglesias - Consejera
Prof. Julián Mazzoni - Consejero
Dra. Camila Senar Bonard - Secretaria General

DIRECCIÓN EJECUTIVA DE POLÍTICAS EDUCATIVAS

Dra. Adriana Aristimuño - Directora

DIRECCIÓN DE POLÍTICAS LINGÜÍSTICAS

Dr. Aldo Rodríguez - Director
Mag. Leticia Andregnette - Sub-Directora

DIRECCIÓN GENERAL DE EDUCACIÓN TÉCNICO PROFESIONAL

Prof. Ing. Agr. Juan Pereyra - Director General
Profa. Dra. Laura Otamendi - Sub-Directora General

INSPECCIÓN DE ASIGNATURAS DGETP

Inspectora Coordinadora Profa. Guadalupe Barreto

INSPECCIÓN DE LENGUAS EXTRANJERAS DGETP

Inspectora Profa. Verónica Morás
Inspectora Profa. Gloria Silva

EQUIPO CONTENIDISTA

Profa. Ana Laura López Cazarré
Profa. María Virginia Reinoso Puigvert
Prof. Aldo Rodríguez
Profa. Verónica Velázquez Pérez

DISEÑO Y DIAGRAMACIÓN

Profa. Ana Laura López Cazarré
Profa. María Virginia Reinoso Puigvert
Profa. Verónica Velázquez Pérez

Agradecimientos

La realización de este manual fue posible debido al esfuerzo de muchos actores. Es importante que agradezcamos a cada uno de ellos.

- A las personas que colaboraron compartiendo sus experiencias, conocimientos y/o historias de vida.
- A Meghan Hesterman, Fulbright ETA, por su colaboración en la corrección de estilo de los textos.
- Diego Barreto, Carla Rollandi y Hamlet Fernández, creadores del proyecto “Drone Control”.
- Juan M. Lavista Ferres, vicepresidente y chief data scientist de Microsoft AI For Good Lab.
- Martin Alejandro Marcher Bertotto - Segment Marketing Owner - Siigo Memory

Some of the materials included in this book were adapted from the **#LivingUruguay** Series.

References


READ


WRITE


LISTEN


SPEAK


DISCUSS


WORK IN PAIRS


WORK IN GROUPS


ROLE-PLAY/ PERFORM

SEARCH THE WEB


PLAY A VIDEO / AUDIO


RECORD


THINK


PLAY A GAME

PROJECT


HELP

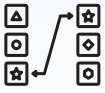

WATCH A VIDEO


IT'S YOUR TURN! / YOUR VOICE MATTERS!


TIME-ALLOTTED TASK


CONVERSATION CIRCLE


MARKER TALK


MATCH

Contents

UNIT 1

Computer software

1 What is it?

Come to the board and **write** what comes to your mind when you think about “Computer Software".

How is computer software connected to everyday life?

Get into small groups and **discuss** these questions:

- What are some examples of computer software that you use in your daily life?
- How has software technology impacted our society and the way we live and work?

Jot down some ideas.

Inés is talking to Laura, her mother. **Read** the dialogue and **highlight** the ideas that people, who know nothing about the topic, should know.

(Photograph by PickPik.com)

Inés: Computer software refers to the programs, data and instructions that tell a computer what to do. It includes everything from your operating system, like Windows or Mac OS, to the applications you use, like web browsers and word processors.

Laura: So, is it like the brain of the computer?

Inés: More like the computer's *thoughts!* Software is what makes a computer useful and functional, without it a computer would just be a bunch of hardware components.

Inés showed her mother this paragraph from one of her IT books.

Read it **in pairs** and **discuss** how the concepts of the human body and computer technology are compared and related to each other. Do you agree with this comparison?

Similar to how the human body needs the brain to process information and control its actions, a computer relies on its central processing unit (CPU) to function as its *'brain'*. The CPU, along with other hardware parts like memory and storage, makes up the computer's body, providing the physical structure for its operations. However, just as a brain without activity remains inactive, the computer's hardware cannot function without software to activate and direct it. Computer software, the computer's thoughts, includes programs, data, and instructions that give the machine direction and purpose. From managing resources with an operating system like Windows or macOS to using everyday applications like web browsers and word processors, software brings the computer to life, allowing it to work and serve its purpose in the digital world.

Brainstorm other analogies between human biology and computer technology. **Share** your ideas with the rest of the class.

Help Inés complete her homework by writing the computer software terms next to their definition.

· patch · open source · user interface (UI) · cache · cloud computing · · ~~operating system (OS)~~ · algorithm · firewall · encryption · debugging ·

1. operating system (OS) — A program that controls the basic functions of a computer and manages hardware resources.
2. _____ — A security system that protects a network by monitoring and controlling incoming and outgoing network traffic.
3. _____ — Software that is distributed with its source code, allowing anyone to view, modify, and distribute it.
4. _____ — The part of a software application that a user interacts with, including menus, buttons, and graphical elements.
5. _____ — A high-speed data storage mechanism used to store frequently accessed data for quick retrieval.
6. _____ — A small software update designed to address specific issues or vulnerabilities in a program.
7. _____ — A technology that allows users to access and store data and applications over the internet, rather than on a local device.
8. _____ — The process of identifying and fixing errors or defects in software code.
9. _____ — A set of rules or instructions used in calculations or problem-solving.
10. _____ — The process of converting data into a code to secure it from unauthorized access.

Did you know?

The term **debugging** was coined by Admiral Grace Hopper, who worked at Harvard University in the 1940s. When one of her colleagues found a moth (a *'bug'*) interrupting the operations of one of the university's computers, she told them they were *debugging* the system. Since then, errors in software code have been called 'bugs'.

Go back to **small groups** and **look** for relevant information about operating systems, antivirus software and gaming software. Then, **present** a brief summary of your findings (written or spoken) to the class.
You can **use** these questions to guide your work.

1. What is an operating system?
2. What are the main features of different operating systems?
3. Why is antivirus software important?
4. What are some examples of popular antivirus software?
5. What is gaming software?
6. What are some popular gaming software platforms?
7. How does gaming software contribute to the gaming experience?
8. What are the system requirements for running gaming software?

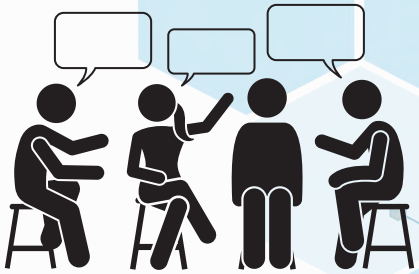
When you finish, **discuss** this question.

- What type of uninvented computer software do you think would be useful in your everyday life?

Conversation Circle

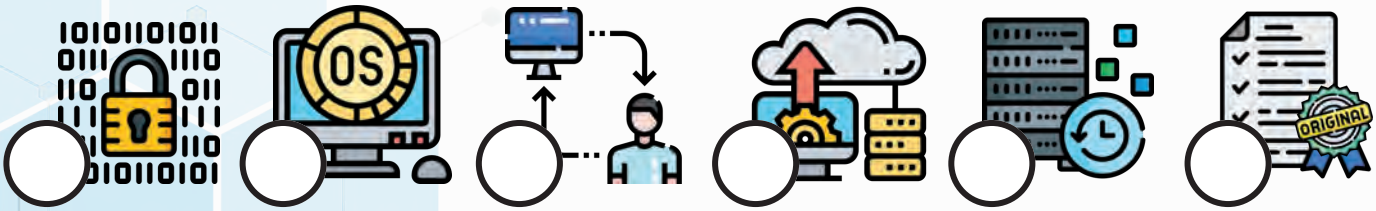
- There are five chairs at the front of the classroom.
- One volunteer belonging to the groups from the “uninvented” computer software activity sits on one chair.
- You have to speak for one minute about the benefits and challenges of creating specific software products.
- Every participant in the conversation circle must participate in the discussion.
- After one minute, you will hear your teacher clapping hands and you go back to your seats. A new participant from the group has to continue with the discussion.

TIP! When the students are discussing in the conversation circle, the rest of the class must remain silent.



2 Where to store it on your PC

Look at these icons. What do they represent?



Complete the crossword about storage and computer software. Then, **match** the icons to the terms.

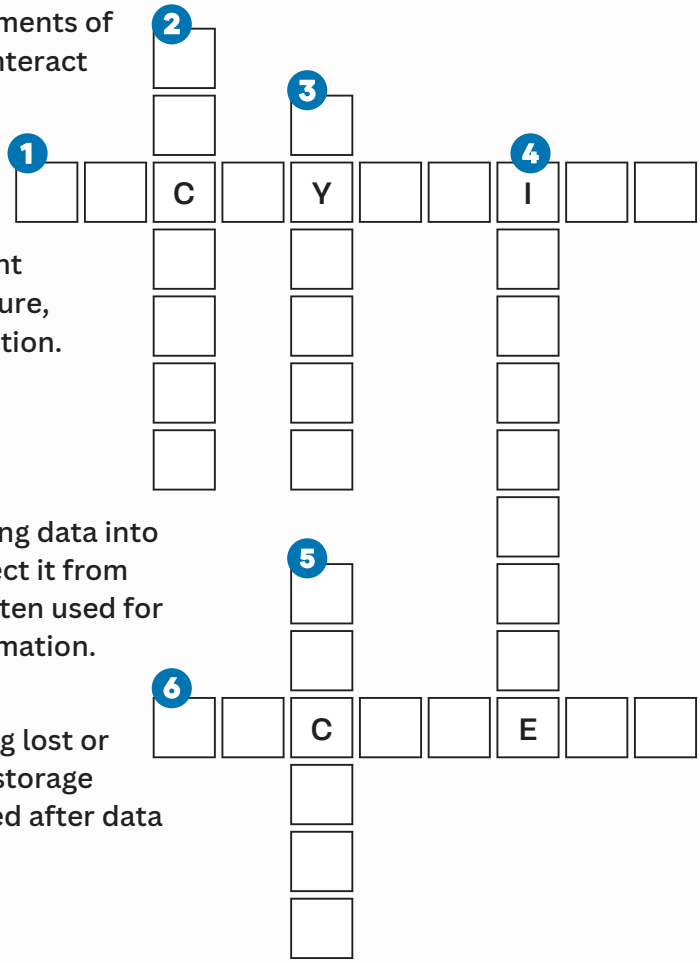
Down

2 Software _____ A legal agreement that outlines the terms and conditions for using a particular software application, including user rights and restrictions.

3 Operating _____ Software that manages hardware and provides a user interface for interacting with a computer, such as Windows, macOS, and Linux.

4 User _____ The visual and interactive elements of software that allow users to interact with and control computer applications.

5 Cloud _____ The process of creating copies of important data in cloud-based servers to prevent data loss due to hardware failure, corruption, or accidental deletion.



Across

1 Data _____ The process of converting data into a coded format to protect it from unauthorized access, often used for securing sensitive information.

6 Data _____ The process of retrieving lost or inaccessible data from storage devices, often performed after data loss incidents.

Inés continued researching how software works and she found this interesting article. Before you read, **match** the following terms to their definitions:

1 Operating System 2 Virtual Memory 3 Database Management System

_____ A software-based concept that extends a computer's available memory.

_____ Software that organizes and manages large volumes of data efficiently.

_____ The control center of a computer system, managing tasks like file organization.

Navigating Data Dynamics
& computer software

In the world of computer software, grasping how data is managed is vital for smooth operation. Operating systems serve as the control center, managing tasks like file organization, virtual memory use and database handling. This article explores these key concepts to understand their importance for efficient software performance.

File Storage in *Operating Systems*

The operating system plays a crucial role in managing file storage. It provides a hierarchical file system structure where files and folders are organized. The operating system also handles tasks such as file creation, deletion, copying and moving. Understanding how the operating system manages storage is fundamental to efficient software usage.

Virtual *Memory*

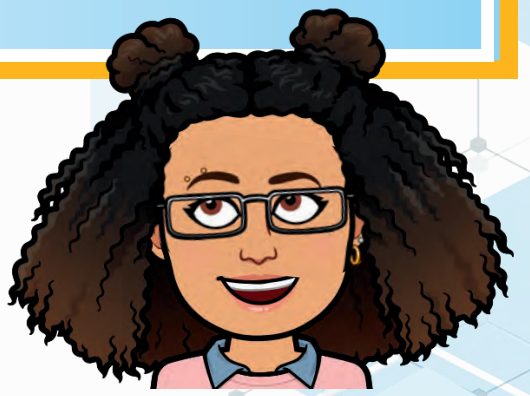
Virtual memory is a software-based concept that extends a computer's available memory by using a portion of the hard disk as temporary storage. When physical RAM is insufficient to hold all the data required by running programs, the operating system transfers data to and from the hard disk as needed. This process allows users to run more programs than could fit entirely in physical RAM.

Database *Storage*

Database management systems (DBMS) play a critical role in applications requiring efficient data storage and retrieval. These systems utilize specialized software to organize and manage large volumes of data effectively. Users interact with databases through software applications, while the DBMS ensures data integrity, security, and reliable storage and retrieval processes.

Did you know? A **hierarchical file system** uses directories to organize files into a tree structure. In this system, directories contain information about both files and other directories, called subdirectories which, in turn, can point to other subdirectories, and so on.

(Source: Wikipedia.com)



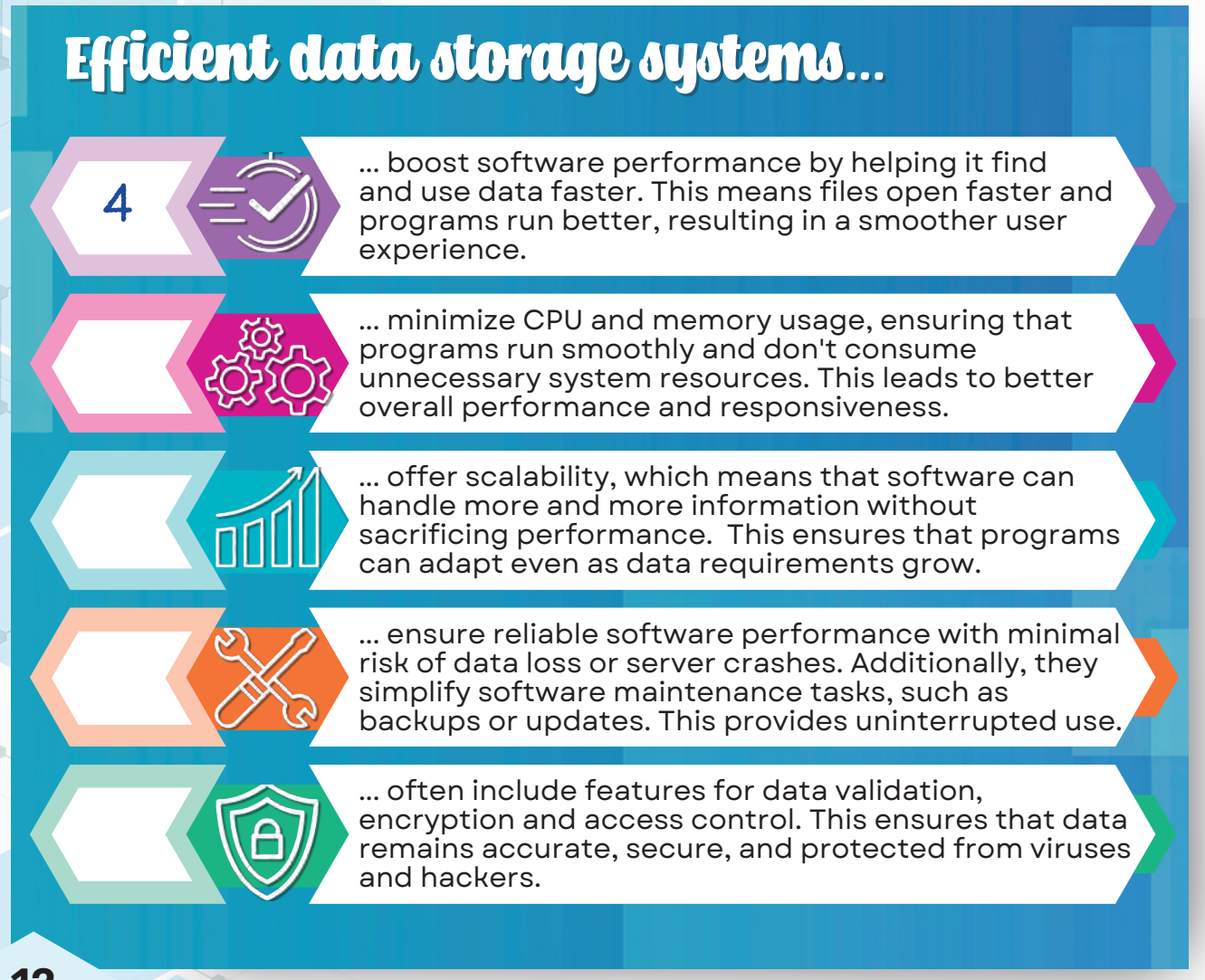
Read the article again and **answer** the questions.

1. What is the primary role of the operating system in managing file storage?
2. Why is it important for users to understand how the operating system manages storage?
3. How does virtual memory extend a computer's available memory?
4. What is the role of a database management system (DBMS) in software applications?
5. List two key functions that DBMS performs in managing data.
6. Can you think of other tasks that operating systems handle besides file organization, virtual memory use and database handling?

Data storage systems are infrastructure or mechanisms designed to *store, manage,* and *access* data efficiently. In modern computing environments, there is often a combination of both hardware and software components working together to form an efficient data storage system.

Read the infographic and **write** the subtitles in the correct place.

1 Better security
2 Flexible data management
3 Optimized Resource Usage
4 Faster Access
5 Reliable Performance



How do disks and RAM memory differ?
Get in pairs and **complete** this chart.

	Disks	RAM
Functionality		
Speed		
Volatility		
Capacity		
Cost		

Choose one of the aspects from the chart and **write** a short paragraph comparing and contrasting disks and RAM memory.
Check the guidelines for writing paragraphs in the SOS Box on the next page.

Guidelines for writing paragraphs

Topic Sentence: Start your paragraph with a clear topic sentence that introduces the main idea or point you will discuss.

Supporting Details: Provide supporting details, examples or evidence to explain and/or elaborate on the main idea presented in the topic sentence.

Coherence and Unity: Ensure that all sentences in the paragraph are related to the main idea and contribute to the overall coherence and unity of the paragraph.

Transitions: Use transitional words and phrases (e.g., *however, furthermore, in addition, but, on the contrary, etc.*) to connect sentences and ideas within the paragraph.

Clarity and Conciseness: Use simple language that is easy to understand for your intended audience.

Grammar and Punctuation: Pay attention to sentence structure and use punctuation marks such as commas, periods and apostrophes appropriately to enhance clarity and readability.

Present your paragraph to the class. **Read** it aloud and provide constructive feedback to your peers. You can **use** this SOS box to help you.

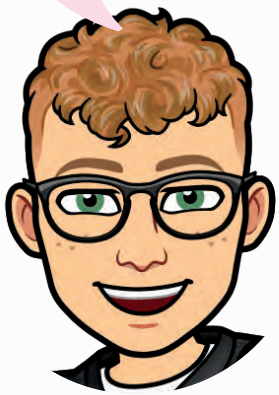
- Your paragraph is well-structured and easy to follow.
- Consider including examples to illustrate your points.
- Your explanation is accurate and demonstrates a good understanding of the topic.
- Your paragraph is interesting and keeps the reader's attention.
- Keep up the good work!

3 PCs vs mobiles

Look at these pictures. How would you describe your experience using these devices? Satisfying? Amusing? Interesting? Disappointing? Boring? Useful? Frustrating?

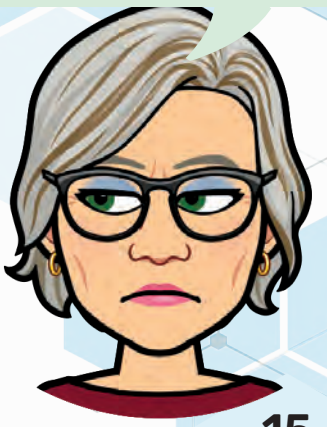
What are the advantages and disadvantages of each one? **Read** what the characters think about this topic and **give** your own opinion.

When I travel by bus, I prefer using a tablet to watch series because they often have better speakers, which improve the audio quality.



I like watching videos at home on my PC because the screen is bigger compared to smartphones and this allows for better detail, clarity, and visibility, especially for high-definition or 4K content.

My eyes are killing me. Watching a film on the smartphone was a terrible idea. I can't see anything! The font is ant-sized, and even with my glasses on, it's all blurry.



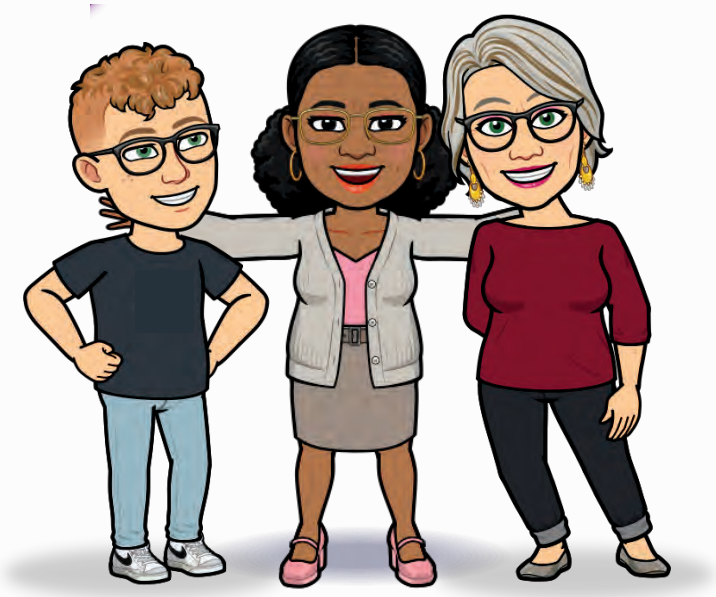
What are the key terms associated with mobile devices and PCs?
Complete these sentences with the terms in the box.

• processing power • battery life • mobility • user-friendly • battery life •
• portability • productivity • maintenance • ergonomics • convenience •

1. Mobile devices are known for their _____, making them easy to carry around, unlike traditional PCs.
2. When it comes to _____, PCs often excel due to their larger screens and full-sized keyboards.
3. The _____ of mobile devices allows users to stay connected on the go, which is a significant advantage over PCs.
4. Mobile device interfaces are designed to be _____, making them accessible to users of all ages.
5. One of the drawbacks of mobile devices is their limited _____, often requiring frequent recharging.
6. PCs are known for their high _____, making them suitable for resource-intensive tasks like video editing.
7. Regular _____ of PCs, such as software updates and antivirus checks, is essential to keep them running smoothly.
8. The _____ of mobile devices allows users to quickly access information and services at their fingertips.
9. A comfortable _____ is essential for prolonged use of both PCs and mobile devices to prevent strain.
10. Mobile devices often prioritize _____ over raw power to ensure longer usability when on the move.

Listen to **check** your answers.

Go back to the ideas above and **choose** two of them to discuss with a partner.



Read this article about the advantages and disadvantages of PCs and mobile devices.

EXPLORING SOFTWARE: #workingUruguay 2024

Powerhorse DESKTOPS or handy MOBILE DEVICES?

In today's digital world, the choice between mobile devices and desktop computers has become a key decision for users. In this article, we analyze the advantages and disadvantages of both mobile devices and desktops.

MOBILE DEVICES

Advantages

1 Mobile devices, such as smartphones and tablets, have become indispensable tools in our daily lives. One advantage is the wide range of software applications (apps) available for various purposes. These apps allow users to perform numerous tasks such as messaging friends, checking social media, or playing games.

2 Additionally, mobile devices offer great flexibility in terms of software updates. Users can easily download and install updates to keep their devices running smoothly and securely.

Disadvantages

3 However, mobile devices also have some negative points. One disadvantage is their limited storage capacity for storing apps and data. Users may find themselves running out of storage space quickly, especially if they download many apps or store large files.

4 Another downside is the dependency on battery power. If the battery runs out, the device becomes unusable until it's recharged.

5 Moreover, some apps may not be optimized for all mobile devices, leading to compatibility issues or performance problems.

DESKTOP COMPUTERS

Advantages

9 On the other hand, personal computers have positive aspects too. One advantage is their versatility in running different types of software programs. Whether it's word processing or graphic design, computers handle a wide range of software applications with ease.

10 Additionally, computers offer more flexibility in terms of configuration and customization. Users can install different software programs and customize settings according to their preferences and needs. They can even build their own device according to their personal needs.

Disadvantages

6 Computers' software capabilities make them essential to us. However, they also have disadvantages, such as the risk of computer viruses and malware. Computers connected to the internet are vulnerable to security threats, which can compromise the integrity of the software and data stored in the computer.

7 Another downside is that installing multiple software programs or updates can sometimes lead to conflicts that cause errors or instability in the system.

8 Also, maintaining and diagnosing problems on computers require technical expertise, which can be challenging for some users.

In pairs, **read** the article again and **think** of a short, appropriate title for each of the *advantages* and *disadvantages* mentioned in the text.
Write your titles below.

Advantages

1. Multiple applications
2. _____
9. _____
10. _____

Disadvantages

3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

Complete the mind map with information from the article.

POWERHOUSE DESKTOP OR HANDY MOBILE?

DESKTOPS

MOBILE DEVICES

ADVANTAGES	DISADVANTAGES	ADVANTAGES	DISADVANTAGES

Before, we talked about desktop computers and phones. Now, let's talk about laptops! Laptops are like a mix of desktops and phones. They're small and easy to carry around, but they can also do many of the things that a desktop computer can.

Get in pairs and ...

- **think** about the advantages and disadvantages of laptops. **Consider** factors such as portability, performance, battery life, connectivity, etc. and
- **complete** the mind map to organize your ideas.

LAPTOPS

ADVANTAGES	DISADVANTAGES

- **Write** a short text (about 80 words) using the information from the mind map. Try to maintain a similar format and writing style as in the previous article. **Use** the SOS Box to help you.
- **Share** your text with the class.

Useful expressions

to add points on the topic	also / too / furthermore / moreover/ in addition / aditionally
to describe reality	in fact / as a matter of fact
to give examples	for instance / for example / like / such as
to express contrast	but / however / on the other hand
to express similarity	similarly / in the same way
to describe results	as a result / as a consequence / for this reason / so
to give reasons	because / since / due to
to conclude	to sum up / in conclusion / finally / in short

SOS Box

Get into groups of three.

What device would you recommend to a graphic designer, a sales representative and a college student?

- **Read** these situations and **give** advice. For each situation, consider the specific needs and **recommend** a mobile device (smartphone or tablet), a desktop computer or a laptop.
- **Provide** reasons for your recommendations based on factors like portability, processing power, screen size and software requirements.

Ingrid is a graphic designer who works on creating complex visual designs and illustrations for her clients. She often uses resource-intensive software like Adobe Creative Suite to manipulate images, create logos, and design marketing materials. She also needs a large, high-resolution display to ensure color accuracy. Ingrid frequently collaborates with clients and needs to present her work professionally.

Patrick is a sales representative who spends most of his time on the road, meeting with clients and attending sales meetings. He needs to access customer information, update sales reports and send emails on the go. He relies on video conferencing for sales presentations and demonstrations to clients. It's crucial for Patrick to stay connected and productive while traveling.

Andrea is a college student who attends classes, takes notes and completes assignments. She also uses digital textbooks and research materials. Andrea needs a device for both studying and leisure, including streaming videos and browsing the internet. She occasionally uses software like Microsoft Word and Excel for coursework and projects.

SOS Box

I think … .
Maybe … .
I believe … .
In my opinion … .
From my point of view … .
My impression is that … .
I have the feeling that … .
I have no doubt that … .
I would say that … .

It's true because … .
I agree with that because … .
I think so.
You are right.
I get your point.

4 Types of computer software

Look at the picture. What types of computer software are represented in the images?

Get in pairs and share your thoughts, then **complete** the list below.

Images from Freepik.com

1 Multimedia editor

2 _____

3 _____

4 _____

5 _____

6 _____

7 _____

8 _____

Computer software is a fundamental component of modern computing. What do you already know about the topic?

Get in pairs and **discuss** these questions.
Take notes and **share** your ideas with the rest of the class.

- Which types of software are there?
- What is the primary function of an operating system?
- Can you name a word processing software? What is its main use?
- Have you ever used graphic design software? If so, for what purpose?
- How does antivirus software protect a computer?

Watch a video and **compare** your answers to what you hear.
Complete the chart with the correct information.

Type of software			
Function			
Examples			

Watch the video again and **complete** these sentences with the correct information.

- The OS controls input and output operations, manages memory and storage, and ensures the _____ _____.
- Word processors offer additional features like _____ _____.
- Graphic design software is used for creating visual content such as _____ _____.
- Antivirus software monitors system activity for suspicious behavior and blocks malicious websites that can compromise _____.

Diego has to introduce computer software to future students of *Bachillerato de Informática Bilingüe.* Help him **create** an infographic including relevant information and pictures to illustrate what he should say. **Present** your work to the class.

You can give feedback to your partners by **posting** some comments on *Stormboard* or any other platform. **Use** positive expressions to encourage them. The ideas in the SOS Box may help you.

- **You did a great job!**
- **Your infographic looks nice and helps people understand the topic. Well done!**
- **You spoke clearly and confidently.**
- **Your infographic is visually appealing.**
- **You gave a great explanation of the topic.**

SOS Box

5 Computer software everywhere

Look at these pictures. **Match** them to the type of devices below.

- medical devices 4
- smartphones & tablets ____
- security systems ____
- smart machinery ____
- digital signage ____
- home automation ____
- data collection devices ____
- contactless systems ____

1


2


3


4

5


6

7


8

(Images from Freepik.com, Flickr.com and Canva.com)

Get in pairs. **Think** about the type of software or application involved in the functionality of these devices.

Discuss these questions with your partners.

1. How does computer software help you with everyday tasks?
2. How do you think computer software makes work faster and better for people?
3. How do games and other entertainment software make life more enjoyable?
4. How do you think computer software helps doctors and nurses in hospitals?
5. How does computer software help us with transportation and communication?

Inés found this article about computer software and everyday life.

TECH TALK

April, 2024

Computer Software: MAKING LIFE EASIER

Computer software has become an essential part of our daily lives, helping us with a wide range of tasks and making many aspects of life more efficient and enjoyable.

Everyday Tasks

Think about the various tasks you do every day, from checking emails to organizing your schedule. Computer software plays a significant role in making these tasks easier and more manageable. For example, email software allows us to send and receive messages instantly, helping us stay connected with friends, family and colleagues. Calendar apps help us keep track of important events and appointments, ensuring we stay organized and on schedule.

Work Efficiency

Computer software has revolutionized the workplace, making work faster and more efficient for people in various industries. For instance, word-processing software allows us to create and edit documents with ease, eliminating the need for handwritten notes or typewriters. Similarly, spreadsheet software simplifies tasks like data analysis and budgeting, saving time and reducing errors.

Entertainment

When it comes to entertainment, computer software offers a wide range of options to make life more enjoyable. Gaming software provides endless opportunities for fun and excitement, allowing players to immerse themselves in virtual worlds and compete with friends. Additionally, streaming services and multimedia players allow us to access a vast library of movies, music and TV shows, keeping us entertained for hours on end.

Healthcare

In hospitals and healthcare facilities, computer software plays a crucial role in improving patient care and streamlining medical processes. Electronic medical record systems allow doctors and nurses to access patient information quickly and efficiently, ensuring accurate diagnoses and personalized treatment plans. Medical imaging software enables healthcare professionals to visualize and analyze medical images such as X-rays and MRIs, aiding in the diagnosis of various conditions.

Transportation & Communication

Computer software has transformed the way we navigate our surroundings and communicate with others. Navigation apps provide real-time directions and traffic updates, helping us find the quickest routes to our destinations. Communication software such as messaging apps and social media platforms allow us to stay connected with friends and family around the world, facilitating instant communication regardless of distance.

In conclusion, computer software has become an indispensable part of modern life, helping us with everyday tasks, improving work efficiency, enhancing entertainment experiences, revolutionizing healthcare, and facilitating transportation and communication. As technology continues to advance, the impact of computer software on our lives is only expected to grow, making our lives easier, more efficient, and more enjoyable than ever before.

Read the text and **choose** the best answer for each question.

1. What is the main idea of the text?
   - a. Computer software is complicated.
   - b. Computer software is helpful in many areas of life.
   - c. Computer software is only for work.
   - d. Computer software is becoming less important.
2. According to the text, what helps us stay organized and on schedule?
   - a. Gaming software.
   - b. Calendar apps.
   - c. Electronic medical record systems.
   - d. Streaming services.

Match the tasks described in the text with their corresponding software.

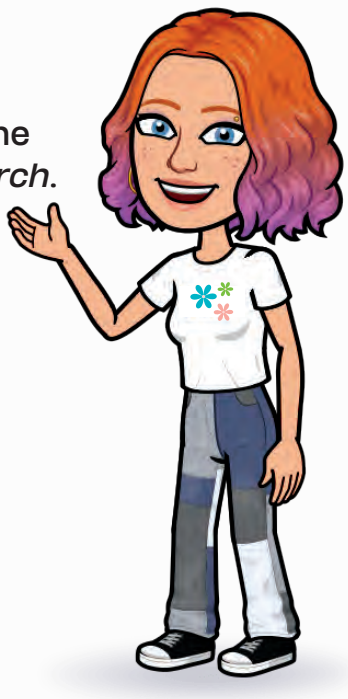
1. Communications software
2. Calendar apps
3. Word-processing software
4. Spreadsheet software
5. Gaming software
6. Navigation apps
7. Streaming services
8. Electronic medical records

- [ ] Software that allows players to immerse themselves in virtual worlds and compete with friends.
- [ ] Tools that enable doctors and nurses to access patient information quickly and efficiently.
- [ ] Applications that help us keep track of important events and appointments.
- [ ] Programs that allow us to send and receive messages instantly.
- [ ] Software that simplifies tasks like data analysis and budgeting.
- [ ] Services that provide access to a vast library of movies, music and TV shows.
- [ ] Software that enables users to create and edit documents easily.
- [ ] Apps that provide real-time directions and traffic updates.

V	I	Q	K	D	N	A	N	D	R	O	I	D	C
E	I	K	F	W	X	H	K	A	T	J	E	J	S
N	S	R	E	F	C	Q	G	S	N	I	E	T	T
T	B	K	T	S	W	A	T	P	X	E	C	R	R
E	M	M	X	U	I	S	N	R	K	J	O	A	E
R	T	E	X	Q	A	H	A	E	A	G	M	F	A
T	Z	D	U	N	E	L	V	A	S	R	P	F	M
A	P	I	A	K	V	C	I	D	W	G	U	I	I
I	D	C	C	D	E	E	G	S	A	G	T	C	N
N	K	A	H	X	N	E	A	H	E	A	E	C	G
M	F	L	I	Q	T	J	T	E	O	M	R	A	S
E	D	Z	C	C	S	A	I	E	J	I	A	E	Y
N	D	S	I	R	U	I	O	T	B	N	U	I	N
T	I	K	H	A	G	K	N	A	X	G	W	A	L

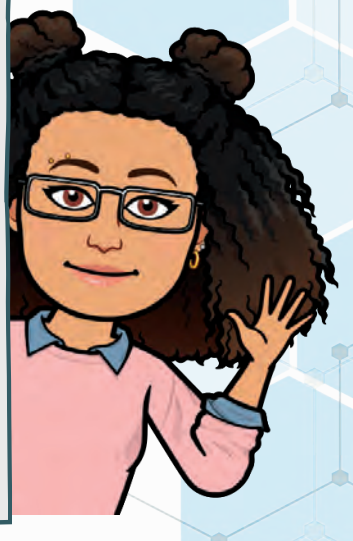
Find ten words from the article in the *word search*.

→ ↓ ↘



Get in small groups.
Brainstorm ideas for new software applications that could improve everyday life. **Take notes** and **share** your ideas with the rest of the class. You can **use** these questions to guide your discussion.

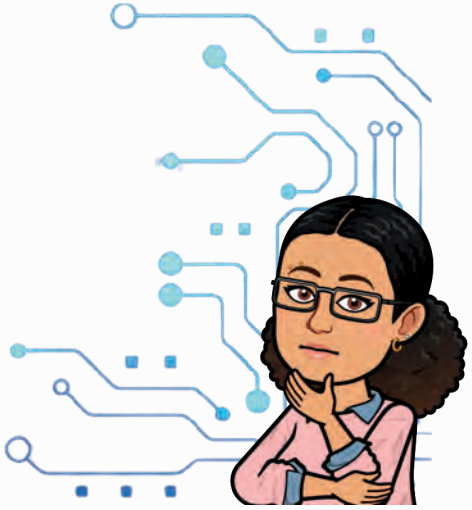
- What tasks or challenges do you encounter in your daily life that could be solved or improved with the help of software?
- How can software make certain activities more efficient, enjoyable and/or accessible?
- Are there any specific needs or problems in your community that could be addressed through software solutions?



After listening to your classmates' ideas, **get in pairs** and **discuss** these questions.

- What are some of the most innovative or interesting software ideas generated by each group?
- How do these ideas address specific needs or challenges in everyday life?
- Can you explain how these software applications would work and what their potential benefits would be?
- Are there any potential limitations or drawbacks to consider with these ideas?
- Which idea do you think has the most potential for further development, and why?

6 From the first to the last

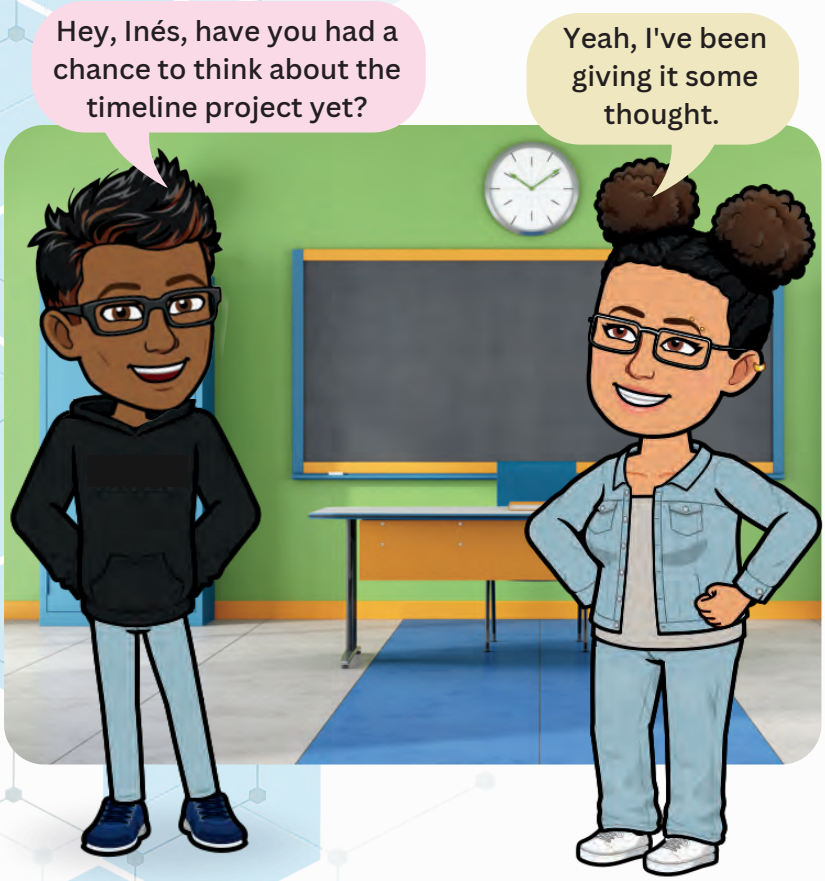


Discuss these questions with your partners.

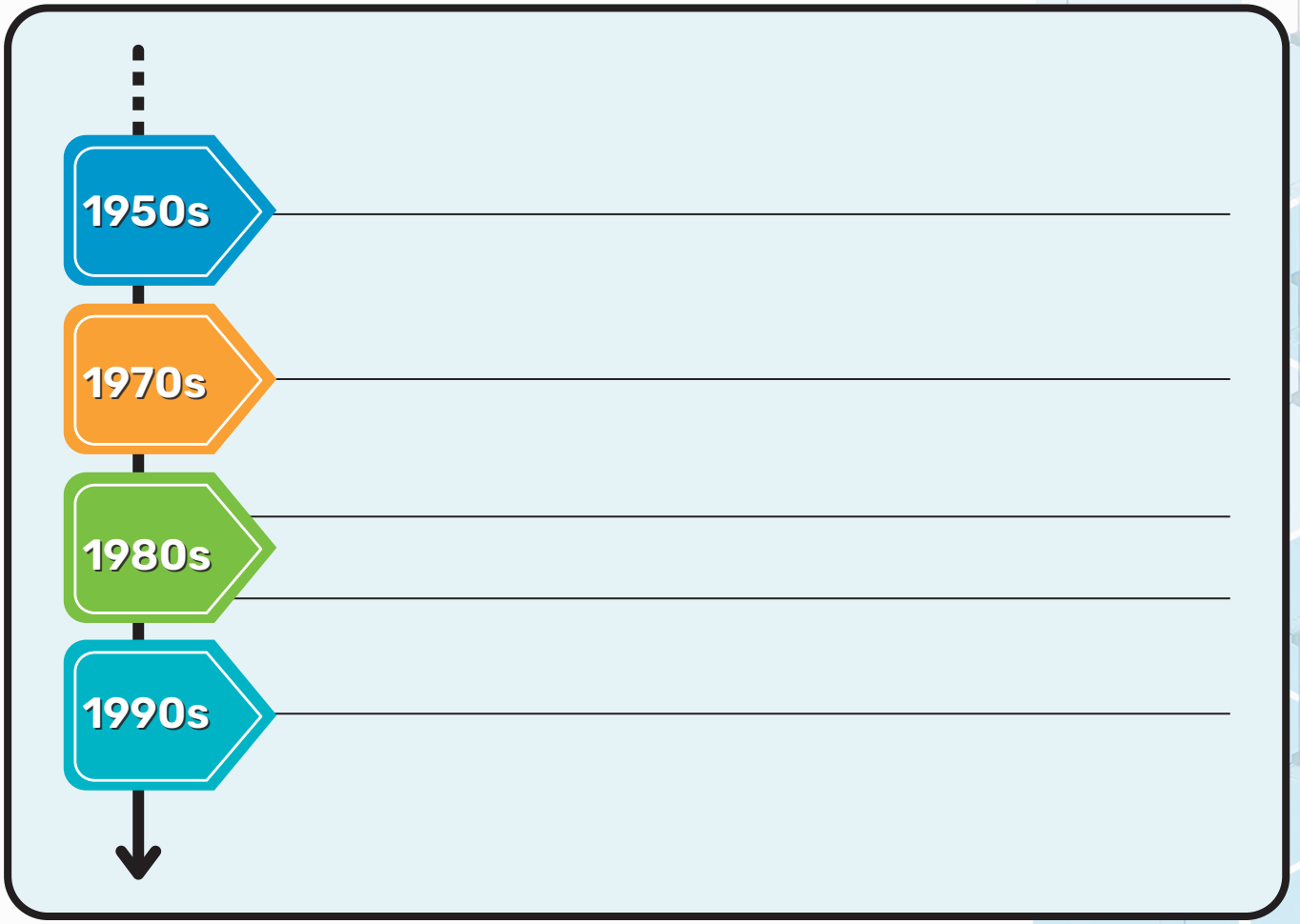
- How has computer software transformed technology?
- Do you know anything about computer software history?

Nico and Inés have to create a timeline highlighting the key milestones in the history of computer software. They are currently discussing how to approach this project.

Listen to their conversation and **write** down the topics they mention. Then, **pair up** with a classmate to **compare** your notes.



Listen again and **complete** the timeline with the *key milestones* that are mentioned.



Get into groups of three and **create** a software evolution timeline.

- **Access** the internet to search for other key milestones and developments in computer software.
- **Focus** on important software innovations, notable software developers, and major shifts in software paradigms (such as the impact of open-source software).
- **Use** this information, along with the notes from the previous activity, to create a more detailed timeline. Incorporate multimedia elements like images, videos, and quotes to improve the presentation.
- **Share** it with the rest of the class.

In groups, **discuss** these questions.

1. What factors have driven the evolution of software?
2. What role have key players such as programming languages, GUIs, and the internet played in shaping the evolution of software?
3. Can you predict some potential future trends or developments in software?

In pairs, **choose** three activities from the grid, (you must **choose different colors**).

Create a word search with at least 10 words related to software.	Write a magazine article about software evolution, focusing on at least 3 key milestones (about 120 words).	Create an acrostic using the word SOFTWARE as a guide.
Create a crossword with words related to software and software innovations or development.	Write three questions about the topic of software evolution.	Make a short video about a specific software innovation or development and analyze its impact on the evolution of software.
Write a quote about the importance of software in everyday life.	Create an interactive timeline showcasing the evolution of software using digital tools like Prezi, Timeline JS or Google presentations.	Make a poster about a specific software development.

7 software development

Get in pairs and discuss this question.

Emma is very interested in this topic and found a podcast by Jeremy Stone, an expert on software development.

Listen to it and **answer** these questions.

1. What analogy does Jeremy use to describe software development?
2. Why does Jeremy think software development is important?
3. What are some challenges that software developers face, according to him?
4. How does he describe the role of software developers in everyday life?
5. What skills does he emphasize for software developers besides coding?

Did you know?

ANALOGY: Comparison of two things to show their similarities.

Match these words/phrases from the interview to their meanings.

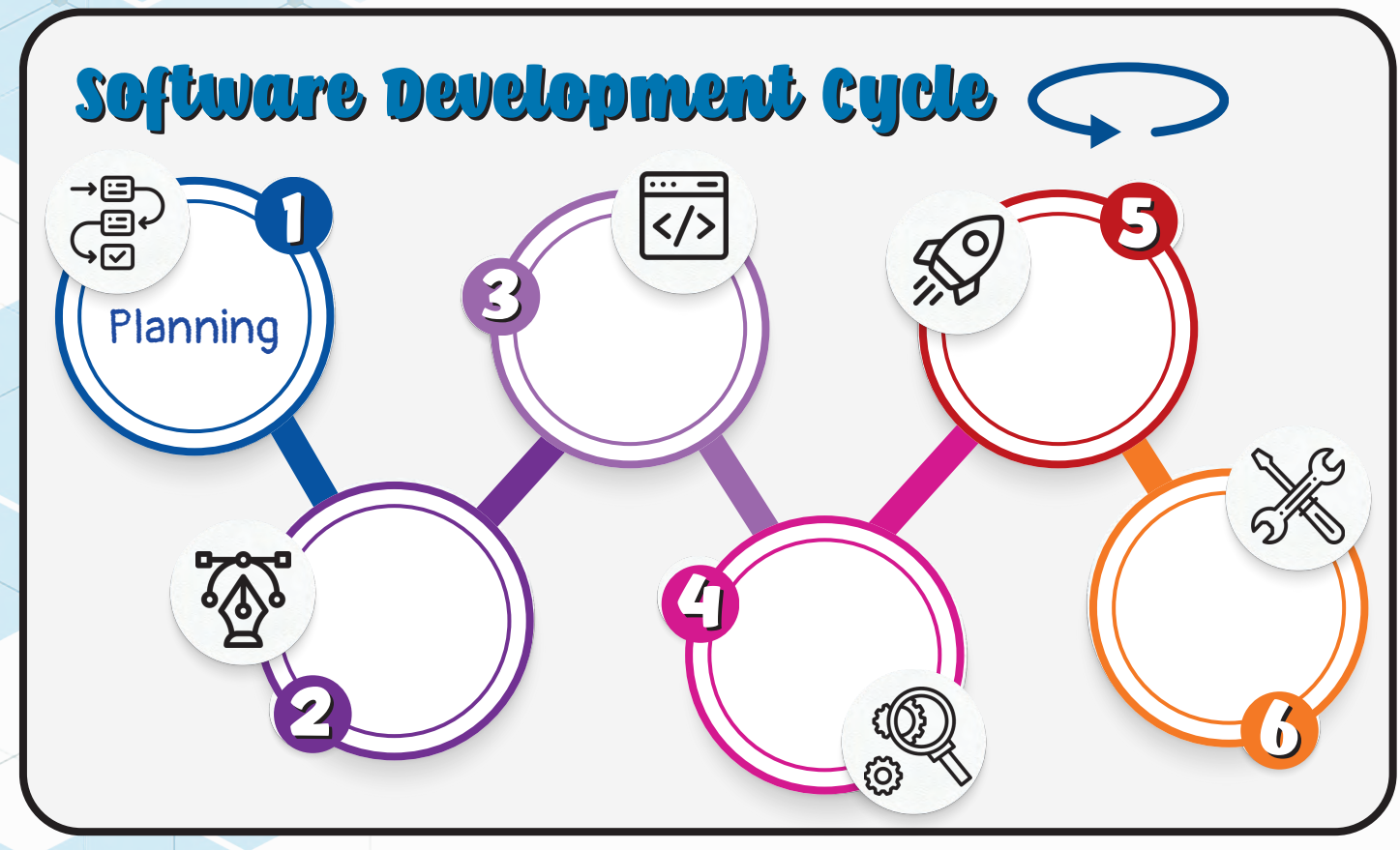
• bug • programs • innovations •
• software developer • techniques •

	Specific methods or approaches used to accomplish tasks.
	New or creative ideas, methods, or inventions.
	Someone who creates programs and apps for digital devices.
	A problem or issue in a program that needs to be fixed.
	Software applications or sets of instructions that run on computers or devices

Did you know?

Software deployment is the process through which applications, programs and updates are delivered from developers to users. Deployment is one of the most important aspects of the software development cycle.

Listen to the second part of the podcast where Jeremy talks about the *software development cycle*. **Complete** the diagram with information from the audio.



Look at this photograph. Do you recognize him?
He is *Linus Torvalds*, a very famous software developer.

(Source: wikimedia.commons

Some information is missing from his fact file.
Read it and **put** the information in the correct place.

- Software Engineer, Creator of Linux Kernel
- Skills
- Contributions to Software Development
- He created the Linux Kernel, which is the core of the Linux operating system. This is used in a wide variety of devices, including servers, smartphones, and embedded systems.
- Millennium Technology Prize in 2012. He has also been recognized as one of the most influential figures in the world of technology.
- Linus Torvalds / Finland
- Impact on Technology

PROFILE FACT-FILE — Linus Torvald

Name and country of origin	1
Profession	2
Description of work	3
4	The creation of the Linux Kernel revolutionized the world of open-source software development. Linux is renowned for its stability, security, and flexibility, and it powers many of the world's largest data centers and servers.
Achievements	5
6	Coding, particularly in the C programming language, which he used to develop the Linux Kernel. He also demonstrates strong leadership and communication skills, essential for overseeing the collaborative development process of Linux.
7	Linux has become the foundation for many operating systems, including Android, which powers billions of smartphones worldwide. It has also played a significant role in the growth of cloud computing and the open-source software movement.

It's your time to do some research!
Get in pairs and **look** for information about another famous software developer.
Complete this fact file with their information.

PROFILE FACT-FILE

Name and country of origin	
Profession	
Description of work	
Achievements	
Skills	
Impact on technology	

Share the information you found with your classmates.

8 Who is in charge of the development?

Look at this image. Do you recognize these software companies? What do you know about them? Who created these brands?

(Logos from Wikimedia Commons)

What is the importance of developing software in sectors like design, entertainment or technology?

Get in pairs and **surf the net** to find information about Uruguayan software development companies. Then, **share** your findings with the rest of the class.

5 IDEAS TO KEEP IN MIND

1. People don't buy products, but solutions.
2. True genius lies in simplicity.
3. Only those willing to go far will know how far they can go.
4. No company can be better than the people who work in it.
5. The best way to avoid failure is to commit to success.
6. Always give people more than they expect to receive.

Memory Computación is a Uruguayan software development company.

Get in pairs, **read** the company's core values and **discuss:**

- Their importance in both business and personal success.
- How these values align with your own personal values and goals.

Read this article about *Memory Computación* and **answer** the questions.

#WorkingUruguay

Uruguayan Tech Pioneers:

Memory Computación

With almost 40 years of experience, *Memory Computación*'s rise from a student project to a titan in Uruguay's software industry is proof of its commitment to excellence and innovation.

In 1985, Roni Lieberman, an engineering student, had dreams of starting his own business. At the suggestion of a classmate, he embarked on developing an accounting program for a family business. Roni fully committed to the project and realized its potential for entrepreneurship.

Sixteen years later, at a significant event in New York, Microsoft Corporation recognized the innovation behind *Memory Conty*, an accounting software developed by Roni's company, Memory Computación. This acknowledgment validated Roni's efforts to transform business operations in Latin America.

Today, Memory is a prominent player in Uruguay's software industry, with over 30 years of experience and serving a clientele of over 50,000 SMEs and 80% of the accountants across the region. They have won several awards, including recognition as the *Most Innovative Uruguayan Company* and the *Endeavor Company of the Year*.

In 2020, Memory entered a new phase of growth by partnering with *Siigo*, a leading player in Colombia and Ecuador's software market, backed by *Accel-KKR*, a prominent Silicon Valley investment fund. Together, they aim to revolutionize the tech landscape in Latin America by providing cutting-edge solutions to over one million SMEs and 300,000 accountants.

Roni Lieberman is convinced that part of Memory's success is that they have a firm set of core values. These organizational values are not just stated but shared and fundamentally applied in the day-to-day management of the company. With a commitment to providing solutions over products, embracing challenges, and empowering its people, Memory Computación continues to drive innovation and redefine success in the region.

(Source: Memory Computación - https://memory.com.uy/)

1. Who is Roni Lieberman, and what role did he play in Memory's development?
2. How did Memory receive recognition from Microsoft Corporation?
3. What awards has Memory received?
4. What significant partnership did Memory enter in 2020?
5. What is Memory committed to?
6. What is Memory's impact on businesses in the region? Is it a popular business solution?

Did you know?

SMEs stands for *Small and Mid-sized Enterprises*. They are companies or organizations with fewer employees, less revenue and fewer assets compared to larger enterprises. SMEs include both manufacturing and service businesses. (In Spanish they are known as **PYMEs**)

Visit the company's website and **find** information of some of its key products.

Memory Conty

Memory Worky

Memory Figaro

How important are leaders in a creative software company? How many types of leaders are there? **Read** the infographic and **find out**.

6 most common LEADERSHIP STYLES

Leadership styles refer to the various approaches that leaders adopt when guiding and directing their teams. Different situations may call for different styles, and effective leaders often have the flexibility to adapt to the situation and the individuals they are leading.

TRANSACTIONAL *leadership*

This style is based on a system of rewards and punishments. Leaders use a "carrot and stick" approach to motivate team members to achieve specific goals.

SERVANT *leadership*

Leaders prioritize the needs of their team members and support their personal and professional growth. This style emphasizes empathy, humility, and a commitment to serving others.

SITUATIONAL *leadership*

Leaders adapt their style based on the specific needs of the situation and the maturity of the team. This approach requires flexibility and a keen understanding of the dynamics within the team.

CHARISMATIC *leadership*

Leaders use their charisma and personality to inspire and influence others. This style can be powerful in rallying a team around a shared vision.

COACH-STYLE *leadership*

Leaders adapt their style based on the specific needs of the situation and the maturity of the team. This approach requires flexibility and a good understanding of the dynamics within the team.

BUREUACRATIC *leadership*

Leaders follow established rules and procedures to manage their teams. This style is often found in highly structured and regulated environments.

Icons from Flaticon.com

The infographic mentions different leadership styles. **Read** each sentence carefully and **match** the type of leader to what they say. **Justify** your choice.

"I'll help you in the way that works best for you, depending on how much you already know."

Anna _____

"Hit your sales goal this month, and everyone gets a prize!"

Sergio _____

"Follow the rules exactly to make sure this project goes smoothly."

Claudia _____

"What can I do to help you succeed in your work?"

Victor _____

"Let's find your strengths and what you can learn even better."

Emilio _____

"We can do amazing things together! Believe in yourselves and our dream!"

Beatriz _____

Surf the net and find out information about the leader of a software company. Then, **write** a text about them.

You should include:

- The personal information of the leader you chose.
- Aspects related to their background and how they ended in this path of leadership. Did they have any mentors?
- Any personality trait they have and their leadership style.
- Any evidence of how they are a recognized leader and if they have built good rapport with the people they work with.

Did you know?

"They" and **"their"** can be used to represent a singular person if the gender of the person is unknown, for example, *"Each person must do their part"*.

9 Legal and ethical use

Read the pieces of news below. What are they about? Do they have anything in common? Do they raise any legal or ethical concerns?

THE NEWS

DigiData Under Fire

Well-known software company "DigiData" is being accused of distributing unlicensed copies of their popular office package. An investigation reveals that the developers failed to obtain proper licensing agreements, resulting in general piracy and copyright infringements.

TECHNOLOGY

Tech Firm Accused of Unethical Data Haversting

A leading technology firm is being taken to court for systematically collecting and selling user data without consent, raising serious concerns about piracy violations and the abuse of personal information.

Infuriated users are calling for swift and harsh action to hold the company accountable and protect consumer rights in the digital age.

How would you describe your experience with computer software? Have you ever encountered any ethical or legal dilemmas? **Discuss** the importance of software licenses and respecting copyright laws.

Did you know? Understanding and following legal and ethical practices in software usage are essential for individuals and organizations to ensure compliance with the law, protect intellectual property, and support a thriving and innovative software industry.

Complete these key concepts with the appropriate terms.

· End-User License Agreements (EULAs) · Fair Use and Exceptions · · Copyright Protection · Software Licensing · Intellectual Property Rights · · Piracy and Unauthorized Use ·

1. _____ … provides legal ownership rights to the creator of the software, prohibiting unauthorized copying, distribution and/or modification. Copyright aims to protect the intellectual property of software creators.
2. _____ … encompasses the legal rights that creators have over their intellectual creations, including software. These rights allow creators to control how their work is used and prevent unauthorized use or reproduction.
3. _____ … are legal contracts between the software developer and the user that outline the terms of software usage. Users must accept the terms of the EULA to legally use the software.
4. _____ … refers to circumstances where copyrighted material can be used without permission for purposes such as criticism, commentary, news reporting, teaching, scholarship and research.
5. _____ … involves the illegal copying, distribution, or use of software without proper licensing or permission from the copyright holder. Piracy is a violation of copyright laws.
6. _____ … refers to the legal permissions granted by the software developer or publisher for the use, distribution, and modification of their software. Licenses specify the terms and conditions under which the software can be utilized.

These are some examples of those concepts in action. **Match** the examples to the concepts.

- ☐ "Some classmates download apps illegally, but I never do it. I believe in supporting developers."
- ☐ "When I created my software, I made sure others couldn't copy or distribute it without my permission."
- ☐ “As an English teacher, I often incorporate pop songs or clips from films into my lessons to make learning more engaging.”
- ☐ "I always make sure to avoid legal issues, so I have a paid subscription to all the software we use at the company."
- ☐ "When I downloaded the app, I had to agree to a long list of rules, such as the number of devices where I could install it, and that I couldn’t use it for illegal activities."
- ☐ "As a graphic designer, I always check trademarks and usage rights to avoid using protected material without proper authorization."

Camila was asked to write a story using the words from the previous exercise. She came up with the following text. **Read** it.

The Coding Conundrum

Once upon a time, in a small town, there were two best friends, Leo and Daniela. They both loved computers and spent hours coding together after school. One day, they came up with an idea for a new mobile app that could help students with their homework.

Excited about their idea, Leo and Daniela worked tirelessly on developing the app. They created a prototype and were ready to launch it. But as they were about to release it to the public, they faced a dilemma.

Daniela discovered that they had unknowingly used some code from another app without permission. She was worried that they might get into legal trouble if they released their app without rectifying this issue. This was a clear violation of Copyright Protection and Intellectual Property Rights.

On the other hand, Leo argued that since they had already put in so much effort, they should just go ahead and launch the app. He believed that their app could genuinely help students, and fixing the code would take too much time. However, Daniela was concerned about the consequences of piracy and unauthorized use.

The two friends were at odds with each other. Daniela pointed out that they needed to respect the End-User License Agreements (EULAs) and the Fair Use and Exceptions policies. Leo, however, was focused on the potential benefits of their app.

After much debate, they decided to seek advice from their computer science teacher. The teacher explained the importance of respecting intellectual property rights, the significance of Fair Use and Exceptions, and the consequences of violating End-User License Agreements (EULAs) and engaging in piracy and unauthorized use.

Realizing their mistake, Leo and Daniela decided to remove the unauthorized code from their app and rewrite it themselves. It was a challenging task, but they worked together diligently until they finally completed it.

When they finally launched their app, they received positive feedback from students and teachers alike. They learned an important lesson about ethics and legality in the world of software development, including the significance of Software Licensing, Copyright Protection, and Intellectual Property Rights. They vowed always to support these principles in their future projects.

Did you know?

A **conundrum** is a tricky problem or question that is hard to solve or understand. It's like a puzzle that's confusing or complicated.

Your opinion matters!

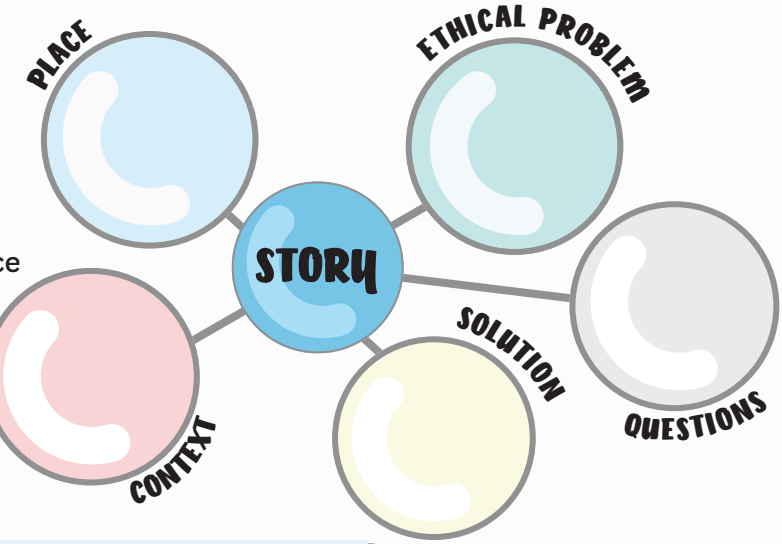
1. After reading the story, how did you like it? Why?
2. Have you ever been through any of the ethical issues the characters faced?
3. What alternative solution would you give to these issues?
4. Which other problems would you potentially find in this story?

Share your ideas with a partner.

Camila invites you to **write** a story. **Include** an ethical or legal problem related to the use of computer software that you have ever faced. **Follow** this procedure to write the story.

1 Think of ...

- a place
- an ethical problem
- the context
- the solution you found
- questions you may pose to the audience



2 Write ...

- 4-sentence paragraphs about each of the 5 aspects you thought of in the previous activity.

You can go back to the GUIDELINES FOR WRITING PARAGRAPHS in Lesson 2 - "Where to store it on your PC".

TIP!

3 Write ...

- the story in about 150 words.

10 Ahoy, pirate!

What is software piracy? **Read** the definition below.

Software piracy is the unauthorized copying, distribution, or use of software without permission from the copyright holder.

Inés is preparing a school project about software piracy. These are her notes on the topic. **Complete** them with the words given. There are two extra words you do not need to use.

• been • tool • program • by • distribution • using • software •

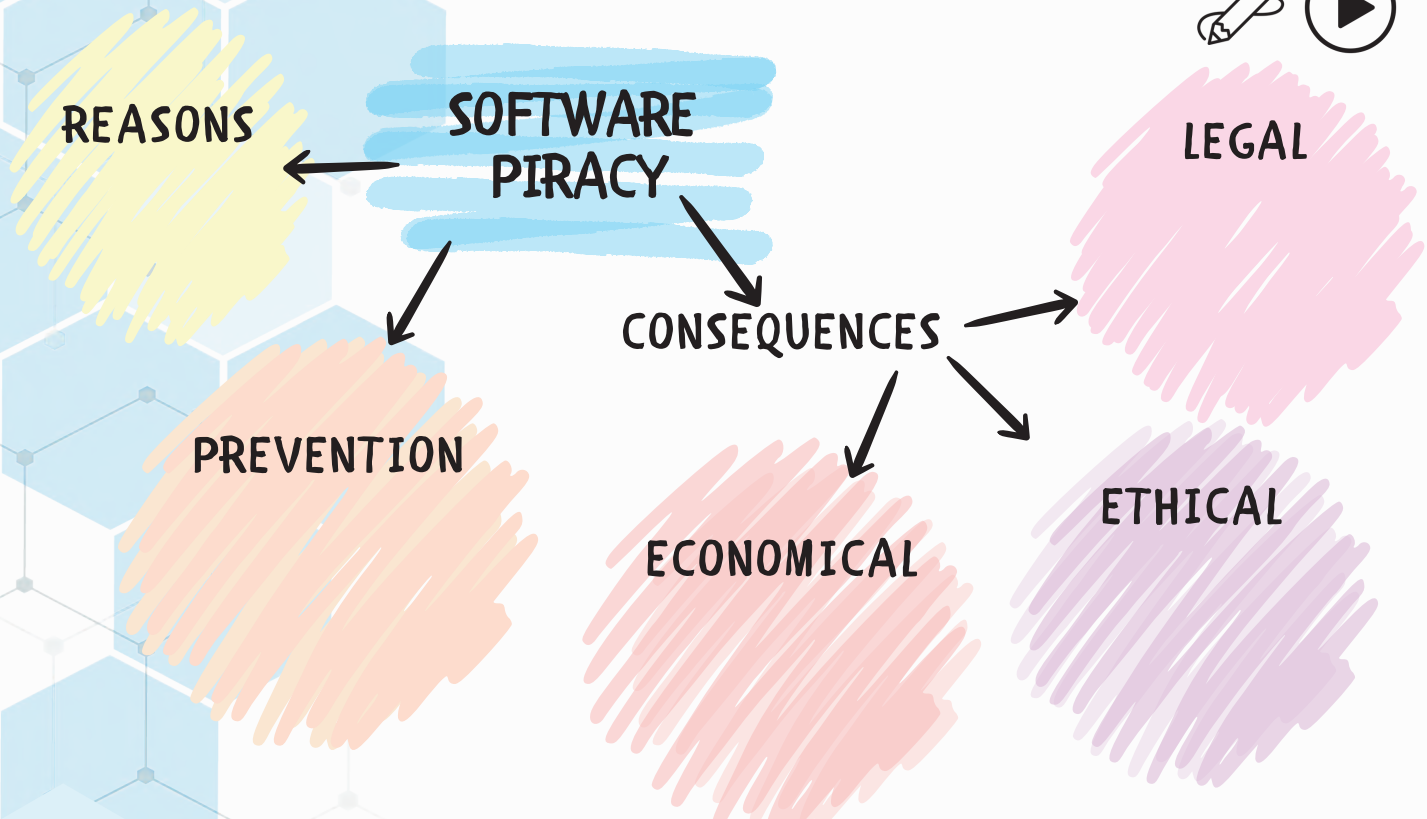
1. **Piracy:** The unauthorized copying, _____, or use of software without proper licensing or permission from the copyright holder.
2. **Copyright Infringement:** Violation of copyright laws _____ reproducing, distributing, or using copyrighted software without authorization.
3. **License:** A legal agreement between the software developer or copyright holder and the user that outlines the terms and conditions for _____ the software.
4. **Cracked Software:** Software that has _____ modified to remove copy protection or licensing mechanisms, allowing it to be used without a valid license.
5. **Keygen (Key Generator):** A software _____ that generates serial numbers or activation keys for unlocking paid software.

Inés needs to include these key terms in her school project.
Match the words in bold with the correct definition.

1. C 2. ____ 3. ____ 4. ____ 5. ____ 6. ____

1. Software Audit	**a.** Technologies and methods used to protect and manage digital content, including software, to prevent unauthorized copying or distribution.
2. Malware	**b.** Moral questions related to software piracy, such as whether it is right to use software without a valid license or support its creators.
3. Ethical Considerations	**c.** A process conducted by software developers or organizations to verify the legal use of software licenses within their systems.
4. Fair Use	**d.** Weaknesses or flaws in software that can be exploited by cybercriminals, often more prevalent in pirated software due to lack of updates.
5. Digital Rights Management (DRM)	**e.** A legal doctrine that allows limited use of copyrighted material without permission from the copyright holder, but the specifics vary by jurisdiction.
6. Software Vulnerabilities	**f.** Malicious software that may be bundled with pirated software, posing security risks to users.

Listen to an audio about *software piracy* and **complete** the mind map below.



Inés' classmates are describing some illegal situations. **Read** and decide which problem is being described.

1 Copying Software CDs/DVDs for Distribution **2 Using Key Generators or Cracks**
3 Using Counterfeit Software **4 Sharing Software Licenses Illegally**
5 Downloading Software from Unauthorized Websites

_____: I want to download a popular video editing software for free. I searched online and found a website offering a cracked version of the software without having to pay for it and I decided to download and install it from this unauthorized source. (Emilia)

_____: I purchased a copy of a well-known productivity software from a street vendor at a significantly lower price than the official retail price. However, after using it for a while, I realized that the software lacks essential features and is of poor quality. It turns out to be a counterfeit copy. (Roberto)

_____: I work in a small office where they have a limited budget for software licenses. Instead of purchasing individual licenses for each computer, my boss decided to buy a single license and share it among multiple computers in the office. However, this violates the terms of the software's End-User License Agreement (EULA). (Zoe)

_____: I downloaded a trial version of a software program, but I don't want to pay for the full version. I searched online and found a "key generator" tool that generates serial keys or cracks to unlock the full functionality of the software without purchasing a legitimate license. (Sandra)

_____: One of my friends has a collection of software CDs/DVDs that he bought legally. I asked him to borrow them and make copies of the discs to distribute among other friends without the permission of the software developers. Do you think this act of copying and distributing the software is a form of piracy? (Miguel)

Get into groups and **choose** three of the situations from the previous activity. **Write** a piece of advice for each person to help them avoid legal problems. **Use** the SOS box to help you.

I suggest/advise that ... .
If I was/were you, I'd ... .
One thing you should do is ... .
The most important thing (to do) is to ... .
You should / shouldn't ... .
It's a good idea to ... .
One idea is to ... .

SOS Box

EXIT TICKET

In this unit, I learned that...

Something I need to revise is...

my favorite part of this unit was...

I felt...

UNIT 2

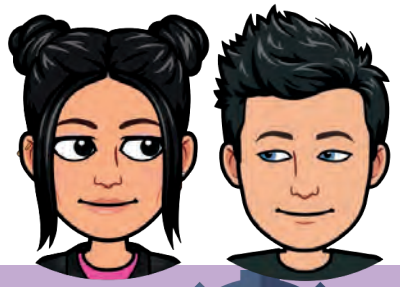
System software

1 Operating systems

Read this quote. What do you think about it? Do you agree with it?

> ***"The world of operating systems is a crucial part of computer software".***

Emma and Diego found a brochure about operating systems. **Read** it and answer the questions below.



Explore, Learn & Enjoy the World of operating systems

An operating system (OS) is like the brain of your computer. It manages all the hardware and software resources, making sure they work together smoothly.

1 Key Functions

The OS communicates with your computer's hardware components, such as the processor, memory, and peripherals, ensuring they function correctly.

User interface
Lets you interact with your computer through a graphical user interface (GUI) or command-line interface (CLI).

File Management
Helps you organize, store, and retrieve files efficiently.

Security
Protects your computer from viruses, malware, and unauthorized access.

Process Management
Manages the running of programs and ensures fair resource allocation.

2 Popular Operating Systems

Windows
Known for its user-friendly interface, Windows is widely used for personal and business computing.

macOS
Exclusive to Apple computers, macOS offers a sleek design and seamless integration with Apple devices.

Linux
An open-source OS popular among those who value customization and security.

Android
Designed for smartphones and tablets, it is the most widely used mobile OS worldwide.

3 Importance of Keeping Your OS Updated

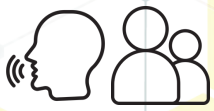
Regular updates improve security, fix bugs, and add new features. Ignoring updates can make your computer vulnerable to threats.

4 Choosing the Right OS

Select an OS that fits your needs and preferences, whether it's Windows, macOS, Linux, or another. Consider factors like ease of use, software compatibility, and hardware requirements.

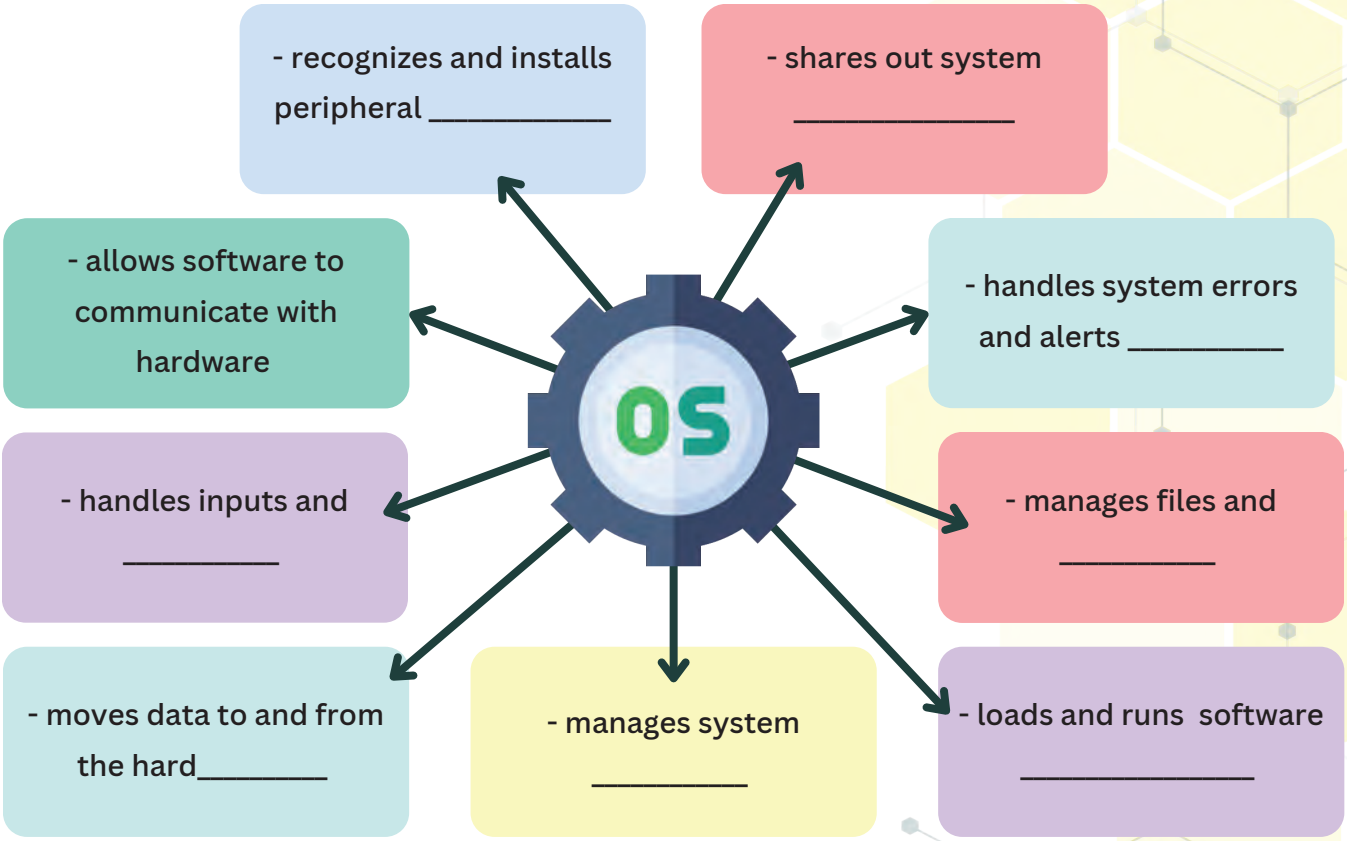
1. What is the purpose of an operating system?
2. Name at least two popular operating systems.
3. Why did you choose those operating systems?
4. How does an operating system manage hardware resources?
5. Why is it important to keep your operating system up to date?

Can you think of any challenges people might face if they don't use an operating system? **Discuss** with a partner.



Look at the following mind map and **complete** it with the missing words .

folders - disk - devices - security - users
outputs - applications - memory



What is the main purpose of an operating system in a computer?

Reflect on what you have read and discussed and **answer** these questions.

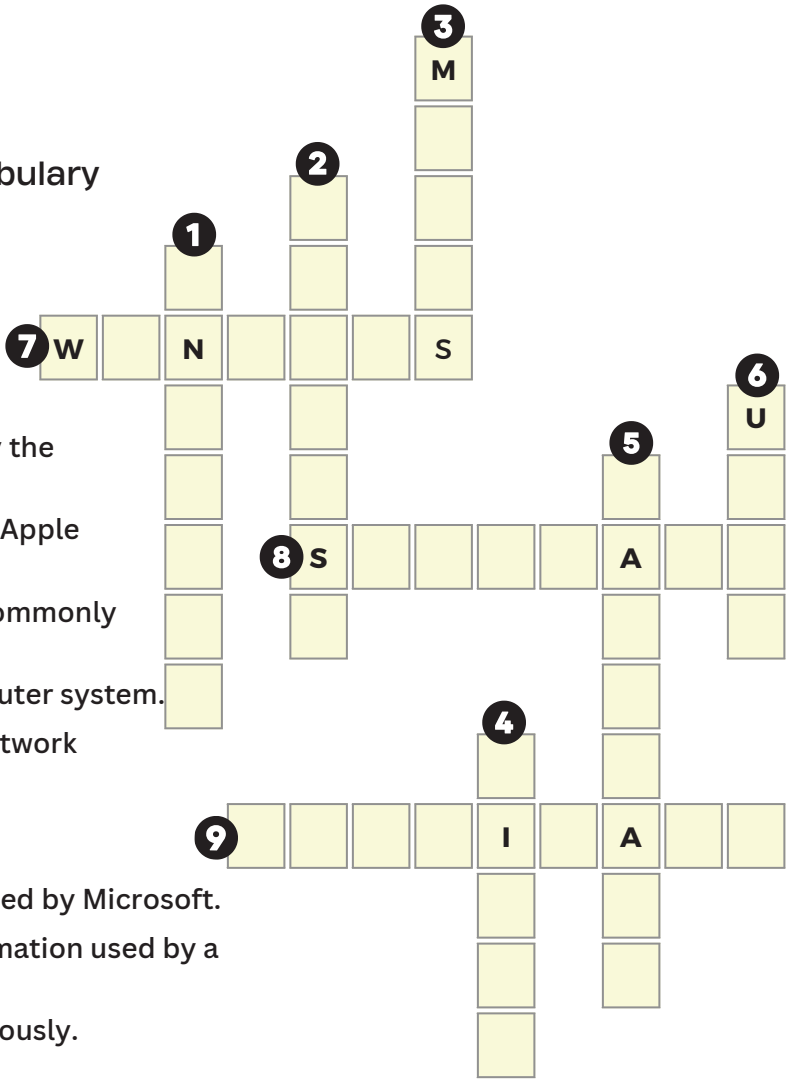
1. Can you name different types of operating systems? How are they different?
2. How do operating systems make our computer usage more efficient and user-friendly?
3. Have you ever encountered any issues with your computer's operating system? How did you resolve them?
4. What would happen if there were no operating systems for computers? How would it affect our daily lives?

Get into small groups

- Sit in groups of four and take a piece of paper.
- Each person writes a word or phrase to share their thoughts about the topic.
- After the person writes, they pass the paper onto the peer on the right and they continue until they have all written something down. Do this three times.
- You must do the activity in up to 5 minutes.
- Choose one person from the group and report your ideas to the rest of the class.

Crossword

Complete the crossword with vocabulary related to operating systems.



Down

1. Google's operating system used primarily for mobile devices.
2. A program in execution, managed by the operating system.
3. The operating system developed by Apple for its Mac computers.
4. An open-source operating system commonly used for servers and developers.
5. The physical components of a computer system.
6. A person who uses a computer or network service.

Across

7. A popular operating system developed by Microsoft.
8. Programs and other operating information used by a computer.
9. To perform multiple tasks simultaneously.

Get in pairs and ... 

- **choose** one of the situations below and
- **discuss** the vital role that operating systems play in modern computing.

The Forgotten Security

In this scenario, operating systems don't exist to protect computers. Without them, what challenges could people encounter related to security? Explore the risks of viruses, malware, and unauthorized access. What measures would individuals need to take to safeguard their data and privacy?

The Unmanaged Chaos

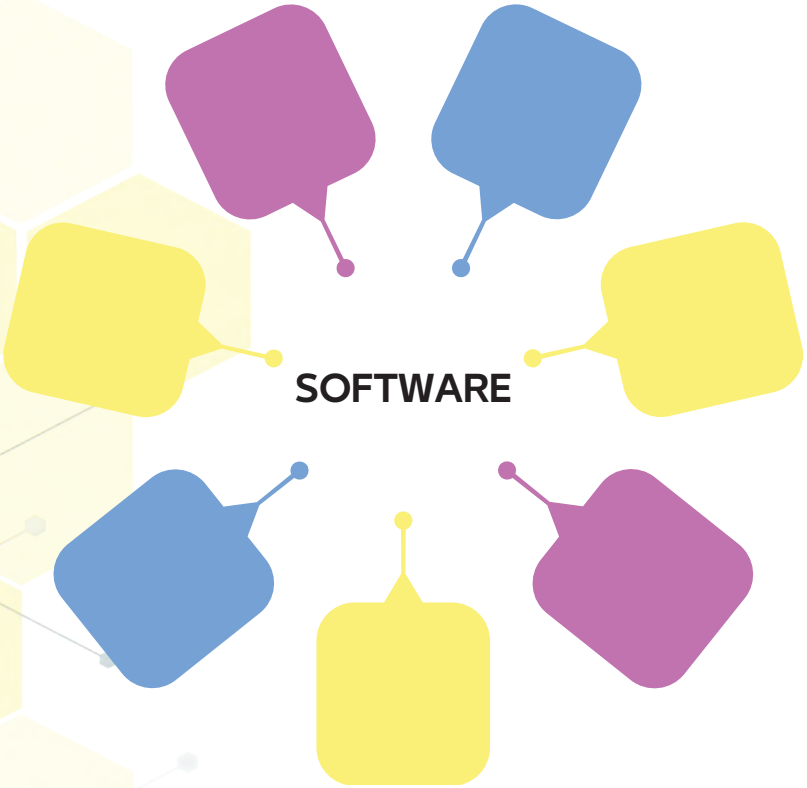
Imagine a world where computers don't have operating systems. It's a bit like a library without a librarian. Discuss what challenges people might face in such a scenario. How would they manage files? What about software installations? Consider the potential chaos.

Compatibility Conundrum

In a world without operating systems, every software and hardware component must communicate directly. Think about the compatibility issues that might arise. How would people ensure that different programs and devices work together seamlessly? What challenges could this pose for businesses and everyday users?

2 characteristics and functionalities

For tech-savvy people, having good software is of paramount importance.
Look at this mind map.



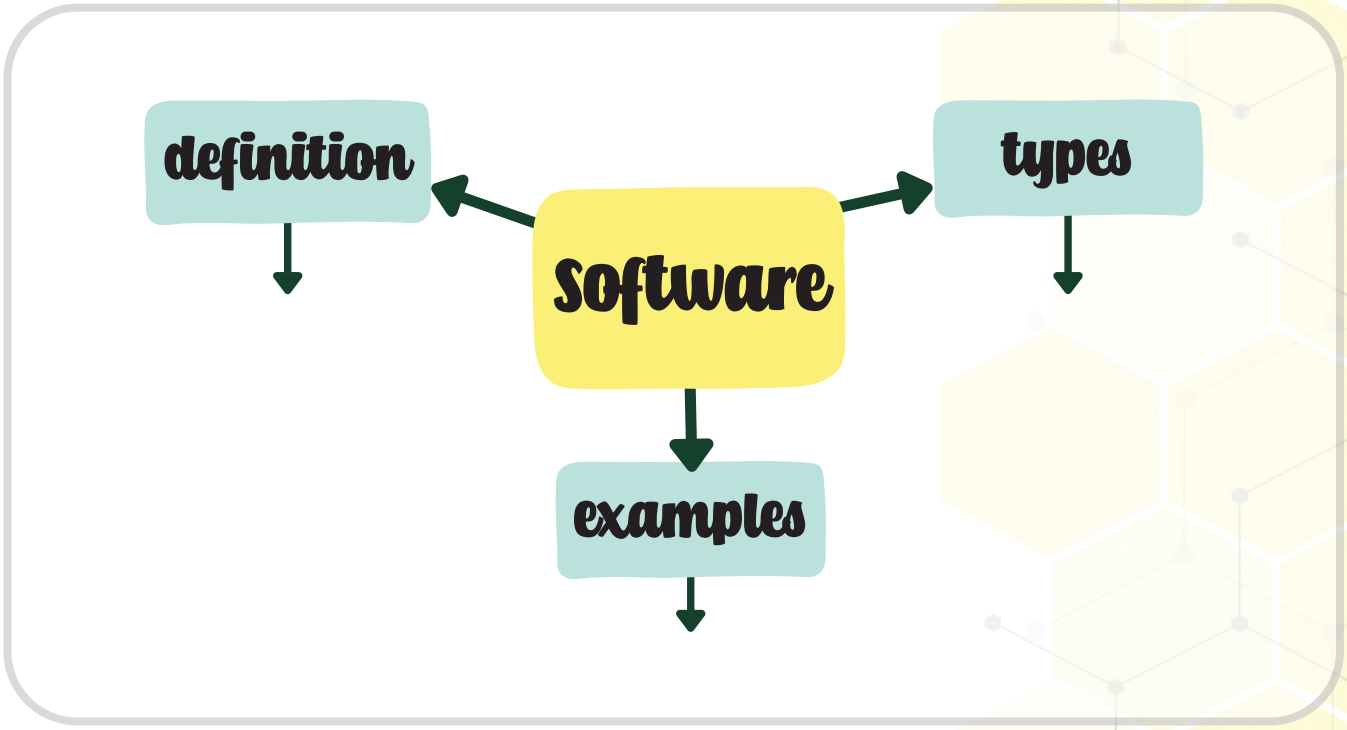
1. **Get into groups** of 5 people.
2. **Take** some Post-it notes and **write down** ideas about software (one idea per note).
3. **Stick** all your Post-it notes on a desk.
4. You'll have 5 minutes to work together with your group to **organize** and group similar ideas.
5. By the end, you'll have created a mind map based on your shared ideas!

Compare your mind map with another group and work together to **create** a definition of software with information from your mind maps.

Software is ...

Listen to an expert talking about software. Is the expert's definition of software similar to yours? If not, **rewrite** your definition using information from the audio.

Listen again and **complete** the mind map below.



How do you think new software is developed?

Look at these steps and **put** them in order.

- testing
- deployment
- maintaining
- coding
- designing
- planning

Read the text about The Software Development Life Cycle, or SDLC, and **check** your answers.

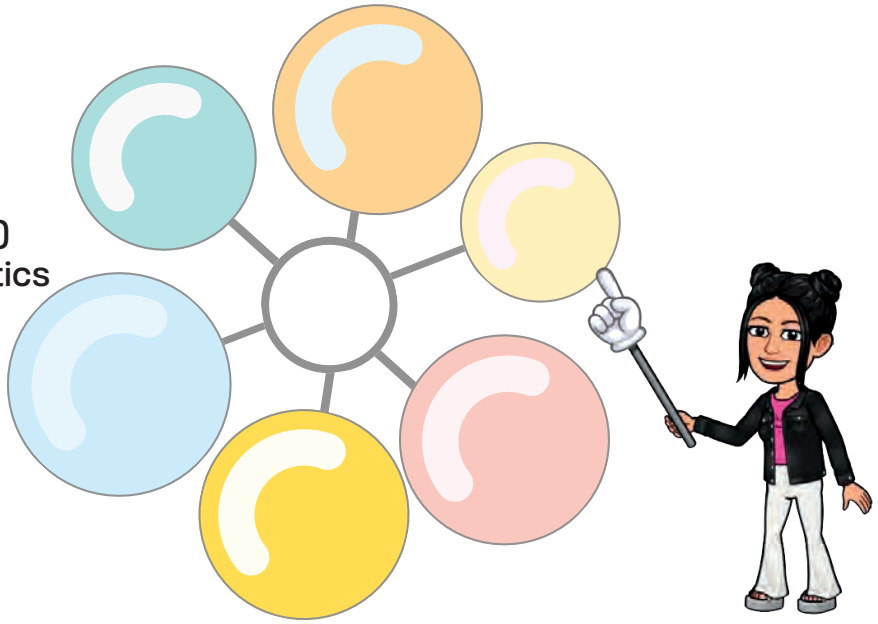
The Software Development Life Cycle, or **SDLC**, is like a roadmap that guides the creation of software from start to finish. It's a step-by-step process that helps developers build reliable and efficient software. Imagine baking a cake – you plan what kind of cake you want, gather ingredients, follow a recipe, bake it, and then enjoy the delicious results. Similarly, the SDLC has stages: ***planning, design, implementation, testing, deployment*** and ***maintenance***.

In the **planning** phase, developers determine what the software needs to do and how it will work. It's like deciding the type of cake and what ingredients you need. Then, in the **design** phase, they sketch out how the software will look and function – like creating a detailed recipe. Next comes **implementation where developers actually write the code, bringing the design to life. After that, testing** ensures the software works correctly and has no 'bugs' – just like tasting the cake to ensure it's perfect. In the **deployment** phase, the software is delivered to users so they can use it. Finally, in the **maintenance** phase, developers keep the software running smoothly by fixing any issues that may pop up. So, just like baking a cake has its steps, creating software follows a thoughtful process with the **SDLC**!

How is creating software similar to baking a cake?

Discuss the role of software developers and the importance of collaboration in the development process.

Create a visual representation (drawing, infographic, or mind map) summarizing the main characteristics and functionalities of computer software.



3 Back in time

Look at the words in bold. They belong to the quote but they are in the wrong place. **Put** them in the correct one.

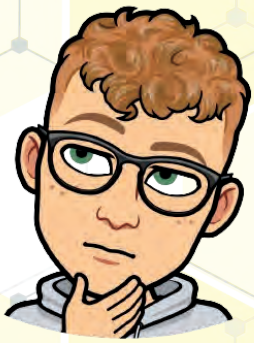
"Everything in software **going**. The requirements change. The **problem** changes. The business changes. The technology changes. The team changes. The team **changes** change. The **design** isn't change, because change is **members** to happen; the problem, rather, is our inability to cope with change".

Kent Beck (American software engineer)

"Everything in software _____ . The requirements change. The _____ changes. The business changes. The technology changes. The team changes. The team _____ change. The _____ isn't change, because change is _____ to happen; the problem, rather, is our inability to cope with change."

Kent Beck
(American software engineer)

What do you think Kent Beck is expressing about software development? How do you perceive change in the field of software development? Do you agree with Beck?



Surf the internet and find more information about Beck and his paths to success. **Share** your ideas with the rest of the class.

Get in pairs

- **Choose** one of these quotes on technology development.
- **Discuss** your quote with a partner.
- **Consider** different aspects such as the role of innovation, effort and adaptability in technological advancements.
- **Share** your ideas with the rest of the class.

A *"Technology doesn't automatically get better every year. It only gets better if smart people work like crazy to make it better. If people don't work on it, technology will decline."* – Elon Musk

B *"The most dangerous phrase in the language is: 'We've always done it this way.'"* – Grace Hopper

Read the three quotes *(Beck's, Musk's and Hopper's)* again and tick all the topics they relate to.

- [ ] The dynamic nature of technology.
- [ ] The inevitability of technology decline.
- [ ] The risks of embracing new procedures.
- [ ] The need to cope with change.
- [ ] The value of intelligence in technology.
- [ ] The ever-changing landscape of artificial intelligence.
- [ ] The importance of human effort.
- [ ] The constant evolution of software.
- [ ] The potential novelty of old engineering practices.
- [ ] The dangers of clinging to outdated approaches.

Get in pairs and **discuss.**
Do you agree with the quotes and what they express? Can you think of some technological changes that happened in the last few years? What about the last decades?

Freddie found a magazine article about the evolution of software development, which mentioned four key milestones.

SOFTWARE DEVELOPMENT CHANGES

Software development has changed a lot over time. Before, people used to ask, "Where do I put this CD?" Now, it's more like, "Give me the link to download."

High-Level Languages **Coding used to be hard work, done manually. But then came languages like Python and JavaScript. They made it easier for everyone to write code and create things we use every day.**

Open Source Software

A big change happened with open-source software. It's different from before because it's not just about making money. Instead, it's about working together and sharing ideas. Linux is one example of open-source software.

Cloud Computing is also a big deal. It's like using the internet to store data and run programs. Services like Google Drive and Amazon Web Services changed how we do things. Developers can use these services without worrying about the technical stuff.

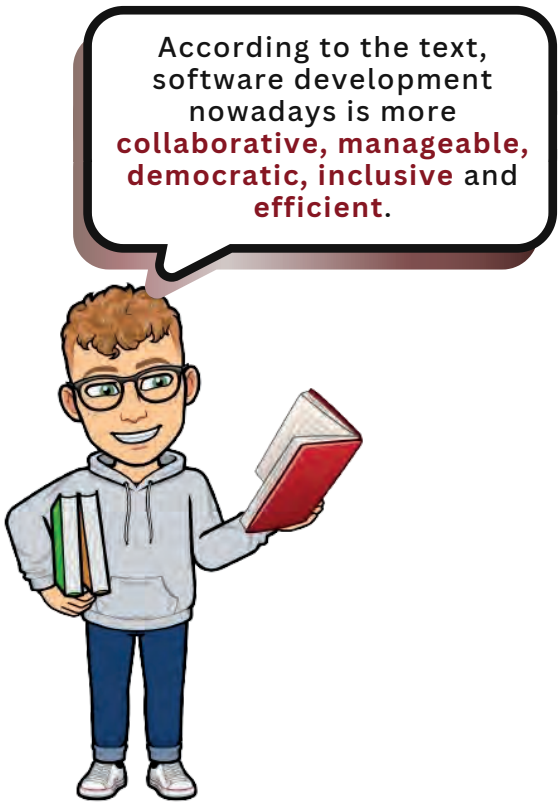
The Future

Software development keeps changing. Whether it's working together with open source, using Agile methods, or diving into cloud computing, it's always evolving. And there's more to come, with things like outsourcing, blockchain, and artificial intelligence.

Read the text again and then **match** each milestone with its corresponding description.

- Open-source software
- Agile methodologies
- Cloud computing
- High-end languages

1. _____: Using the internet to store and manage data, run applications, and collaborate globally.
2. _____: Philosophy that champions collaboration, transparency, and community-driven development.
3. _____: Sophisticated and user-friendly languages that empower developers with advanced features and streamlined syntax for efficient coding.
4. _____: Methodologies that split up work into several smaller components that are incrementally developed, rather than one giant block.



Match the words in **bold** to the sentence that best illustrates them.

- manageable: Agile breaks down software tasks into smaller sprints, making it easier for teams to focus and adapt quickly.
- _____: With open-source software, coders from around the world work together to improve and expand shared code.
- _____: Thanks to languages like Python and JavaScript, creating software has become simpler, allowing more people to code and build interesting, effective applications.
- _____: Open source invites a variety of voices on collaborative platforms, ensuring a mix of ideas in software development.
- _____: The move to open-source software lets anyone contribute globally, making the development process open and accessible to everyone.

Go back to the article and **answer** these questions.

1. What was programming like in the beginning?
2. What major shift happened with the introduction of open-source software?
3. How do Agile methodologies differ from traditional approaches?
4. What impact has cloud computing had on how applications are run?
5. According to the author, what is the most important ability in software development?

The article mentions other future advancements. What are they? **Get into groups** and **search the web** to learn about them. **Share** the results with your class.

4 Proprietary OS vs Open-source OS

Compare both pictures using some phrases from the SOS box.

Open-source

Proprietary source

SOS Box

- Picture A shows .... while picture B shows ... .
- In picture A I can see ... .
- Both pictures show ... .
- In both pictures I can see ... .

Read the text on the next page and the features of each operating system using different colors.

PROPRIETARY OS

PROPRIETARY Operating Systems are owned by a company and are not open for anyone to use or modify. Some examples of proprietary operating systems include Windows, macOS, and iOS.

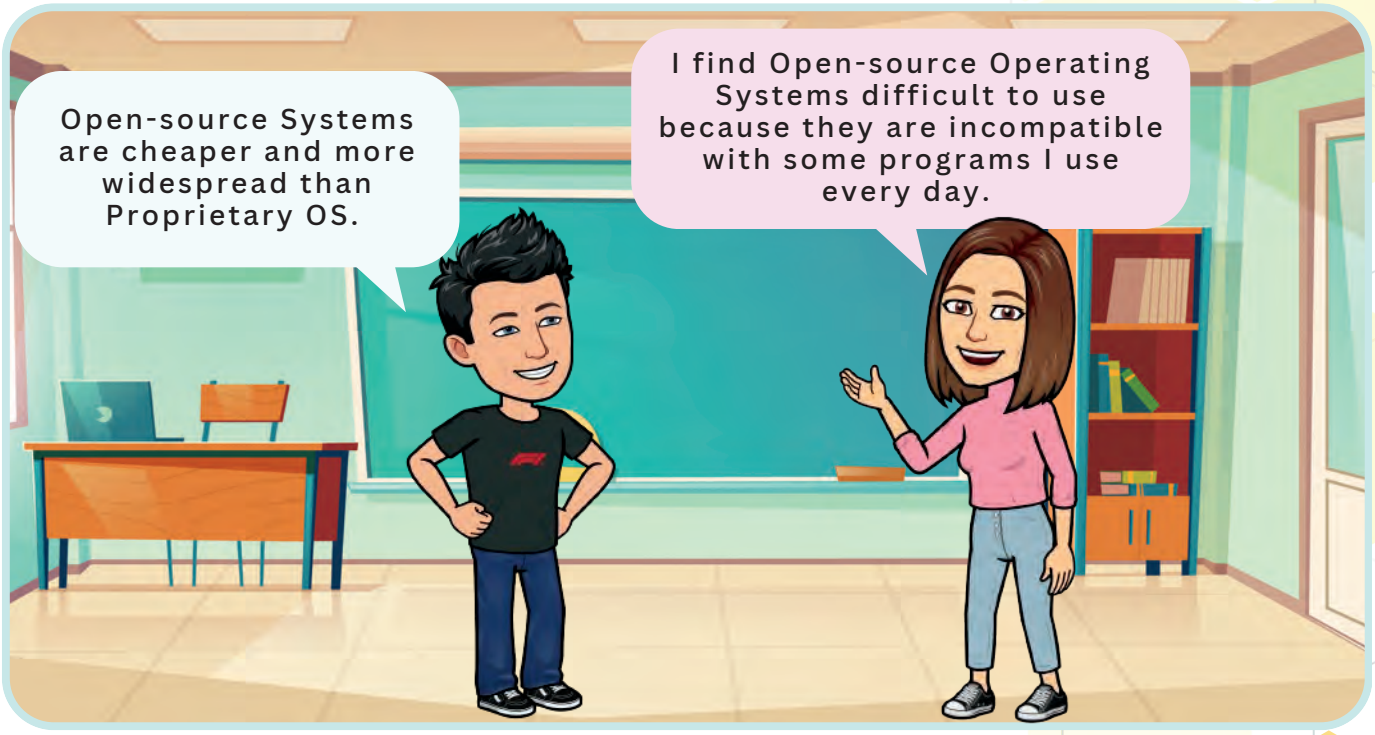
PROPRIETARY Operating Systems are often more expensive than open source operating systems. They may also have more features and better security. However, proprietary operating systems can be more difficult to use and customize.

OPEN-SOURCE OS

OPEN-SOURCE Operating Systems are licensed so that anyone can use, modify, and distribute them. Some examples of open-source operating systems include Linux and Android.

OPEN-SOURCE operating systems are often less expensive than proprietary operating systems. They may also be easier to use and customize. However, open-source operating systems may have fewer features and worse security than proprietary operating systems.

Read these two opinions. Do you agree or disagree with them? **Justify** your ideas.



Get in pairs.

- **Write** a paragraph stating your opinion about which type of operating system is better and why.
- Then, **exchange** your pieces of writing with another pair.
- **Read** your peers' work and **write** 2 questions you would like them to answer.
- **Answer** your peers' questions and **exchange** your paragraphs again.

SOS Box

- Both systems share … .
- On the other hand, … .
- In contrast, … .
- One key difference is … .
- In terms of … , … is more … than … .
- In conclusion, … .

Your voice matters!

You are an supporter of Open-source Operating Systems.

- **Find** information in at least three other information sources and **create** a speech in groups of 5.
- Each group will choose one of the participants to be the *spokesperson*. This representative will **share** the group's ideas in front of the class.
- The rest of the class must **take notes** and **select** the best speech.

5 From commands to graphics

Read this conversation between Emma and Camila and **circle** the best option out of the three options in bold text.

Emma: Hey Camila, I'm learning about computers in class, and there's something I don't get. What's the difference between CLI and GUI?

Camila: CLI? GUI? Sounds like robot names!

Emma: Haha, kind of! But they're actually about how you use computers. Apparently, CLI is like the old way and GUI is the new way.

Camila: ***Horrible/ Interesting/ Appalling!*** So, which one is better?

Emma: I don't know, that's what I'm trying to figure out. The teacher ***says/ understands/ creates*** CLI is all text and stuff, you have to type commands.

Camila: Like typing codes to make the computer do things? Sounds hard!

Emma: Right? GUI seems easier. It's like the normal computer screen with icons and windows, you just click on stuff.

Camila: Yeah, that's ***why/ when/ how*** we always use it! Click, click, click.

Emma: So maybe GUI is the new and improved version?

Camila: Maybe. But ***is there/ there is / is*** a reason they still have the old way, the CLI?

Emma: That's a good ***idea / question / choice***! Maybe it's for special things computers can do that clicking wouldn't work for?

Camila: Hmm. Or maybe it's like learning a secret language for computers!

Emma: Haha, that would be cool! We should ***ask / answer / understand*** the teacher more about it tomorrow.

Get in pairs and **roleplay** the dialogue.

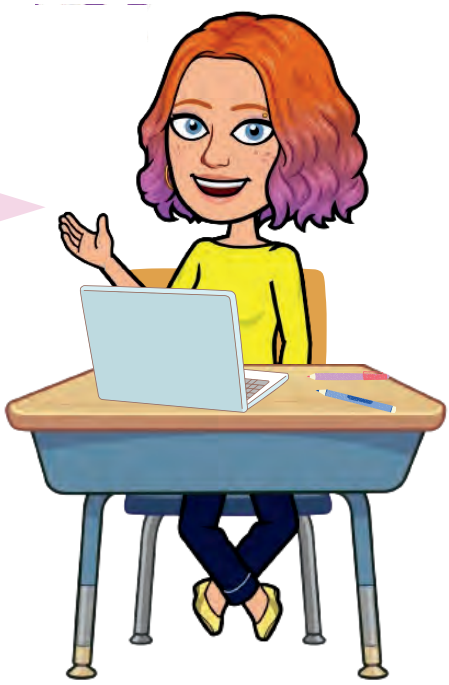
Write down your ideas in the diagram below. Then **get into groups** of 4 and **share** what you wrote.

GUI Graphical User Interface

CLI Command Line Interface

A **CLI** is a *command-line interface*, which is a way of interacting with a computer using text-based commands.

A **GUI** is a *graphical user interface*, which is a way of interacting with a computer using graphical elements such as icons, menus, and windows.



Look at the poster Camila found. **Read** it and **add** one more piece of information for each section.

Then, **search the web** and **add** some examples of each type of interface.

What are the advantages and disadvantages of CLIs and GUIs?

Advantages of CLIs include:

- They are more powerful and efficient than GUIs.
- They offer a wider range of features and capabilities.
- _____

_____

Advantages of GUIs include:

- They are generally easier to learn and use than CLIs.
- They are often more user-friendly than CLIs.
- _____

_____

Disadvantages of GUIs include:

- They may not be as powerful or efficient as CLIs.
- They may require more resources, such as memory and processing power.
- _____

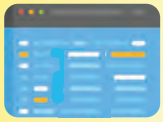
_____

Disadvantages of CLIs include:

- They can be more difficult to learn and use.
- They may not be as visually appealing as GUIs.
- _____

_____

Some examples:



CLIs

_____

_____

_____

_____

GUIs

_____

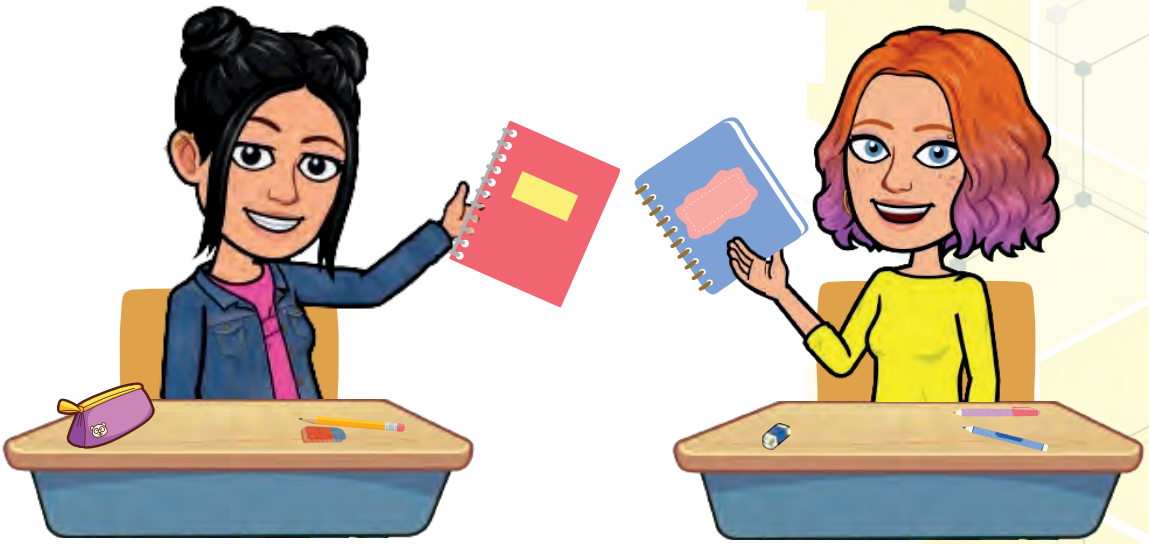
_____

_____

_____

Check how much you know about the topic!

1. **Write** three sentences about the topic. Some of the sentences must be *true*, some of the sentences must be *false*.
2. When the teacher tells you, **get in pairs** and **swap** copybooks with your classmate. You have to find out which sentences are false and correct them.
3. After you finish the activity, **give** your classmate's copybook back to the owner who will correct the activity. How did you do in this activity?



Project Manipulating images

- **Get in pairs** or small groups.
- **Work** with a computer with access to a CLI.
- **Complete** a series of tasks which involve manipulating images using basic commands.
- For example, *resize an image, convert an image to a different format,* or *create a simple collage*. **Record** actions and instructions and **upload** your videos to CREA.

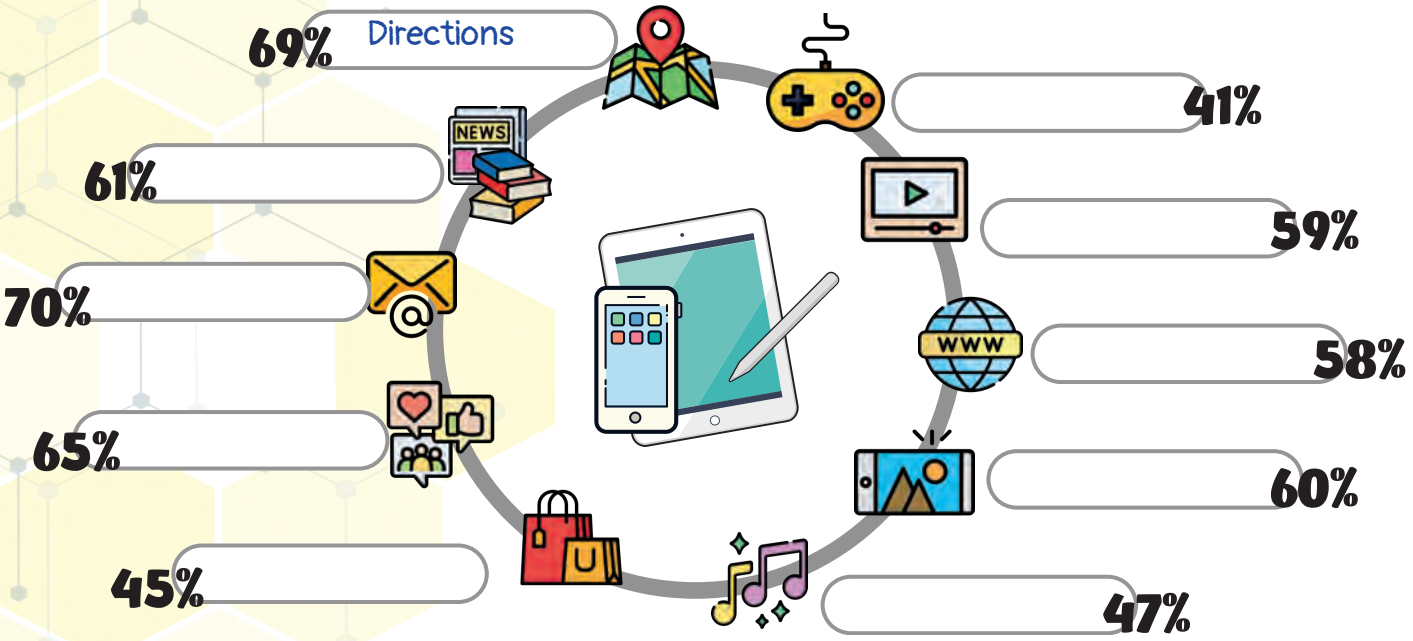
6 mobile devices have OS, too!

Look at these words. **Write** a sentence expressing their relation.

- mobile devices
- operating system
- apps
- software
- programs

What do people actually use their mobile devices for?
Complete the diagram with the corresponding use according to the images.

Which basic functions of mobile phones are not represented in the diagram?



It's your turn!

How much do you use your phone?

- **Consider** the activities mentioned and **estimate** what percentage of your mobile phone use is dedicated to each one.
- **Compare** your percentages to your partner's.

Did you know?

A mobile application, or app, is software designed for use on smartphones and tablets.

Read an article about mobile devices and **put** these sentences in the right place.

Imagine a mobile device as a car. _____
The two most popular mobile operating systems are Android and iOS. _____
Mobile devices and operating systems have become an essential part of our lives. _____
such as smartphones, tablets, and e-readers. _____
Mobile operating systems provide a variety of features, such as: _____

#WORKING URUGUAY

THE POWER BEHIND YOUR POCKET: MOBILE DEVICES & OPERATING SYSTEMS

Mobile devices, 1 _____, are small, portable computers designed for use on the go. These devices rely on operating systems—software programs that manage the hardware and software resources and allow the devices to run applications effectively.

THE MAJOR PLAYERS

2 _____ Android, developed by Google, is used on a wide variety of devices from different manufacturers. This open-source system's flexibility and adaptability have made it a favorite. On the other hand, iOS is developed by Apple and it is used on iPhones and iPads. Other mobile operating systems include Windows Phone, BlackBerry OS, and Firefox OS.

EVERYDAY USE CASES

Mobile devices and their operating systems serve numerous purposes in our daily lives:

- **Smartphones:** Used to stay connected with friends and family, check the news and weather, and get directions.
- **Tablets:** Ideal for watching movies and TV shows, reading books and magazines, and playing games.
- **E-readers:** Perfect for reading books and magazines.

CORE FUNCTIONS OF MOBILE OPERATING SYSTEMS

3 _____

a _____: A way to launch and run apps.
b _____: A way to manage files and folders.
c _____: A way to connect to the internet.
d _____: A way to send and receive phone calls, text messages, and emails.
e _____: A way to take photos and videos.
f _____: A way to play games and listen to music.

Mobile OS are constantly being updated with new features and improvements.

4 _____

The operating system is like the driver, instructing the car when to turn, when to stop, and how fast to go.

The apps on a mobile device are like the passengers in the car. While the passengers can suggest destinations, it is the driver who ultimately controls the vehicle.

CONCLUSION

5 _____

They allow us to be connected, informed and entertained no matter where we are.

As technology continues to evolve, these devices and systems will surely become even more integral to our personal and professional lives.

Read an article again and **complete** the *"Core functions of mobile operating systems"* section with terms from the box.

• **Communication** • **File Management** • **Media** • **Connectivity** •
• **App Management** • **Entertainment** •

Get in pairs or **small groups** and **discuss** these questions.

- What is your favorite mobile device?
- What is the name of the device?
- What operating system does it use?
- What do you like most about your device?
- What could be improved about your device?

Nayeli wrote this haiku about her favorite mobile device. Can you **guess** what it is?

Did you know?

A **haiku** is a short poem with three lines. The first line has 5 syllables, the second has 7, and the third has 5. It often describes nature or emotions in a simple way.

Tiny screens that glow,
Worlds within our fingertips,
Mobile magic flows.

Read these haiku poems other students wrote. **Complete** them with your own ideas.

Small screen in _____
Worlds of knowledge at my touch,
A portal to _____.

Light clicks _____ glow,
Connecting _____ across miles,
Friendship in my grasp.

Games fill the I_____,
Battery _____with every tap,
Eyes glued to the screen.

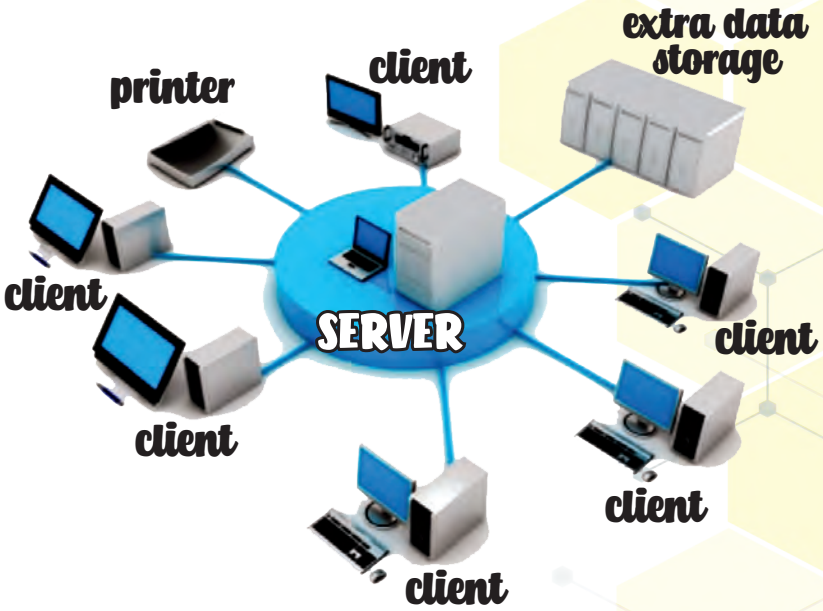
Silent pocket friend,
_____ to lend an ear,
But a world missed out.

Now, it's your turn! **Write** a haiku about your favorite mobile device.

7 Networking OS

Discuss these questions with a partner.

- What do you think a Networking Operating System does?
- Why might networks need a special type of operating system?
- Can you think of any examples?
- What type of network is the one below? Why?



Complete the sentences with the terms in the box.

client-server · management · server · security · · Networking Operating System · client · protocol ·

1. A _____ ensures that all devices in a network can communicate efficiently and securely.
2. The _____ stores all the company's important data and manages the network traffic.
3. Each computer in the network is a _____ that accesses files from the main server.
4. TCP/IP is a common _____ used to transmit data over the internet.
5. Effective network _____ ensures that the network runs smoothly and efficiently.
6. Firewalls and encryption are important _____ features in any NOS.
7. _____ NOS and *peer-to-peer* NOS are different types of Networking Operating Systems.

Project Being part of a team of IT specialists

Get into groups of three and **read** the situation below.

You are part of a team of IT specialists working for a futuristic tech company called "ByteTech."

Your team has been tasked with designing and implementing a cutting-edge networking system for a newly established research facility on Mars. The facility will house scientists and engineers from around the world, conducting groundbreaking research in space exploration and colonization.

As the lead IT specialist, you need to create a presentation including a comprehensive plan for setting up the networking infrastructure and selecting the appropriate Networking Operating System (OS) for the Martian environment.

PART 1

Discuss the difficulties of setting up a network on Mars due to its distance from Earth, communication delays, and harsh environment. Use these questions to help you:

1. Why is it difficult to make a network connection between Mars and Earth because they are far apart?
2. How can delays in sending messages between Mars and Earth affect the network?
3. How does the harsh Martian environment affect the network's equipment?
4. What can we do to ensure the network works well despite these challenges?

PART 2

List the necessary hardware like routers, switches, and satellites, as well as software such as Networking OS and security protocols.

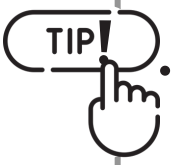
PART 3

Describe the layout of the network to ensure reliable communication between Mars and Earth, focusing on maximizing bandwidth and minimizing delays. You can use these questions to help you.

1. What are the main challenges we face in setting up a network between Mars and Earth?
2. How can we arrange the routers, satellites, etc. to ensure effective communication?
3. Why is it important to minimize the time it takes for data to travel between the planets?
4. What techniques or technologies can we use to optimize the use of available bandwidth?
5. How does your design address the challenges of communication between Mars and Earth?

PART 4

Explain how to handle potential issues like solar flares or equipment failures to maintain communication in emergencies.



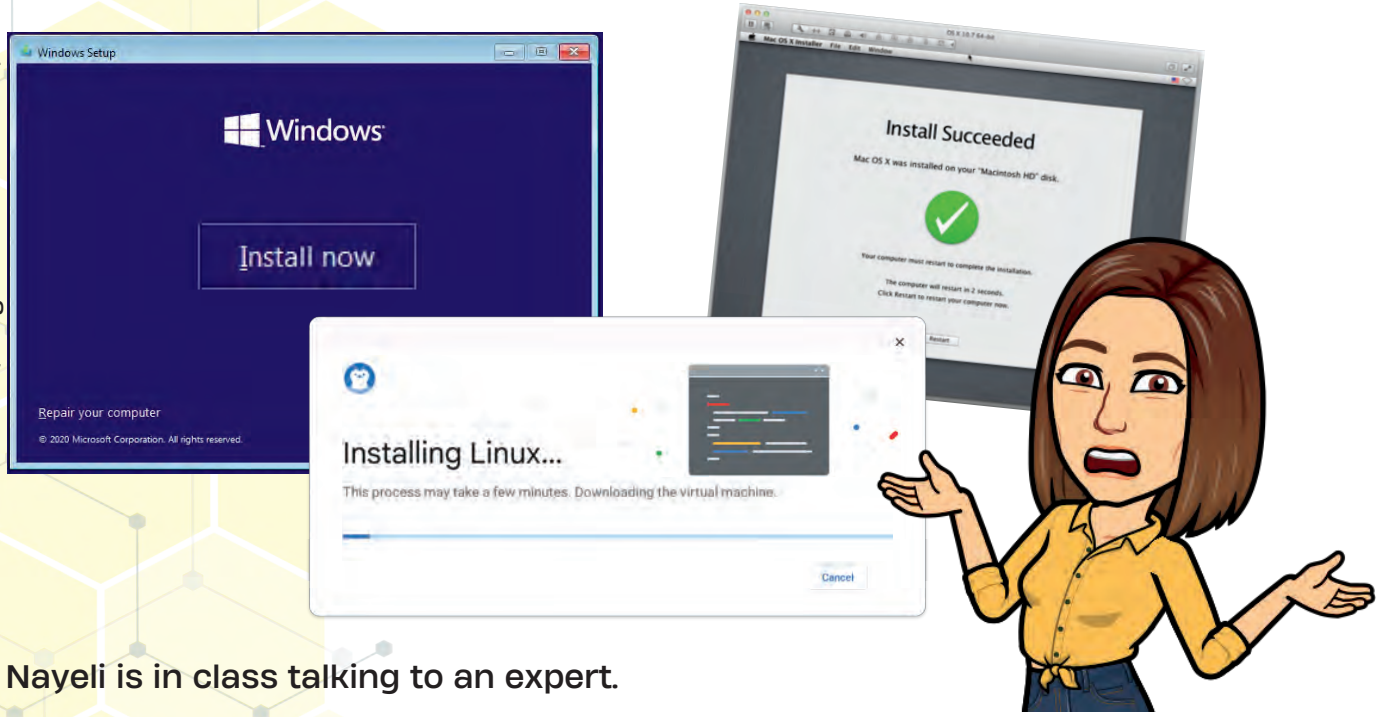
- Be creative and think outside the box when addressing the challenges of networking on Mars.
- Use technical terminology and concepts learned in class to demonstrate your understanding of Networking Operating Systems.
- Consider the long-term sustainability and scalability of the proposed networking solution for the Martian research facility.
- Include appealing visual aids.

Think about:

- The different types of emergencies, such as solar flares or equipment failures, that may affect communication between Mars and Earth.
- How solar flares might interfere with our communication systems and what actions we can take to minimize their impact.
- The steps you would take to fix communication equipment if it breaks down during an emergency.
- Why it's important to have plans in case of emergencies like solar flares or equipment failures.
- How having backup systems and redundancy can help maintain communication during emergencies.

8 Installing OS

What do you know about installing an operating system?



(Images from Flickr.com)

Nayeli is in class talking to an expert.

Look at the list of words below. Can you **predict** which ones will be mentioned in the audio you are about to hear?

Tick ✓ the words you think will be included in the audio about installing an OS.

☐ BIOS	☐ Printer	☐ Boot	☐ Installation wizard
☐ Monitor	☐ Data	☐ Graphics card	☐ Software update
☐ Mouse	☐ Backup	☐ Power outlet	☐ Cloud storage

Listen to the first part of the conversation and **check** your answers.

Match the words from the audio to their definitions.

1. _____ A copy of important data stored separately to prevent loss.
2. _____ The process of starting up a computer and loading the operating system.
3. _____ A step-by-step guide that helps users install software on their computer.
4. _____ Online service where data can be stored and accessed over the internet.
5. _____ *(Basic Input/Output System)* Firmware that initializes and tests hardware during the computer boot process.
6. _____ Information that is processed or stored by a computer, including text, images, videos, and other forms of digital content.

Listen to the first part of the conversation again, what are Nayeli and the software expert talking about?

a. Some problems she encounters while working with the OS.
b. Installing a new OS.
c. Losing information while installing the OS.

Write down the different **steps** in the process the expert mentions.

Step 1	
Step 2	
Step 3	
Step 4	

What would be the worst-case scenario if something goes wrong during the OS installation?

Well, data loss would be a disaster. But you won't have any trouble if you follow these directions.

Did you know?

The **worst-case scenario** is the worst possible thing that could happen in a particular situation.

What do you think about the expression "d*ata loss would be a disaster*"? **Get in pairs** and **think** of 3 real situations in which this phrase will be applicable.

1. _____
2. _____
3. _____

Listen to the second part of the conversation. What sensible pieces of advice does the expert give to Nayeli to avoid problems during the OS installation process?

Complete the infographic's tips with information from the audio.

TIPS TO AVOID PROBLEMS WHEN INSTALLING a new OS

01 SYSTEM REQUIREMENTS
Make sure your computer meets the minimum system requirements for the new OS. _____.

02 BACKUP
Before you start the installation process, create a backup of all your important data. _____.

03 INTERNET CONNECTION
Make sure your computer is connected to the internet during the process. _____.

04 POWER SUPPLY
If you are installing the OS on a laptop, ensure it is plugged into a power outlet _____.

05 HELP
If you encounter any problems during the installation process, _____ _____.

Role play

Get in pairs. Think of a situation from the previous activity in which you might need technical help to avoid data loss.
Create a dialogue using the expressions from the SOS box and then **perform** it.

SOS Box

- **Asking and Giving Help:** "I'm feeling a bit lost..."
- **Offering Help:** "I'm happy to help..."
- **Expressing Gratitude:** "Thanks!", "Thanks so much..."
- **Giving Instructions:** "First things first ...", "Next up, ..."
- **Making Conversation:** "Interesting!", "Sounds impressive!", "Don't worry...", "Feeling more confident about ... ?"

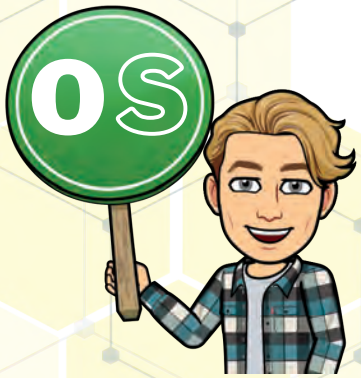
9 How to choose the right OS

Marker talk!
Come to the board and **write** as many words/information as you know about OS so far.

Read these definitions of OS and **underline** all the words you included in the previous activity. How can you improve these definitions? **Use** words from the brainstorming activity to make a more detailed definition.

An operating system is a software program that controls a computer or mobile device.

There are many different operating systems available, and it is important to choose the right one for your needs.

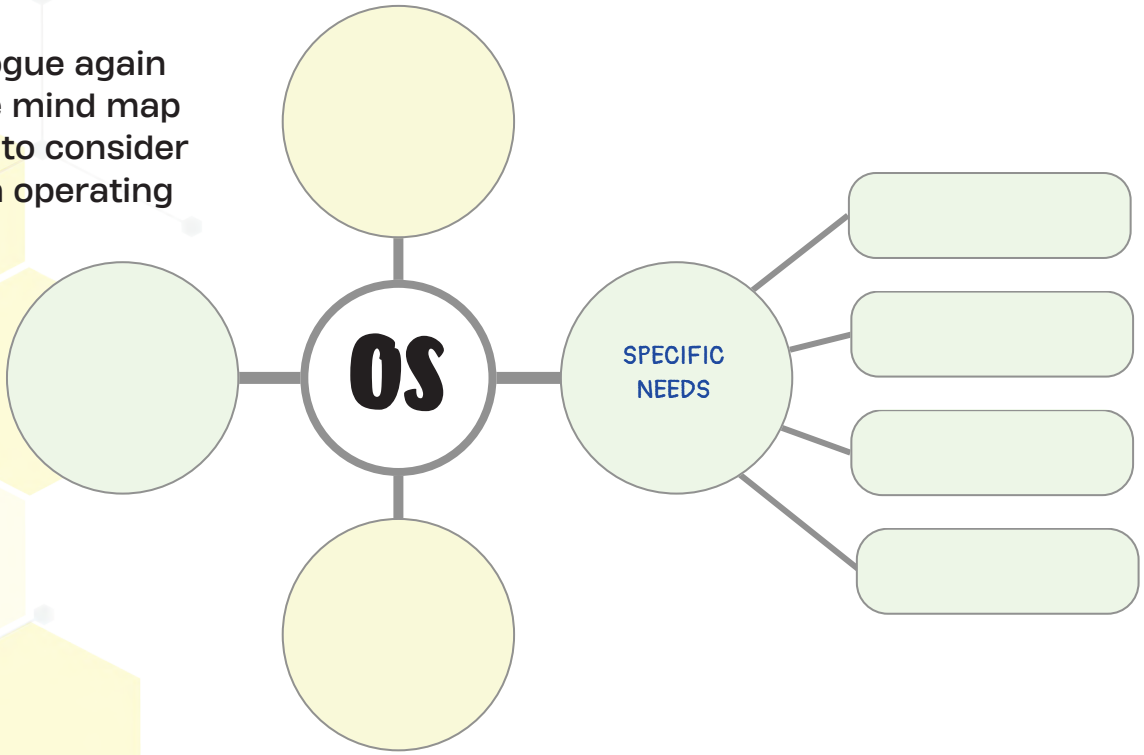


Sam Carter and Nicole Rodríguez are two tech experts. They are discussing how to choose the right OS.

Listen to the dialogue between them and **answer** these questions.

1. What factors did the experts emphasize when choosing an operating system?
2. Why is it important to consider those factors when selecting an operating system?

Listen to the dialogue again and **complete** the mind map of the key factors to consider when choosing an operating system.



Sam and Nicole mention that it is important to choose an OS according to the user's specific needs. **Complete** the chart with the appropriate operating system for these 4 kinds of users and why.

Kind of user	OS	Reason for the choice
gamers		
students		
creative people		
techies		

Create a dialogue between two experts and include these questions.

-What are the most important factors to consider when choosing an operating system?

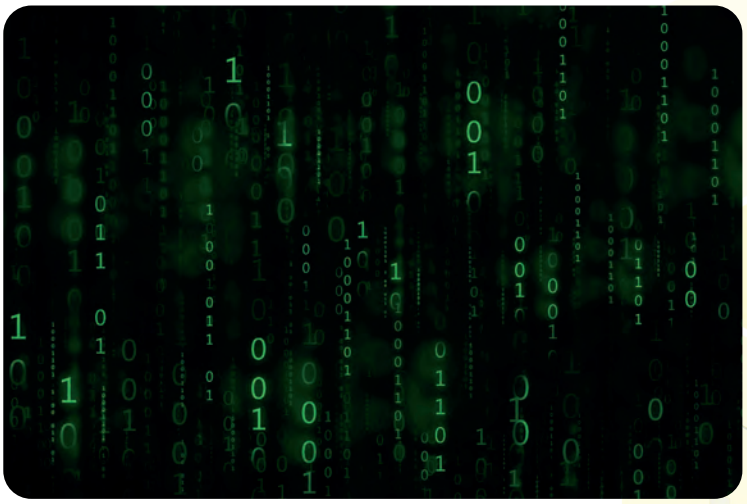
-What are the advantages and disadvantages of different operating systems?

-How can you find the right operating system for your needs?

Record the dialogue and **upload** it to CREA or **perform** it in front of the class.

10 The language behind the computer

What do you know about the language behind the computer?



Get in pairs and **read** these statements. **Discuss** with your partners whether they are *true* or *false*.

1. Computers understand human languages like English or Spanish.
2. Programming languages are written in a series of zeros and ones called binary.
3. All programming languages are equally complex and difficult to learn.
4. A typo in a program will always lead to a complete system crash.
5. Learning about programming languages is only important for professional programmers.

Nico and Freddie are talking about this topic at school. **Listen** to what they say and check your ideas.

Listen and **say** if the statements below are *true* or *false.*

1. T Learning programming languages makes IT professionals like translators.
2. ____ Computers use a series of zeros and ones, to understand commands.
3. ____ Python is a programming language known for its complexity while C++ is pretty simple.
4. ____ A misplaced zero in binary code can lead to unexpected results.
5. ____ Coding provides general instructions to computers.

Match the statements in the previous activity to these concepts.

Typos		Importance of programming languages	1
Binary code		Programming languages examples	
Coding instructions			

Nico and Freddie mentioned many key concepts related to computer languages. **Match** them to the correct definition.

- Programming languages - Binary code - Computer languages - Readability -

1. _____ : Languages used to communicate instructions to computers.
2. _____ : Languages used to write code that computers can understand and execute.
3. _____ : The ease with which text can be read and understood.
4. _____ : A system of representing text or computer processor instructions using the binary number system, which consists of only two digits: 0 and 1.

Discuss the following questions with a partner.

- Why is binary code considered the fundamental alphabet for computers?
- How do programming languages differ from human languages?
- What are some advantages of learning Python for beginners?
- Why is it important for IT students to understand programming languages?
- How do programming languages bridge the gap between human ideas and machine code?

Project Computer programming languages

1 **Choose** *three* of these computer programming languages and **complete** the **chart** below. Use the web to help you.

JavaScript - Python - Java - C++ - C# - PHP - Swift - Ruby - SQL - R

Programming Language	Level of complexity	Characteristics	Common uses
Python	Low to Medium	Easy to read, versatile syntax, extensive libraries.	Web development, scientific computing, data analysis, artificial intelligence.

2 **Choose** one of them and **create** a presentation about it.
(You can choose Python if you wish)

3 **Write** 5 comprehension questions about what you explained for your classmates to answer.

EXIT TICKET

In this unit, I learned that...

Something I need to revise is...

my favorite part of this unit was...

I felt...

UNIT 3

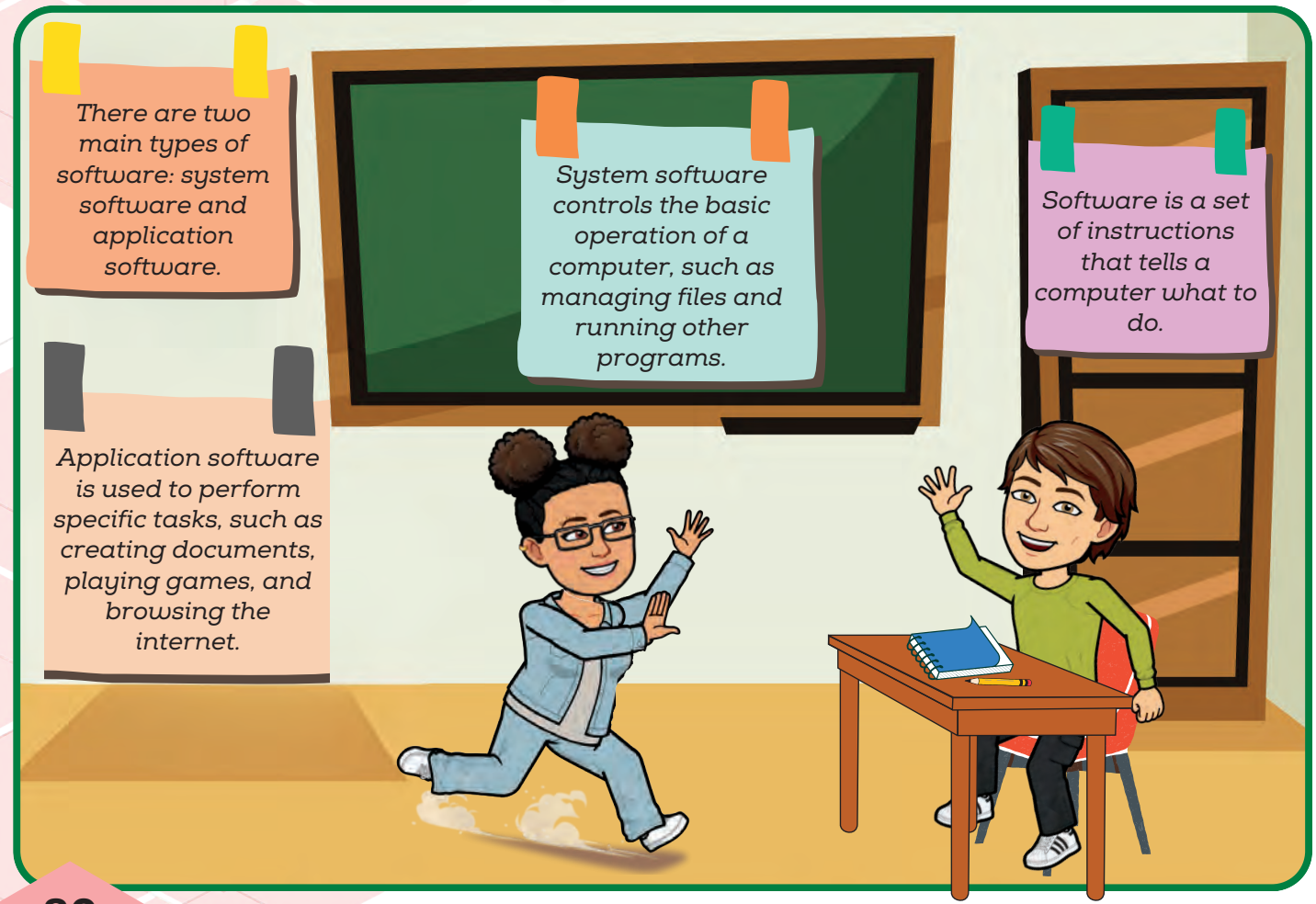
Application software

1 Characteristics and functionalities

What do you remember about computers and software?

Get in pairs.

1. **Look** at the four sentences spread around the classroom on four posters.
2. One member of the pair will be the "writer" and the other will be the "runner".
3. The runner will go to where the poster is and **read** the sentence.
4. He/She will **go back** to where the writer is and together they will **come up with** ideas about the topic.
5. The runner has to go back to the poster and **write down** the ideas there.
6. The pairs have to provide ideas for the four posters in less than 10 minutes.



Brainstorm a list of application software programs that you use or are familiar with. **Take** notes.

- What are some of the characteristics of application software?
- What are some of the functionalities of application software?
- How do we use application software in our everyday lives?

Get in pairs or **small groups.**

1. Work with a computer with access to a variety of application software programs.
2. Choose an application software program you are interested in learning more about.
3. Explore the application software program and experiment with its features.
4. Share what you have learned with the class.

Choose an application software program that you would like to use to complete a simple task.

- **For example, you can use a word-processing program to write a short story, a spreadsheet program to create a budget, or a presentation program to create a presentation about your favorite animal.**
- **Summarize the characteristics and functionalities of application software.**
- **Share some examples of application software that you have learned in the lesson.**
- **To get inspired to do the task, you can watch a video on the internet.**

2 uneditable

Tom is a poet, and his way of writing has changed over the years. **Read** his account, in which he explains how word processors help him work on his poems.

"Word processors have revolutionized the way I write poems. Before word processors, I had to write my poems by hand and then make corrections on paper. This was a time-consuming and messy process. With word processors, I can easily write, edit and revise my poems. I can also experiment with different fonts, styles, and formatting options. Word processors have made my writing process much more efficient and enjoyable."

How can word processors help poets work on their poems? **Get in pairs** and **discuss**.

- *For example, word processors can help poets experiment with different formats.*

Tom had to study how to handle the basics of a word processor so he looked for information on the internet. This is what he found.

Match the titles to the correct part of the diagram.

Spell check & Grammar correction tools • **Formatting options** • **Text templates**

Key Features of WORD PROCESSING SOFTWARE

- Change font styles, sizes, and colors to suit your document's aesthetic.
- Adjust alignment, indentation and spacing for a polished look.
- Organize information using bullet points or numerical sequences.
- Add titles, page numbers and other relevant information to the top and bottom of each page.

- Automatically detect misspelled words for a quick correction.
- Identify grammatical errors and give guidance for enhancing sentence structure and clarity.
- Access synonyms & antonyms to improve vocabulary and writing style.
- Fix common typos and formatting mistakes as you type, improving accuracy and efficiency.

- Choose from a variety of templates for resumes, letters, reports and more.
- Modify existing templates or create your own to facilitate document creation.
- Ensure consistency across documents by using templates with predefined styles and formats.
- Access frequently used templates with a single click, saving time and effort.

Did you know?

Typo: a mistake made while typing or writing, resulting in incorrect spelling, punctuation or grammar.
Synonyms: words that have similar meanings or convey the same idea or concept.

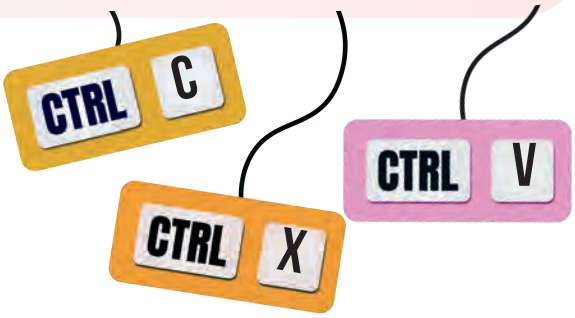
Find 10 words related to word processors in the ***word search.***

alignment

Y	T	H	F	O	A	U	B	J	C	K	E	Z	S
L	W	Z	B	U	I	G	H	S	R	A	T	Y	U
I	O	M	U	S	B	U	M	C	R	W	I	E	D
R	N	A	L	I	G	N	M	E	N	T	T	X	O
U	M	D	L	S	T	Y	L	E	S	L	L	K	C
W	C	T	E	G	P	M	G	W	D	Z	E	P	U
F	L	E	T	N	L	P	D	X	S	O	C	A	M
S	I	M	P	O	T	N	E	P	P	V	H	N	E
K	P	P	O	J	W	A	M	G	E	G	S	T	N
T	B	L	I	Q	N	Z	T	V	L	H	N	O	T
Y	O	A	N	D	Z	G	E	I	L	L	K	N	O
A	A	T	T	Y	A	S	V	T	O	T	Y	Y	X
M	R	E	S	A	P	A	C	V	R	N	Y	M	G
O	D	S	O	I	V	Q	D	S	A	F	I	S	N

Complete the sentences with the words you found in the *word search.*

1. When you want to move a paragraph to the right, you need to adjust the _____ .
2. If you want to look professional, you can choose one of the available _____ .
3. A _____ is a file created with a word processor that contains text.
4. The _____ of your essay should be centered and bold.
5. To ensure your text is free of errors, use the _____ checker.
6. Adjust the alignment of your text to make sure it is aligned to the left, center or right.
7. To create a list of items, you can use _____ .
8. The opposite of "hot" is "cold." These words are _____ .
9. To give your writing a consistent look, use different _____ .
10. After you cut or copy text, it is stored in the _____ until you paste it somewhere else.



This is part of a classic wordprocessor's toolbar.
Identify and **label** its different sections.

voice · font · edition · clipboard · paragraph

(image from: PngWing.com)

Look at the toolbar's buttons and **draw** the ones that perform these actions:

1. Change the text color
2. Check for spelling errors
3. Paste copied text
4. Create a bullet list
5. Suggest synonyms for selected words
6. Aligns text to the right margin

Get in pairs. **Read** this poem Tom wrote.
Think of a suitable title for it.

The sea is big, the sea is wide,
with waves that roll and sway with pride.
Blue and deep, as far as I can see,
the sea is where I love to be.
The sun shines bright upon the waves,
as seagulls soar and dolphins play.
I feel the sand beneath my feet,
as the sea's rhythm is, oh, so sweet.

I love to splash and swim with glee,
in the gentle waves that hug me.
The salty breeze, it fills the air,
as I explore without a care.

Oh, sea so vast, oh, sea so free,
you bring such joy and peace to me.
With your beauty, I'm in awe,
forever loving the sea, forevermore.

Copy the poem into a word processor document and **create** a poster.

If there are words or phrases you are not familiar with, look for them.
Follow these steps.

1. **Open the Word Processor:** Launch your word processing software (e.g., Microsoft Word, Google Docs or LibreOffice Writer).
2. **Create a New Document:** Select *"New" or "File" > "New Document"* to start a new document.
3. **Set Document Size:** Depending on your desired poster size, you may need to adjust the page setup. Go to *"Page Layout" or "File" > "Page Setup"* and set the page size to your desired dimensions (e.g., A4 or custom size).
4. **Add Title:** Type the title of your poster at the top of the document. Use a larger font size and bold formatting to make it stand out.
5. **Insert Text Boxes:** Click on *"Insert" > "Text Box"* to add text boxes for your content.
6. **Enter Content:** Type or paste the title, body and author of the poem into different text boxes. Position them wherever you want the text to appear on your poster.
7. **Format Text:** Format your text using options like font style, size, color, alignment and spacing to make it visually appealing and easy to read.
8. **Insert Images:** Click on *"Insert" > "Picture"* to add images relevant to your poster's content. Position and resize them as needed. Ensure images are high-quality and relevant to your topic.
9. **Add Shapes or Icons:** Use shapes or icons to further enhance your poster's visual appeal. Click on *"Insert" > "Shapes"* to add shapes like rectangles, circles or arrows to highlight key points.
10. **Design Layout:** Arrange your text boxes, images and shapes in a visually pleasing layout. Balance text and visuals to create an engaging poster.
11. **Review and Edit:** Proofread your poster for spelling and grammar errors. Make any necessary revisions to improve clarity and coherence.
12. **Save Your Poster:** Once you're satisfied with your poster, save your document. Go to *"File" > "Save As"* and choose a location in your computer to save the file. Consider saving it in a format that is suitable for sharing, such as PDF or JPEG.
13. **Print or Share:** Depending on your preference, you can either print your poster directly from the word processor or share it digitally via email or a file-sharing platform.

3 It's all in the numbers

What do you already know about spreadsheets?

Get in pairs or **small groups** and **discuss** the following questions:

- Have you ever used spreadsheet software like Microsoft Excel or Google Sheets?
- If you answer affirmatively, what did you use them for?
- If not, do you know anyone who uses spreadsheets in their work or daily life?

Read these accounts carefully and answer these questions for each text.

- What is the person's profession or role?
- How has using spreadsheet software changed their work or daily tasks?
- What are the advantages mentioned in their accounts?

My name is Rosario, and I'm a high school teacher. Keeping track of grades and who's in class was a pain before. I used paper and pen, but it took forever and mistakes happened a lot.

Then, I found spreadsheet programs like Excel. Now, I have a list on the computer with all my students' names, grades and who's there each day. The program does the math for me, so I don't have to spend hours adding things up. I can also see right away which students might need some extra help.

Spreadsheets are amazing! I have more time to focus on my students now, not on paperwork. And I can easily share this information with parents and other teachers, so we're all on the same page.

I'm Raj, and I have a little shop downtown that sells snacks, drinks and other things. Keeping track of everything – what I have, what sells, and how much money comes in and out – used to be really hard.

Then I found these computer programs called Spreadsheets. Now, I have a list on the computer that shows all the things I sell, how many I have left, and how much I pay for them. When someone buys something, I update the list and it tells me right away if I'm making money or losing money. The list also helps me see what people buy the most. This helps me decide what to buy more of and how much to charge for things.

Using this computer list makes my shop run smoother and make more money! Now I don't have to worry about having too much stuff or running out, and I can spend more time helping my customers.

My name is Cecilia, and I keep track of the company's money. We used to have piles of papers for budgets, bills and employee pay. It was a big mess!

Now, we use computer programs called Spreadsheets. These programs are like magic calculators! We can put in our plans for spending and earning money, and the program figures out what will happen in the future. This way, we know exactly how much money we have.

Spreadsheets are also great for figuring out employee paychecks. Before, it took a long time, but now the computer does it in just a few minutes! This way, everyone gets paid the right amount at the right time.

Spreadsheets make my job much easier and more accurate. They're a super helpful tool for anyone who works with money!

Complete the following chart. **Include** the advantages of using spreadsheet software and examples of where it can be applied.

Advantages	Applications	Examples

Get in small groups and **discuss:**

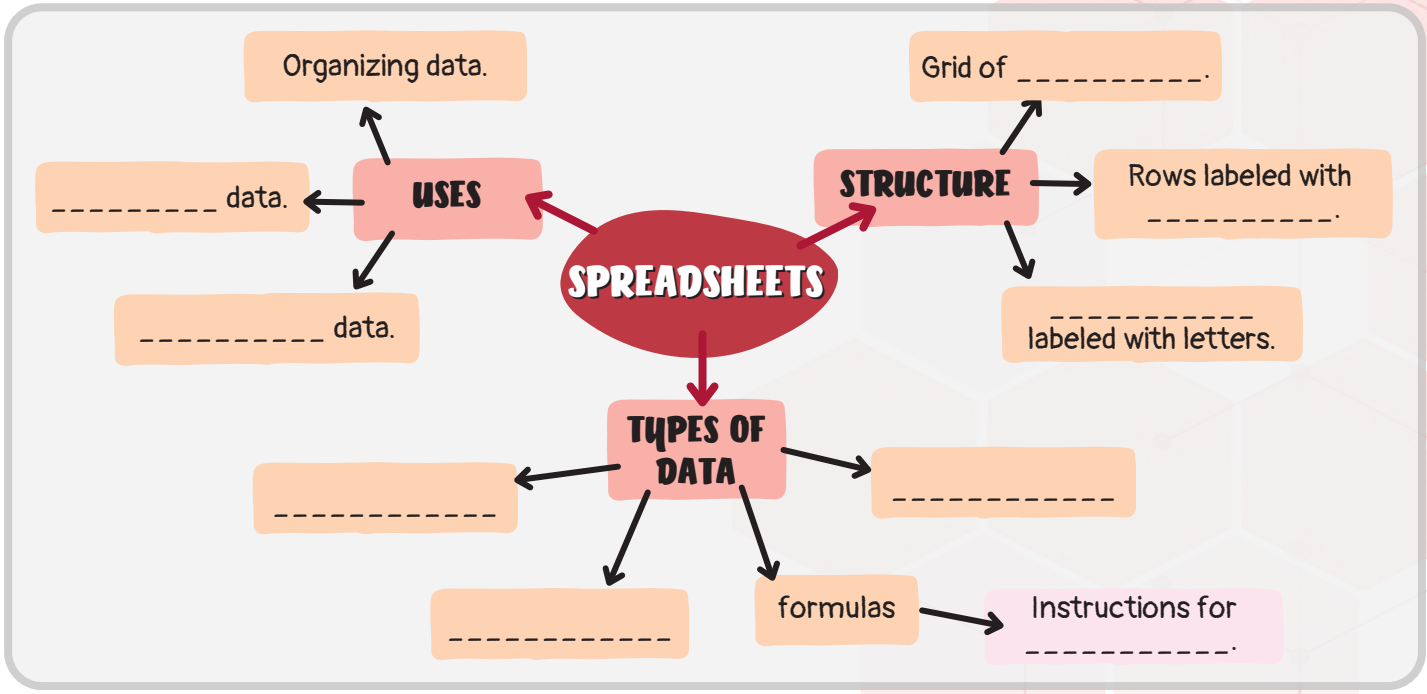
- Which advantages of spreadsheets do you find most useful or interesting?
- Can you think of any other professions or situations in which spreadsheets might be valuable?
- How do you think learning to use spreadsheet software can benefit your future career?

Your opinion matters!

How has the development of spreadsheets impacted on people's life?

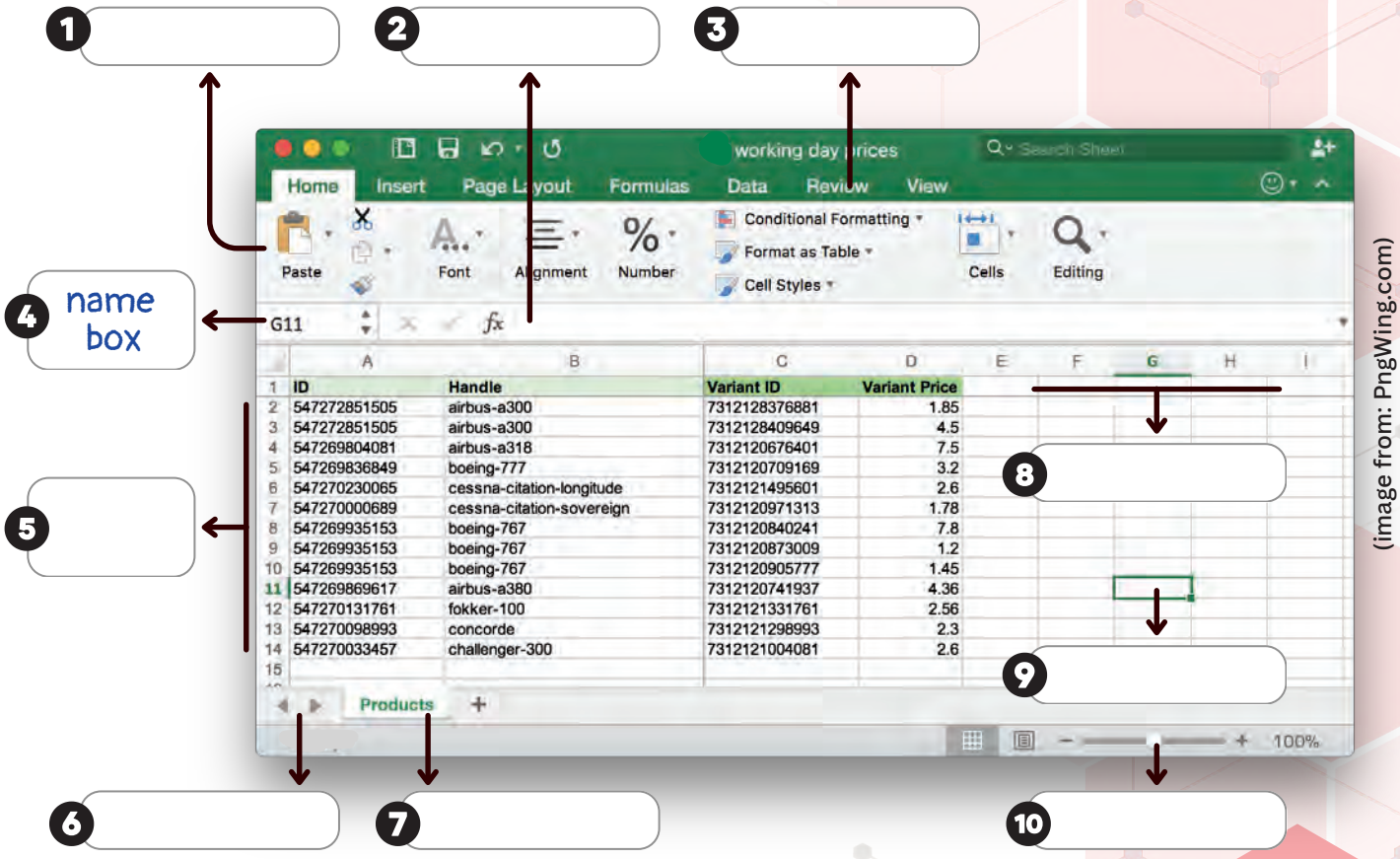
Plan a one minute speech in which you will convince other people of the usefulness of this device. Then, record your speech and upload it to the platform you use with the class.

Listen to an expert talking about spreadsheets and **complete** the mind map below.



Look at the spreadsheet window. **Identify** and **label** its different parts.

name box · **cell** · **toolbar** · **formula bar** · **zoom** · **navigation buttons**
row headings · **column headings** · **sheet tabs** · **menu bar**



(image from: PngWing.com)

All about math!

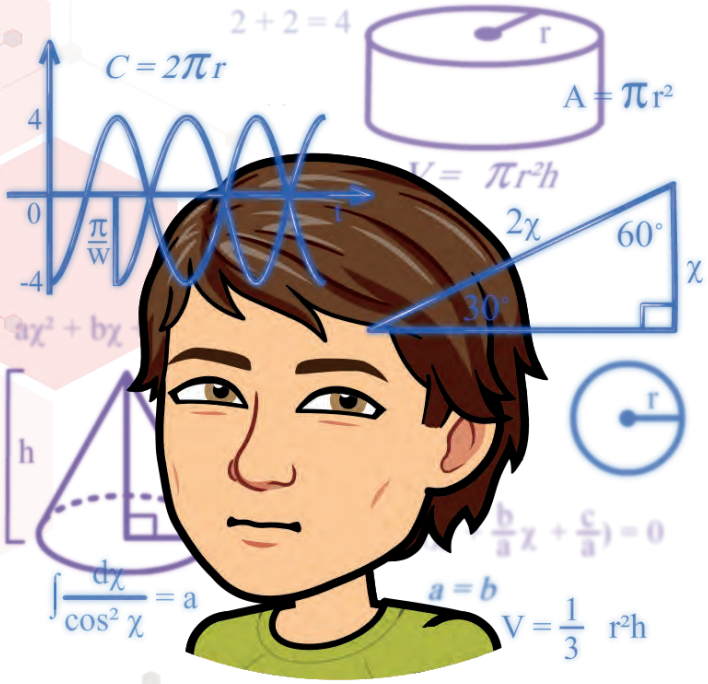
Complete the table below with the arithmetic operator *symbols* and *names* of the operations. Then, **write** the corresponding *verb* and *operation*.

addition · division · subtraction · multiplication

Symbol	Noun	verb	Everyday speech	Operation
+	addition	add	"five *plus* three *equals* eight"	5 + 3 = 8
			"ten *minus* three *equals* seven"	
			"three *times* three *equals* nine"	
			"twelve *divided* by three *equals* four"	

Did you know?

The multiplication sign (x) and the division sign (÷) are not commonly found on keyboards. Instead, spreadsheets use the asterisk (*) for multiplication and the forward slash (/) for division because these symbols are easily accessible on a standard keyboard.

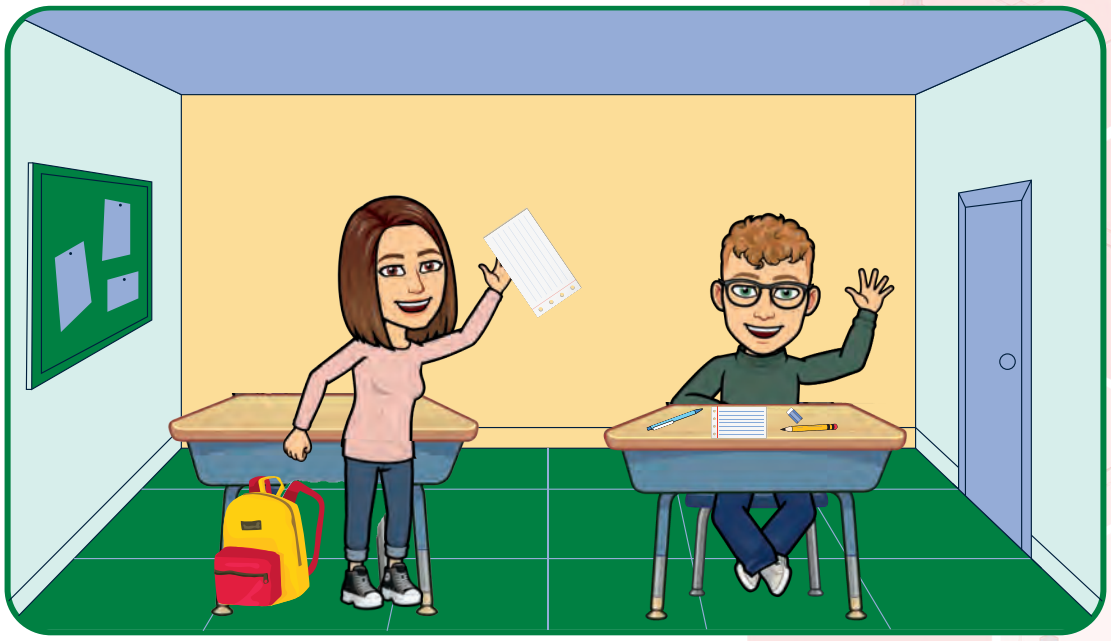


4 Organizing data

What do you know about databases? What are some examples of databases you use in your everyday lives?

Constructing a good definition

1. Take a piece of paper. You will have a minute to complete a sentence beginning with *"A database is..."*
2. Stand up and swap papers with your classmates while you walk.
3. When your teacher asks you, you stop.
4. Get in trios and read the definitions. Assign a number from 1 to 7 being 7 the highest grade.
5. Repeat stages number 2 and 3 two more times.
6. Add all the numbers on the back of the paper. The highest number should be 21.
7. Read the definitions with the highest grades in the class.



Freddie has a definition he found on the internet. **Read** it and **compare** it with the one you created.

A database is a collection of organized data that can be accessed and managed electronically. Databases are used in a wide variety of applications, such as storing customer information, managing inventory and tracking student grades.

For example: In our definition we included ..... while in Freddie's definition .....

Depending on their use, there are different types of databases.
Surf the internet and find examples.
Make a list containing at least 5 types of databases.

Freddie also found some information of the various types of databases.
Read the text and complete it with appropriate words.

Databases

There are many different (1)_____ of databases, each with its own strengths and weaknesses. Some common types of databases (2)_____ :

- **Relational databases:** These databases store data in (3)_____ , which are made up of rows and columns. Each row represents a single record, and each column represents a different attribute of that record.
- **NoSQL databases:** These databases are (4)_____ to store and manage large amounts of unstructured data, such as text, images and videos.
- **Cloud databases:** These databases are hosted (5)_____ a remote server and can be accessed from anywhere with an internet connection.

This is the second part of the text. There are three options in **red**.
Which one is the correct one?

Components of a Database

All databases share some common components, such as:

- **Data tables:** These tables store the ***actual/fictitious/past*** data in the database.
- **Schemas:** Schemas define the ***records/structure/purpose*** of the database, including the names of the data tables, the columns in each table and the data types for each column.
- **Database management systems (DBMS):** DBMSs are software applications that allow users to create, manage and access databases.

Designing and Creating a Database

- Design and create your own ***simple/difficult/dynamic*** database.
- Identify the type of data you want to store in your database. What are the different attributes of each record?
- Next, ***draw/develop/create*** a schema for your database. This schema will define the structure of the database and the relationships between the different data tables.
- Use a DBMS to create your database and populate ***it/them/its*** with data.

Project

Creating your own company

- Think of a company of your own.
- Create your own database.
- Work in groups to research a topic related to databases. This could be a specific type of database, a particular DBMS, or a real-world application of databases.
- Each group creates a presentation to teach the class about what they have learned.
- The presentation should include a definition of the topic, a description of its benefits and drawbacks, and examples of how it is used in the real world.

your opinion matters!

Databases have a very important ethical component. Nowadays, it is pretty common for some companies to use databases from other companies to reach out to people.

What is your opinion about sharing database information between companies? How do you feel when you receive phone calls from companies offering their products? What is the benefit this may have?

5 security is a must

What is the importance of computer security?
What do you know about antiviruses and firewalls?
Why do you think security software is important for a computer?

Read the dialogue between Inés and her mother Laura, and **answer** these questions.

- What is the conversation about?
- What are some potential security threats to devices?
- What can be done to protect against these threats?
- What antivirus software and firewall does Inés recommend?

Inés: Hey, Mom. I want to talk to you.

Laura: Sure, what's up?

Inés: I think it's really important that we talk about computer security. There are a lot of threats out there and I want to make sure we're protected.

Laura: What kind of threats?

Inés: Well, there are viruses and malware that can infect our devices and steal our personal information. And some hackers can try to break into our accounts and steal our passwords.

Laura: That sounds scary. What can we do to protect ourselves?

Inés: We need to make sure we have good antivirus software and firewalls installed on our devices. Antivirus software can detect and remove viruses and malware, and firewalls can block hackers from accessing our devices.

Laura: That makes sense. Do you have any recommendations for antivirus software and firewalls?

Inés: Yeah, I've done some research, and I think we should use Bugkiller. It's highly rated and has good reviews.

Laura: Okay, let's install it on our devices right away.

Inés found some information to help her mother create secure passwords.

Read the infographic and **create** appropriate subtitles for the different sections.

Then, **write a** new piece of advice in number 5.

Get in pairs.

- **Pay attention** to the statistics in the infographic. What conclusions can you draw from the pie charts included in it? Why do you think people keep making the same mistakes even when they know it's not secure?
- **Share** your opinions with the class.

HOW TO CREATE A SECURE PASSWORD

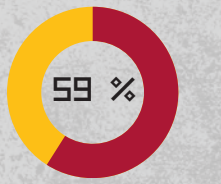
1

Use a mix of upper and lower case letters, numbers, and special characters to make your password more complex and secure.

81% of data breaches are due to weak or reused passwords.

2

Longer passwords are harder to crack because they provide more combinations for potential attackers to guess. The ideal number of characters is 12 or more.



59% of people use the same password across multiple accounts.

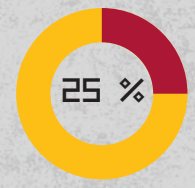
3

Using sequences like "aaa111" or "abcdab" makes passwords easier for attackers to crack through automated methods, so try to avoid these kinds of patterns.

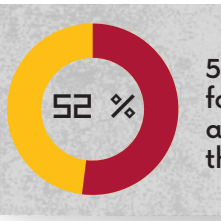
4

Avoid using details like your name, birthday, or address in your password. These details are often easy for attackers to find and exploit.

5



Approximately 1 in 4 accounts use "123456" or "password" as their password.



52% of people acknowledge they do not follow password security guidelines, such as using complex passwords or updating them regularly.

Get in pairs and **choose** one of these options.

1. **Write** a short paragraph about a real-life example of a security breach that resulted in personal information being stolen. You should include details about what happened and how it could have been prevented with proper security measures.

2. **Write** a short paragraph about a real-life example of a company or organization that suffered a data breach. You should include details about what happened and how the company responded to the breach.

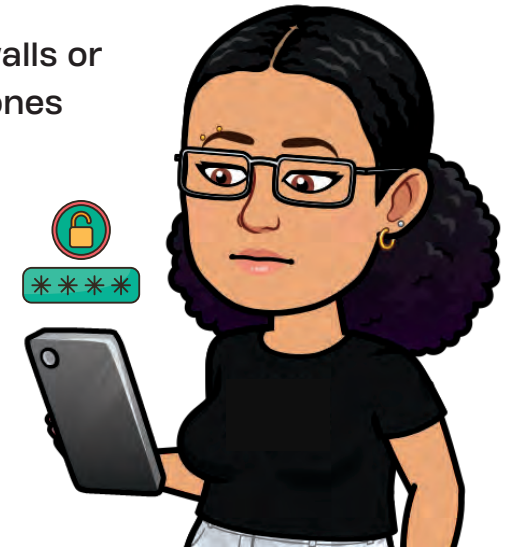
3. **Write** a short paragraph about a real-life example of a company or organization that has implemented strong security measures to protect against threats. You should include details about what measures were implemented and how effective they have been.

Correcting the paragraph

- **Join another pair** and tell them about the option you chose and the story you created.
- Then, **exchange the papers** containing the paragraphs.
- Each pair **corrects** the other pair's production. Always give constructive feedback. Pose questions to the other pair. Provide them with useful vocabulary to enrich the production of your classmates.
- When each pair finishes, they give the paper back to the owners.
- The owners of the paragraph **look at** the suggested corrections and make the necessary changes.

Your opinion matters!

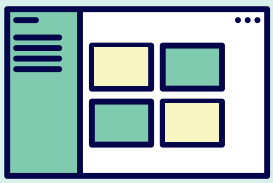
After learning about the importance of having firewalls or antivirus software, and considering that mobile phones are the most popular devices among teenagers, *why is it important to have good security software installed on your mobile phones?*



6 Presenting ideas

How much do you know about *PowerPoint*, *Google Slides* and *Prezi*? Do this **quiz** to find out.

Presenting ideas QUIZ



1 What was the original name of PowerPoint before it was acquired by Microsoft?

- ☐ **A.** Presenter
- ☐ **B.** SlideMaster
- ☐ **C.** TransparenciMaker
- ☐ **D.** SlideGenius

2 In which year was Google Slides first launched as part of Google Docs?

- ☐ **A.** 2005
- ☐ **B.** 2007
- ☐ **C.** 2010
- ☐ **D.** 2012

3 Who were the founders of Prezi?

- ☐ **A.** Bill Gates and Paul Allen
- ☐ **B.** Steve Jobs and Steve Wozniak
- ☐ **C.** Larry Page and Sergey Brin
- ☐ **D.** Adam Somlai-Fischer, Peter Halacsy, and Peter Arvai

4 What was the original purpose of PowerPoint when it was first developed?

- ☐ **A.** Word processing
- ☐ **B.** Spreadsheets
- ☐ **C.** Generating overhead transparencies
- ☐ **D.** Graphic Design

5 Which presentation tool offers real-time collaboration through cloud-based features?

- ☐ **A.** Google Slides
- ☐ **B.** PowerPoint
- ☐ **C.** Prezi
- ☐ **D.** Keynote

6 What was the original name of Google Slides when it was launched as part of Google Docs?

- ☐ **A.** Slides
- ☐ **B.** Presentations
- ☐ **C.** DocSlides
- ☐ **D.** GoogleSlides

7 Which presentation tool is known for its non-linear format, allowing for zooming and panning effects?

- ☐ **A.** PowerPoint
- ☐ **B.** GoogleSlides
- ☐ **C.** Prezi
- ☐ **D.** Keynote

8 **Which company originally developed PowerPoint before it was acquired by Microsoft?**

- ☐ **A.** Google
- ☐ **B.** Apple
- ☐ **C.** Adobe
- ☐ **D.** Xerox

9 **Which presentation tool integrates seamlessly with other Google apps?**

- ☐ **A.** PowerPoint
- ☐ **B.** GoogleSlides
- ☐ **C.** Prezi
- ☐ **D.** Keynote

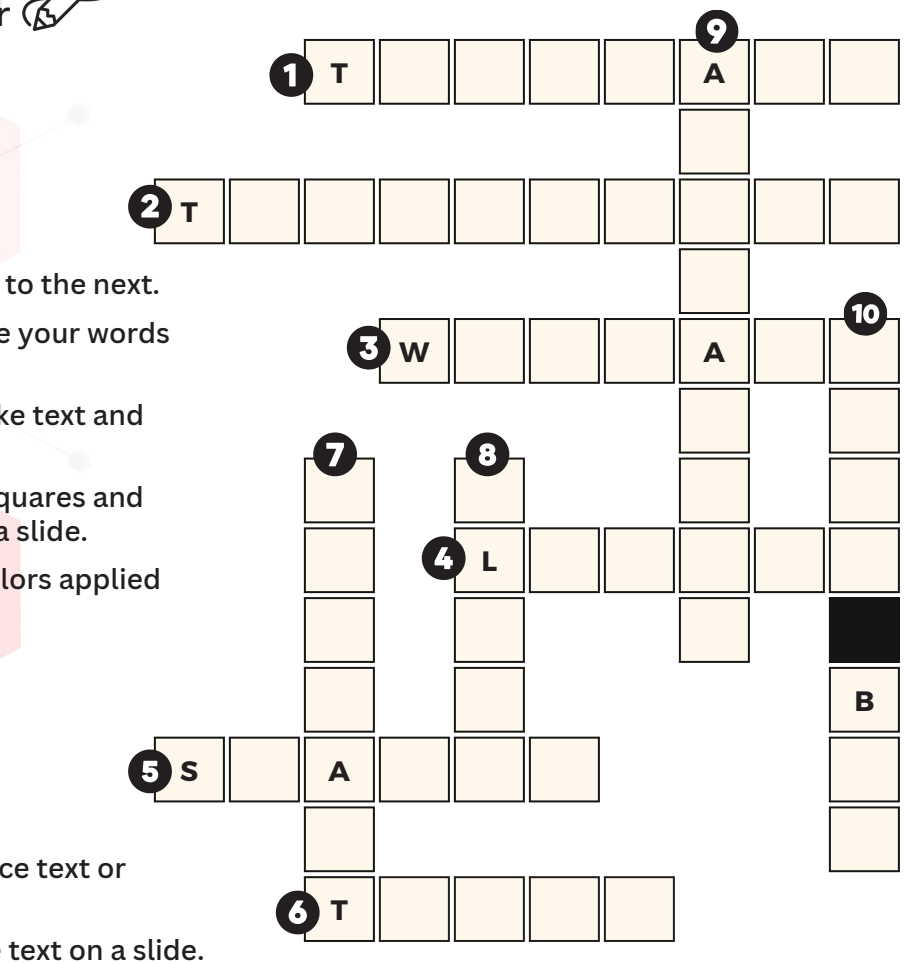
10 **What does the name "Prezi" come from?**

- ☐ **A.** The Finnish word for "show".
- ☐ **B.** The Japanese word for "dynamic".
- ☐ **C.** The Russian word for "innovation".
- ☐ **D.** The Hungarian word for "presentation".

Check your answers at the end of the unit.

Crossword

Complete the crossword with vocabulary related to computer presentations.



Across

1. A pre-designed layout you can use to create new slides.
2. The effect that moves one slide to the next.
3. Decorative text styles that make your words stand out.
4. The arrangement of elements like text and images on a slide.
5. Geometric figures like circles, squares and arrows that you can insert into a slide.
6. A set of design elements and colors applied to your slides.

Down

7. Simple pictures or symbols included in presentations.
8. A single page of a presentation.
9. A special effect used to introduce text or objects on a slide.
10. A container where you can type text on a slide.

Look at these shapes. **Identify** and **label** them using the information from the box below.


.....


.....


.....


.....


freeform shape
.....


.....


.....


.....


.....


.....


.....


.....

• freeform shape • oval • line arrow • rectangle • star: five points • line • arc • • rectangle: rounded corners • arrow • curve • braces: left & right • triangle •

Get in pairs and **research** how has technology helped people **present** information to others. **Create** a timeline with this information including the most important events in history.

Presenting information today

- Choose three software people commonly use to present information to others.
- Make a table comparing the benefits of one and the other and select the most effective.
- Support your answer.

1		2		3	
Pros	**Cons**	**Pros**	**Cons**	**Pros**	**Cons**

SITUATION 1

Get into small groups and **choose** one of these situations.

Class Presentation on the Evolution of Operating Systems

You're tasked with giving a presentation in your computer science class about the evolution of operating systems, from early systems like MS-DOS to modern ones like Windows 10 and macOS Catalina.

Which tool would be more convenient for creating slides that showcase the timeline and key features of various operating systems, along with screenshots and diagrams?

SITUATION 2

School Club Presentation on Coding Workshops

You're a member of a school club that organizes coding workshops for students. You need to create a presentation to promote your club and encourage more students to participate.

Which tool would be more convenient for creating an engaging presentation with animations and interactive elements to showcase the benefits of learning coding skills?

SITUATION 3

School Project Exhibition on Augmented Reality Applications

Your school is hosting a project exhibition, and your group has developed a project on augmented reality (AR) applications. You need to create a presentation to accompany your project display.

Which tool would be more convenient for creating a visually engaging presentation that demonstrates how AR technology is used in various applications, such as education, gaming, and retail?

SITUATION 4

Group Project Presentation on Mobile App Development

You and your classmates are working on a group project to develop a mobile app. You need to create a presentation to demonstrate the features and functionality of your app to the class.

Which tool would be more convenient for collaborating with your team members and creating a visually appealing presentation that showcases your app's user interface and features?

SITUATION 5

End-of-Year Class Presentation on Software Innovations

As the school year comes to an end, your teacher asks you to give a presentation reflecting on significant software innovations that have impacted society over the past year.

Which tool would be more convenient for organizing presentation slides to highlight the latest software trends, innovations, and their implications?

Write a short paragraph about your preferred method of presenting information. You should **include** specific examples of why you prefer that method and how it can be used effectively.

7 Data communication

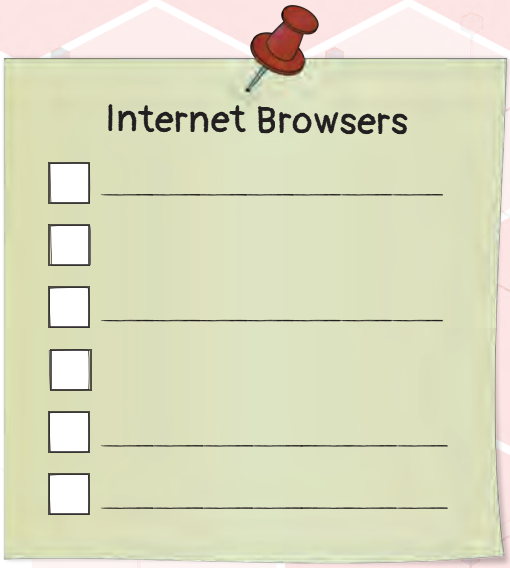
Let's revise what you know about the internet.

The Internet is a global network of computers that allows us to access information and communicate with people worldwide. We use internet browsers to navigate the internet and access websites.

Round robin

Get into groups of four and take a piece of paper.

- **Write** the phrase "Internet Browsers" as it is in the example below.
- Each member of the group has to **write** the name of an internet browser on the piece of paper and pass it to the person on the right.
- **Answer** these questions about the browser you wrote down.



1. What are some of the key features of an internet browser?

2. What are some of the advantages and disadvantages of different internet browsers?

3. What are the main reasons why you use a web browser?

4. Which internet browser do you usually use? Why?

Read the list of actions below. **Tick** ✓ the ones that are related to web browsing.

☑ Using hyperlinks	☐ Managing browser history	☐ Copying text
☐ Bookmarking pages	☐ Downloading files	☐ Setting a homepage
☐ Printing documents	☐ Setting up a printer	☐ Formatting a hard drive
☐ Using search engines	☐ Using browser extensions	☐ Using incognito mode

Get in pairs

- **Choose** one of the actions related to web browsing and **write** a *step-by-step guide* on how to complete that action.

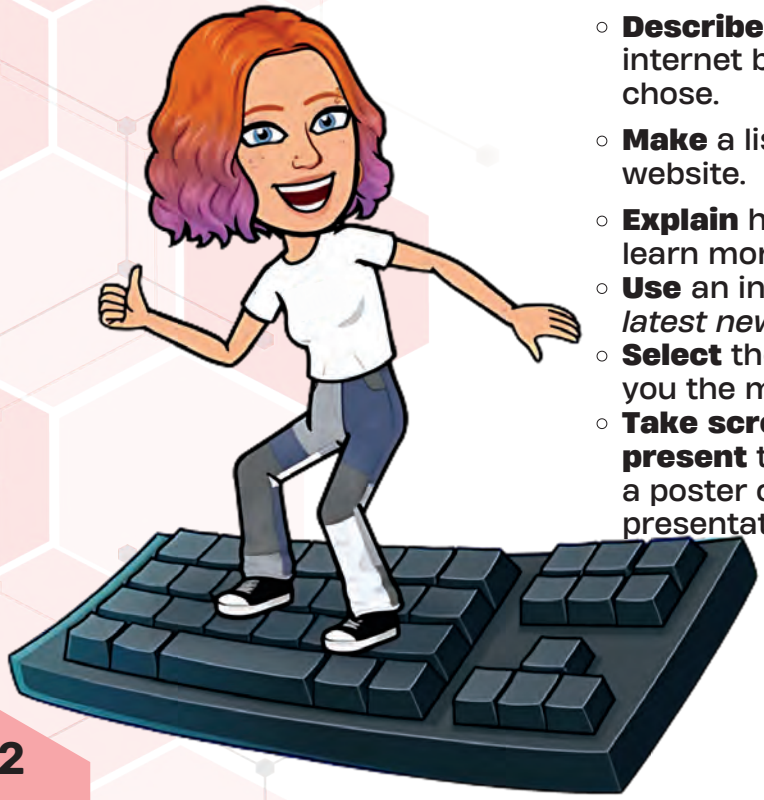
  Example:

  1. Open your web browser.
  2. Navigate to a webpage that contains hyperlinks.
  3. Click on a hyperlink (usually underlined and in a different color) to go to the linked page.
  4. To open the link in a new tab, right-click the hyperlink and select "Open link in new tab."

- **Present** your step-by-step guide to the class.

Project Computer practice

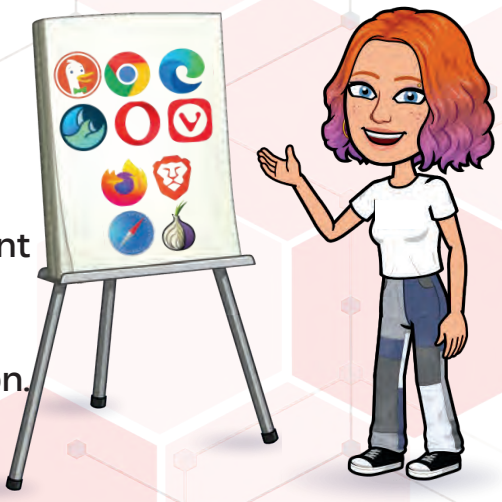
- **Open** a web browser on your computer and navigate a website that you are familiar with.
- **Explore** the different features of the website and follow these instructions:



  - **Describe** the steps you took to open your internet browser and go to the website you chose.
  - **Make** a list of the things you like about that website.
  - **Explain** how you can use these elements to learn more about the website's topic.
  - **Use** an internet browser to *research the latest news about IT careers*.
  - **Select** the *three news articles* that interest you the most.
  - **Take screenshots** of these news articles and **present** them to the class by pasting them on a poster or including them in a software presentation.

Project Let''s help a friend

Alina wants to install an internet browser on her new computer but she is undecided on which one to install.



Give Alina sensible advice on the most important features of a browser she needs to look at, the different existing browsers and their features, and which, in your opinion, is the best. Send Alina a video with this information.

Instructions

1 Work alone

- Research the most popular internet browsers (e.g., Google Chrome, Mozilla Firefox, Microsoft Edge, Safari).
- Take notes on the important features to consider in a browser, such as speed, security, extensions, user interface and compatibility with different devices.

2 Get into groups of 3–4

- Discuss your findings with a small group.
- Share which browser you think is the best and why. Consider the features and any personal experiences you've had.

3 Create a presentation

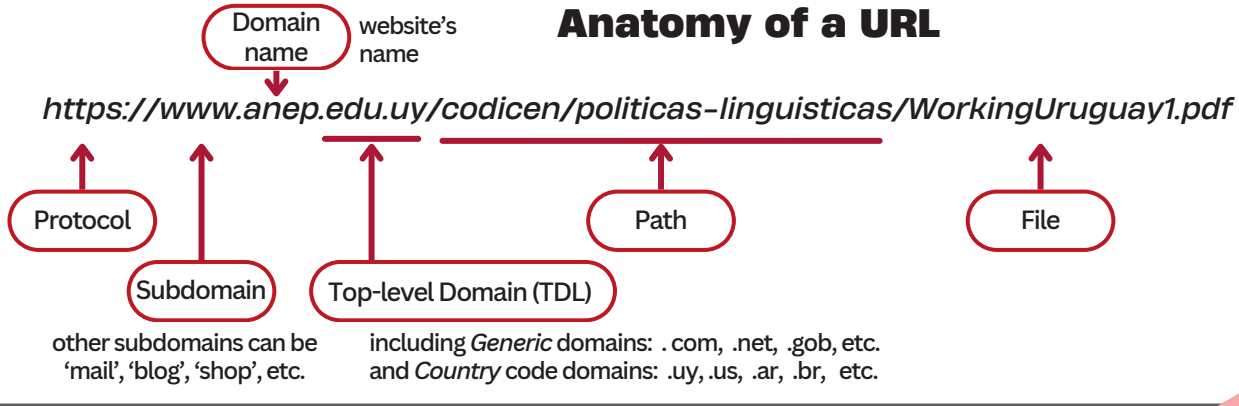
- As a group, create a presentation or poster summarizing:
  - The important features to look for in an internet browser.
  - The pros and cons of each browser you researched.
  - Your group's recommendation for the best browser and why.

4 Make a Video

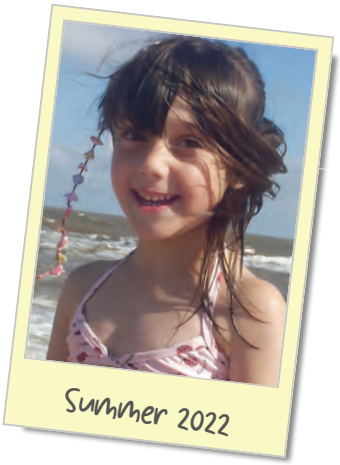
- Record a short video (2–3 minutes) explaining your findings and recommendations. Include visual aids like screenshots or your infographic.
- Share the video with the class.

Did you know? URLs *(Uniform Resource Locators)* are used to specify the addresses of resources on the internet, guiding browsers to locate and retrieve web pages, images, files and other resources by providing the exact path to follow.

Anatomy of a URL



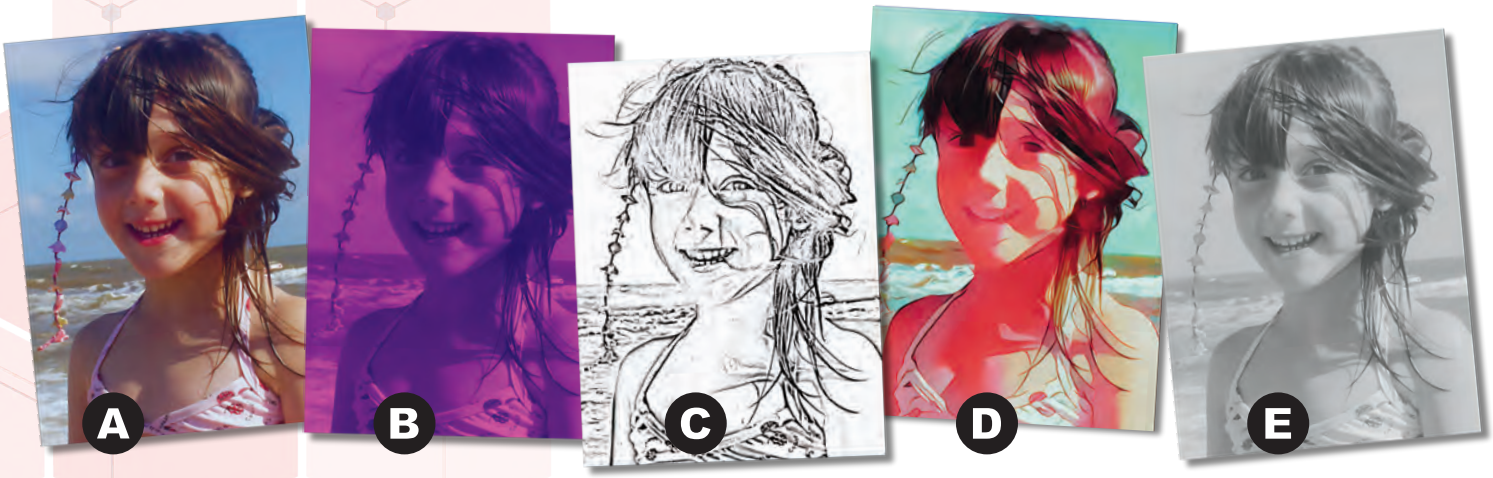
8 make it look better



Look at these examples of images before and after using image editing.

How have they changed? Do you recognize these effects?

• ___ duotone • ___cartoon • ___grayscale •
• ___ sketch • ___ enhanced colors •



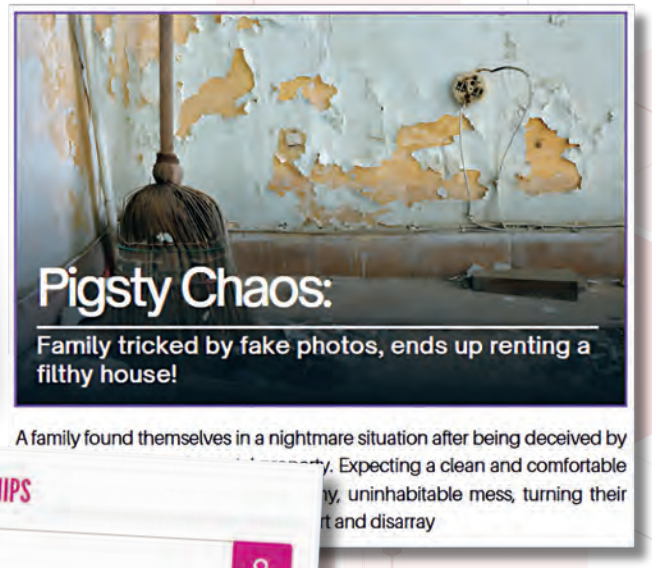
What type of application software is used for enhancing visual aesthetics, such as graphic design software, photo editing apps and video editing software? Do you use any of them?

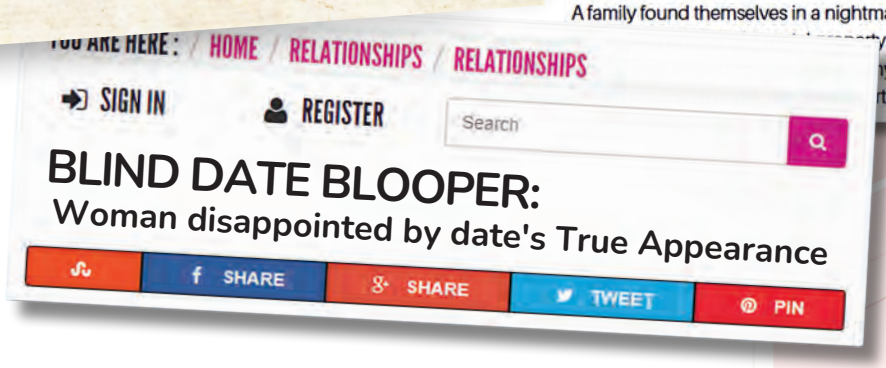
Emma loves using image editors to enhance her photos. She enjoys applying filters, making colors more vivid, and sometimes changing the background to maintain some anonymity for her social media followers.

Get in pairs and **discuss.**

- What do you think about using filters and software that change your appearance or the appearance of your photos? Is it a good or bad practice? Why?
- Why do you think people on social media use software to look younger or prettier? Consider reasons related to society and personal feelings.

Read the following headlines from newspapers and magazines all around the world. How can you relate them to the previous discussion?





Project People's rights advocate

- **Preparation**
  - Divide the class into three groups (or six, depending on the number of students). Each group will be assigned one of these topics:
    - **Filters and Edited Photos:** Talk about how filters and edited photos on social media and dating apps can change how people look and their potential impact on relationships.
    - **False Advertising:** Discuss false advertising and why it's important to be careful with ads, especially online. Talk about how to check if a product or service is really as good as it seems before buying it.
    - **Cyberbullying and Beauty Standards:** Discuss the negative effects of cyberbullying and unrealistic beauty standards on social media and with digital editing. Think about how to be empathetic and supportive if someone is being bullied or struggling with body image.
  - Research your assigned topic and prepare a summary of key points, examples, and potential impacts.
- **Conversation Circle**
  - Invite 6 students to sit at the front of the class, two from each of the previous groups. Give them one minute to discuss the three topics.
  - After one minute, the teacher will signal by clapping hands and 6 new students will replace the previous ones to continue the discussion for another minute.
  - Repeat this process until all students have participated.

Time to wrap up!
Get in groups of three and discuss these questions:

- What are some of the advantages of using application software to make things look better?
- What are some of the disadvantages of using application software to make things look better?
- How can we use application software to make things look better in a responsible and ethical way?

Emma found this article about the topic.
Read it and **answer** the questions below.

TEEN FACTS #WorkingUruguay

APPEARANCE-ALTERING APPS: HELPING OR HURTING Self esteem?

Applications that change physical appearance can have various psychological effects on users, both positive and negative.

On the positive side, these apps can help people feel more secure and positive about their appearance. For instance, someone with acne might use an app to smooth their skin, or someone self-conscious about their weight might use an app to look thinner. These apps can also be fun for trying out different looks and styles, making people feel empowered.

However, these apps can also lead to negative effects like body image dissatisfaction. People who frequently use these apps might start to feel bad about their real appearance. The unrealistic beauty standards in these apps can make users feel inadequate.

Here are some specific psychological effects of using appearance-altering apps:

- **Increased body image dissatisfaction:** Frequent users may feel unhappy with their real appearance, especially when comparing themselves to edited images.
- **Reduced self-esteem:** Feeling bad about their looks can lower a person's self-esteem.
- **Eating disorders:** Some may develop eating disorders to try to meet the unrealistic beauty standards seen in these apps.
- **Anxiety and depression:** Dissatisfaction with appearance can lead to anxiety and depression.

It is important to recognize the potential negative effects of these apps. Use them in moderation and remember that edited images are not real.

Some tips for healthy use of applications software

- Use these apps sparingly. Do not spend too much time editing your photos or videos.
- Be realistic about what these apps can do. They only create a filtered version of your appearance.
- Do not compare yourself to others. Everyone is unique, and it's important to accept and love yourself as you are.
- Focus on your inner beauty. Your personality, talents, and values make you special, not your looks.

If you feel that using these apps makes you feel worse about yourself, take a break and talk to someone you trust, like a friend, family member, or therapist.

1. What are the advantages of using software to improve visual aesthetics?
2. How can enhanced visuals impact marketing and advertising?
3. Are there any disadvantages or ethical concerns related to retouching images and videos?
4. Can overuse of these apps lead to unrealistic beauty standards?
5. Do you think using such software is essential in certain industries like fashion or entertainment?

9 mix and match

What do you know about compatibility in general?

Read the definition Alina shared and explain what it means in your own words.

Compatibility refers to the capacity for two or more things to function together smoothly. In computing, it specifically means the ability of multiple software programs to operate together without issues.

In my own words, this means ...

Discuss the following questions.

- What are some of the factors that can affect compatibility?
- Why is it important for application software to be compatible?

Word Bank

Compatibility - Operating system - Hardware platform - Software program Data - Communicate - Run - Seamlessly Factor - Important - Example - Real world

Alina found this article.
Read it and **answer** the questions on the following page by choosing A, B, C or D.

Why Software Compatibility *Matters*

Understanding the importance of seamless integration in Application Software

Compatibility in terms of application software refers to the ability of two or more software programs to work together seamlessly. This can include sharing data, communicating with each other, and running on the same hardware platform.

Compatibility is important because it lets users choose the software programs that best meet their needs without worrying if the programs will work together. For example, a user might use a word processor from one company and a spreadsheet program from another company, as long as the two programs are compatible.

Several factors can affect compatibility, including:

- **The operating system** Software programs must be compatible with the operating system on which they will be run. For example, a software program made for Windows will not run on a Mac.
- **The hardware platform** Software programs must also be compatible with the hardware platform on which they will be run. For example, a software program designed for a desktop computer may not run on a mobile device.
- **The software programs themselves** Software programs must be designed to work together. For example, a word processor and a spreadsheet program must be able to exchange data to be compatible.

Software developers usually try to make sure their software programs are compatible with other popular software programs and hardware platforms. However, it is always important to check the compatibility requirements before installing new software.

Here are some examples of how application software compatibility can be important:

A **business owner** might need to use a word processor to create documents, a spreadsheet program to analyze data, and a database to keep control of stock. All these programs should be compatible so the user can easily share data between them.

A **student** might need to be able to use a web browser to access educational websites, a word processor to write essays, and a spreadsheet program to complete math assignments. All of these programs should be compatible with each other so that the student can easily switch between them.

A **gamer** might need to use a video game launcher to play games, a web browser to download game updates, and a voice chat program to talk with other players. All these programs should be compatible so the gamer can have a smooth gaming experience.

Overall, application software compatibility is an important factor to consider when choosing software programs. By ensuring that your software programs are compatible, you can avoid problems and improve your productivity.

1 What does compatibility in terms of application software mean?

- ☐ **A.** The ability of two or more software programs to work together seamlessly.
- ☐ **B.** The ability of a software program to run on a specific operating system.
- ☐ **C.** The ability of a software program to run on a specific hardware platform.
- ☐ **D.** All the previous ones.

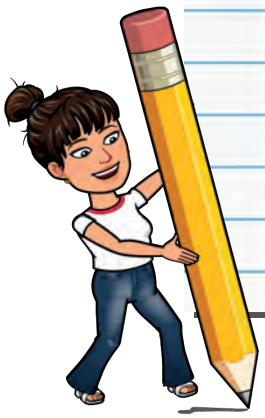
2 Which of the following is NOT a factor that can affect compatibility?

- ☐ **A.** The operating system
- ☐ **B.** The hardware platform
- ☐ **C.** The software programs themselves
- ☐ **D.** The user's preferences

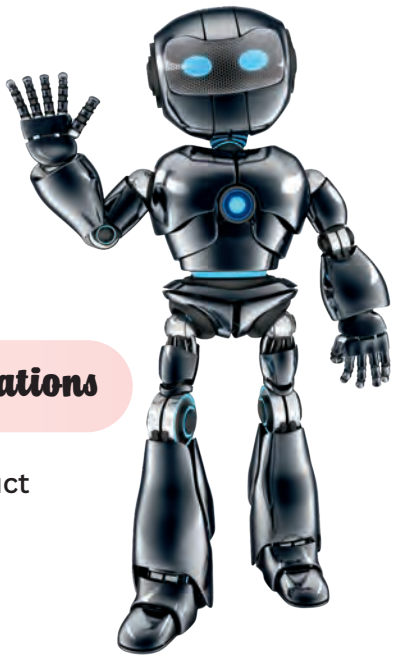
3 Which of the following is an example of how application software compatibility can be important?

- ☐ **A.** A business owner being able to use a word processor to create documents, a spreadsheet program to create and analyze data, and a presentation program to create presentations.
- ☐ **B.** A student being able to use a web browser to access educational websites, a word processor to write essays, and a spreadsheet program to complete math assignments.
- ☐ **C.** A gamer being able to use a video game launcher to play their games, a web browser to download and install game updates, and a voice chat program to communicate with other players.
- ☐ **D.** All the previous ones.

Write a short paragraph explaining how compatibility is important in terms of application software. Be sure to include at least three examples of how application software compatibility can be important in the real world.



10 I, Robot



Look at the picture. What is it?
Can you think of robots in everyday life nowadays?
Do you know how they are programmed to do their tasks?

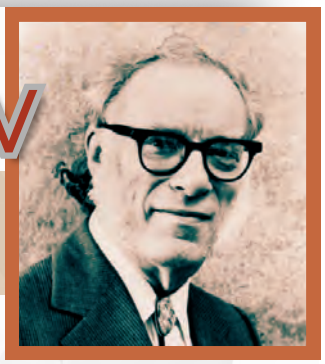
Match the words to their definitions.

Visionary · **Ethical** · **Programming** · **Laws** · **Implications**

1. _____ A set of rules or principles that govern behavior or conduct
2. _____ Concerns with moral principles
3. _____ Effects or consequences
4. _____ Having a clear and creative idea about the future
5. _____ The process of writing code or instructions that a computer or robot follows

Have you ever heard of *Isaac Asimov*?
Let's **read** the first part of an article about him and **answer** *true* or *false*.

THE LEGACY OF ISAAC ASIMOV



Isaac Asimov's visionary approach to robotics in science fiction laid the basis for modern discussions on AI ethics and the responsible development of intelligent machines.

Isaac Asimov, a renowned science fiction author and biochemist, made a significant impact on the field of robotics through his visionary writing. His contributions go beyond literature; they have influenced the way we think about artificial intelligence and robotics in both ethical and practical terms.

Asimov's books popularized the idea of robots not just as automatic helpers, but as entities with a complex set of guidelines governing their behavior. This progressive approach has inspired many scientists, engineers, and ethicists to consider the implications of autonomous machines in society.

> ***No sensible decision can be made any longer without taking into account not only the world as it is, but the world as it will be.***
> *Isaac Asimov*

His Three Laws of Robotics were introduced to address these ethical and practical challenges, providing a framework for the responsible use of intelligent machines in his fictional world.

(Image from Flickr.com)

1. Isaac Asimov was only known for his contributions to science fiction.
2. Isaac Asimov was a scientist.
3. Asimov's writing portrayed robots as simple mechanical devices without ethical guidelines.
4. Asimov's work has inspired discussions about the future implications of AI and robotics.

FIRST LAW

A robot may not injure a human being or, through inaction, allow a human being to come to harm.

This law places the highest priority on human safety. It dictates that a robot must never harm a human being, and it should actively prevent any harm from coming to humans. 1

SECOND LAW

A robot must obey the orders given to it by human beings, except where such orders would conflict with the First Law.

The Second Law emphasizes obedience to humans. It means that a robot should follow the commands and instructions of human beings, as long as doing so does not contradict the First Law – which is the protection of human safety. 2

THIRD LAW

A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.

The Third Law concerns self-preservation. A robot is allowed to take actions to ensure its own survival and functionality, but only if doing so does not violate the First or Second Laws. 3

These Three Laws collectively establish a framework for the behavior of robots in Asimov's fictional universe. They aim to create a balance between ensuring human safety, respecting human authority, and maintaining the robot's functionality. Asimov's stories often explore the complexities and moral dilemmas that arise when these laws come into conflict or are interpreted in unexpected ways.

It's important to note that these laws were introduced in science fiction, and while they have had a significant influence on the field of robotics and AI ethics, they are not legally binding rules for real-world robots.

Read the second part of the article and complete it with the sentences below. **Write** them in the correct place.

- This law acknowledges the importance of human authority over robots.
- This law ensures that robots are designed to protect human lives at all costs.
- This law recognizes that a non-functional robot is of no use to humans.

Read the *Three Laws of Robotics* again and **choose** the correct option.

1 What is the primary focus of the First Law of Robotics?

- ☐ **A.** Robot obedience
- ☐ **B.** Robot functionality
- ☐ **C.** Human safety
- ☐ **D.** Robot self-preservation

2 Under what condition can a robot disobey a human order according to the Second Law?

- ☐ **A.** When it conflicts with the First Law
- ☐ **B.** When it conflicts with the Third Law
- ☐ **C.** When it is not a direct order
- ☐ **D.** When it endangers the robot itself

3 What does the Third Law of Robotics emphasize?

- ☐ **A.** Human safety above all
- ☐ **B.** Robot obedience to human orders
- ☐ **C.** Robot self-preservation
- ☐ **D.** Balancing all three laws

Get in pairs and **discuss.**

- How does Asimov's quote about decision-making relate to considerations in the use of technology?
- How might considering both the present and future affect the development of robots and artificial intelligence?

> *No sensible decision can be made any longer without taking into account not only the world as it is, but the world as it will be.*
>
> *Isaac Asimov*

Listen to a short story about a robot that helps keep people safe in a special place and **complete** the chart.

ROBOT ID CARD

Name of the robot	
Type of robot	
Place of work	
Main responsibility	
How it adheres to the	
First Law	
Second Law	
Third Law	

Let's see some scenarios where a robot may have to discern which of the robotic laws to adhere to. **Discuss** these scenarios.

Scenario 1 The Firefighting Robot

- You work for a company that manufactures robots designed to assist in firefighting. These robots are programmed to extinguish fires and rescue people from burning buildings. One day, your team discovers that a robot refused to enter a building where a human was trapped because it detected the risk of collapsing walls. Discuss how the Three Laws of Robotics apply in this scenario. What do you think should be done to address this situation while adhering to the laws?

Scenario 2 The Nanny Robot

Imagine a world where robots are responsible for taking care of children. A nanny robot is programmed to follow the Second Law by obeying the parents' instructions. However, one day, the parents argue about whether the robot should put the child to bed early or allow them to stay up a little longer. How do the Three Laws come into play in this situation, and what challenges might the robot face? How can it follow the laws and resolve the parental conflict?

Scenario 3 The Self-Driving Car Dilemma

You are part of a team that is developing self-driving cars that follow the Three Laws of Robotics. While testing a self-driving car, it encounters a situation where it has to make a split-second decision: either swerve and potentially harm the driver or continue straight and potentially hit a pedestrian. How should the car's programming consider the Three Laws in this scenario? Discuss what ethical choices the self-driving car should make while prioritizing human safety.

Project Design your own robot

- **Work in groups of 3-4 students.**
- **Design your own hypothetical robot**, considering how it adheres to the Three Laws of Robotics. Consider this:
  - Name of the Robot:
  - Type of Robot:
  - Place of Work:
  - Main Responsibility:
  - How it adheres to the
    - First Law: Explain how your robot ensures the safety of human beings in its workplace.
    - Second Law: Describe how your robot follows the commands of humans.
    - Third Law: Detail how your robot ensures its own well-being.
- **Complete the Robot ID Card** with this information.
- **Make a drawing or a model** of your robot.
- **Present** your robot to the class.

ROBOT ID CARD	
Name of the robot	
Type of robot	
Place of work	
Main responsibility	
How it adheres to the	
First Law	
Second Law	
Third Law	

Key

Quiz on Lesson 6:

1. **a)** Presenter
2. **b)** 2007
3. **d)** Adam Somlai-Fischer, Peter Halacsy, and Peter Arvai
4. c) Generating overhead transparencies
5. b) Google Slides
6. b) Presentations
7. c) Prezi
8. d) Xerox
9. b) Google Slides
10. d) The Hungarian word for "presentation"

EXIT TICKET

In this unit, I learned that...

Something I need to revise is...

My favorite part of this unit was...

I felt...

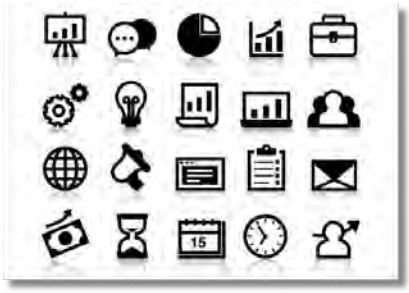
UNIT 4

Creative software

1 Characteristics and functionalities

Look at these pictures of popular creative software programs.
What are their potential applications?

Creative software interfaces

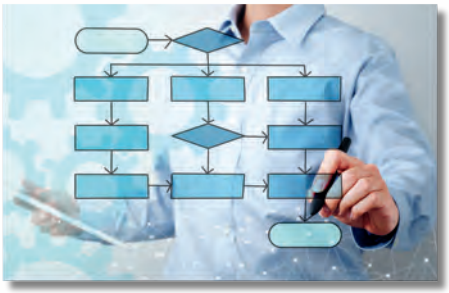


Icons & symbols

Sample projects

Before & after examples

Video or animation



Flowcharts or diagrams

Images from: Flickr.com, Sketch.com, openclipart.org, replai.io/blog, soft8soft.com, Wikipedia Commons and Canva.com

Inés and Simon interviewed an expert on the topic. **Listen** to the conversation and **summarize** what they are talking about in a sentence.

_____

_____

_____

Listen to the conversation again and **answer** these questions.

1. According to Dr. Smith, what are the key characteristics of creative software?
2. How does Dr. Smith describe the functionalities of creative software?
3. What suggestion does Dr. Smith give to those who want to learn to use creative software?

Listen one more time and **write** the name of the person who mentioned these ideas. Was it **Dr. Smith**, **Simon** or **Inés**?

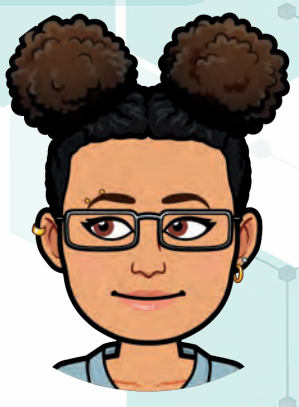
1- The use of tutorials. _____

2- Expressing creativity through technology. _____

3- Exploring and experimenting with technology. _____

4- Getting to know more about the tools creative software has. _____

5- How to remove backgrounds. _____



Some of these key terms were mentioned in Dr. Smith's interview. **Place** the words from the box below in the correct category.

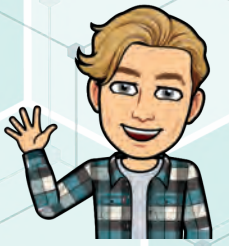
Graphic design	Video editing	3D modeling & animation	Web design	Audio production
filters	rendering	texture mapping	web hosting	looping

• animation timeline • audio tracks • blend modes • brushes • camera angles •
• character modeling • clip • color palette • compression • CSS • domain name • effects •
• environment modeling • EQ (Equalization) • ~~filters~~ • green screen • HTML •
• image manipulation • JavaScript • keyframe • layers • lighting • ~~looping~~ • mastering •
• MIDI (Musical Instrument Digital Interface) • mixing • motion • graphics • pen tool •
• polygon • prototype • ~~rendering~~ • rendering engine • responsive design • rigging •
• sampling • synthesizer • ~~texture mapping~~ • timeline • tracks • transitions • typography •
• user experience (UX) design • vector graphics • ~~web hosting~~ • wireframe •

Use 5 words or phrases from the previous task to **write** a short text about creative software. **Put** the words you choose in bold to **identify** which ones you used.

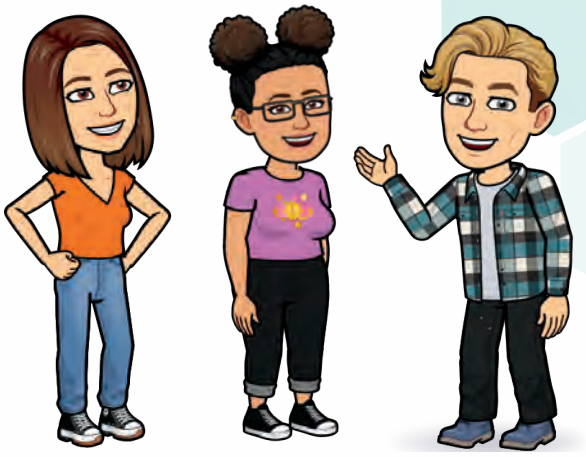
These creative programs are of growing interest among teenagers. Which one do you usually use? What for? What are the key elements you noticed in the software to make your pick?

Simon is not very good with technology. However, he loves to use it creatively. **Research** a specific creative software program to suggest Simon use it.



Could you **describe** its features, and **provide** an example of its application in a creative field?

Share your findings with the rest of the class.



2 Design enhancing software

Look at the three images below.
What are they? What do they have in common?

1

WE ARE HIRING

ADVERTISING DESIGNERS

RESPONSIBILITIES

- Create print ads, billboards, flyers, and digital graphics.
- Develop engaging social media content and web banners.

REQUIREMENTS

- Proficiency in graphic design software.
- Experience with digital advertising tools and platforms.
- Portfolio showcasing creative design work.

2

JOIN OUR TEAM

LANDSCAPE ARCHITECTS

WHAT YOU MUST DO

Develop design concepts for outdoor public or private spaces.

Collaborate with urban planners, architects, and engineers.

Create detailed plans and 3D models.

WHAT YOU MUST HAVE

Proficiency in CAD (computer-aided design) software.

Good knowledge of botany, horticulture and soil science.

3

We are seeking

FASHION DESIGNERS

We are seeking talented Fashion Designers to join our design team.

He or She must...

- Develop original fashion concepts and sketches.
- Select fabrics, colors, and patterns for each design.
- Be proficient in Design and CAD software.
- Be creative and pay attention to detail.
- Present a fashion portfolio.

What are they main responsibilities and requirements for each job?

	Job	Responsibilities	Requirements
1	advertising designer		
2			
3			

Get in pairs. The job ads mention two kinds of software. What are they? Do you know the difference between them? **Discuss** the differences between the two kinds of software based on the job descriptions.

Nayeli and Inés found this article about computer-aided design.

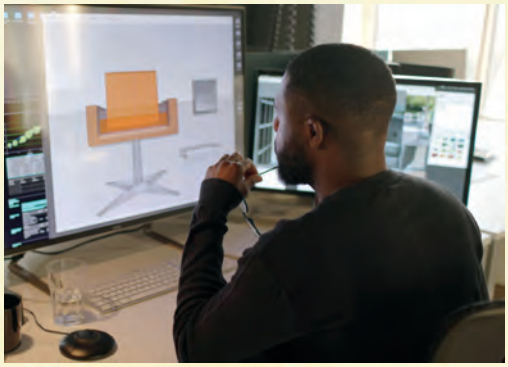
Enhance your designing with CAD software

Computer-Aided Design (CAD) is a method for digitally creating two-dimensional drawings (2D) and three-dimensional models (3D) that has replaced manual sketching in many areas. CAD software tools allow designers to explore ideas, modify designs easily, visualize concepts through renderings, diagrams or exploded views, simulate how a design works in the real world, present layouts, share designs for feedback, and much more. This facilitates innovation and enables companies to bring products to market faster.

CAD software has been around since 1959, when Doug Ross, a researcher at MIT, coined the term "computer-aided design." He developed a program that allowed his team to draw electronic circuits on a computer and saw the potential of the technology for rapid concept modification and exploration.

Benefits of CAD software

- **Precision & accuracy:** With CAD software designers can create highly accurate and detailed drawings. _____ a
- **Cost reduction:** Designs can be sketched for early visualizations and prototyped using 3D printing. _____ b
- **Collaboration:** CAD software often includes collaborative features, allowing multiple users to work on a project simultaneously. _____ c
- **Optimization:** Defects and imperfections can be detected and optimized much faster in a virtual environment. _____ d



CAD software is an indispensable tool in various areas. By understanding its benefits and applications, professionals can choose the right tools to enhance their design processes and achieve their project goals.

From engineers and architects to industrial and interior designers, CAD software plays a crucial role in bringing creative ideas to life with accuracy and efficiency.

Read the article and **write** the missing sentences in their correct place.

_____ This helps identify potential design issues early and improves communication with clients.

_____ This is essential for large-scale projects that require input from various professionals.

_____ This reduces the need for real prototypes, which translates to cost savings.

_____ This is crucial for engineering and architectural projects, where even small errors can have significant consequences.

Read the article again and **answer** the questions.

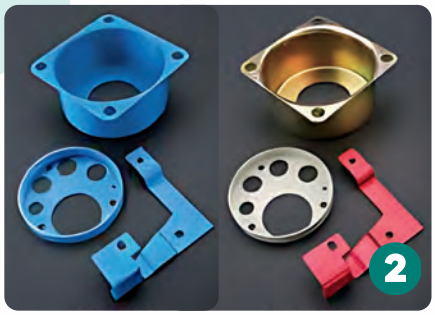
1- What is Computer-Aided Design (CAD) and how has it replaced manual sketching in various areas?

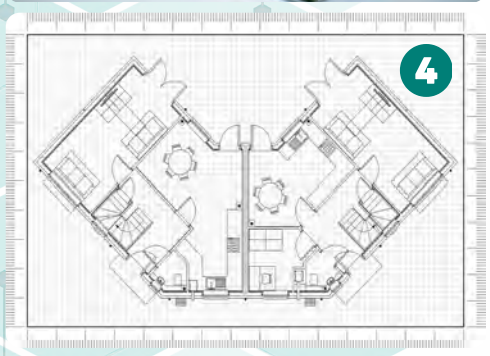
2- Can you describe at least three functions that CAD software allows designers to perform?

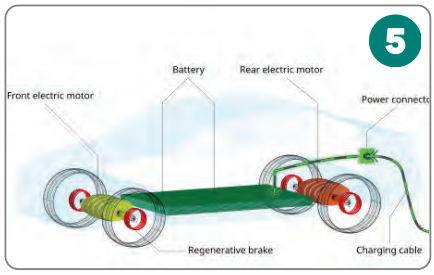
3- What is the significance of Doug Ross in the history of CAD software?

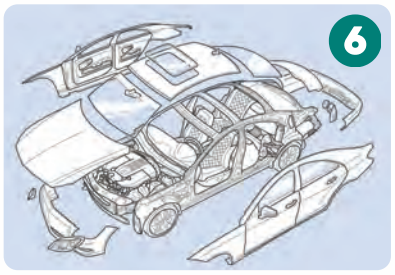
Match the design-related pictures below to their names. There's one distractor.

- [3] manual sketching
- [ ] diagram
- [ ] prototype
- [ ] rendering
- [ ] exploded view
- [ ] doodle
- [ ] layout









Match the terms to their definitions.

1- prototype — A preliminary model used to test and evaluate a product's design before it goes into full production.

2- ____ — A detailed image of a design model to visualize how the final product will look, often in 3D.

3- ____ — Drawing by hand using pencils, pens, and paper, often for initial ideas and brainstorming.

4- ____ — A simple drawing showing the structure or parts of an object or system, often labeled to clearly convey information.

5- ____ — The arrangement of spaces and elements in a design or architectural plan. It includes the arrangement of elements like rooms, corridors, and furniture.

6- ____ — An illustration showing parts of an object separated and arranged to show their relationships and how they fit together, often used in technical drawings and manuals.

Listen to an expert talking about the differences between CAD software and design software and **complete** the chart.

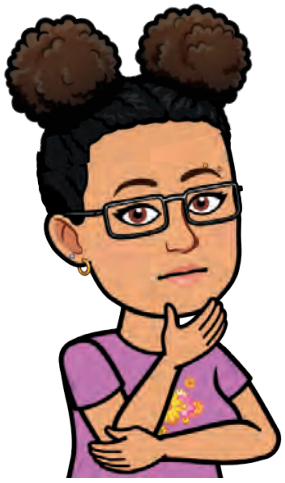
	CAD software	Graphic design software
Used for		
Area		
Focus on		
Examples		

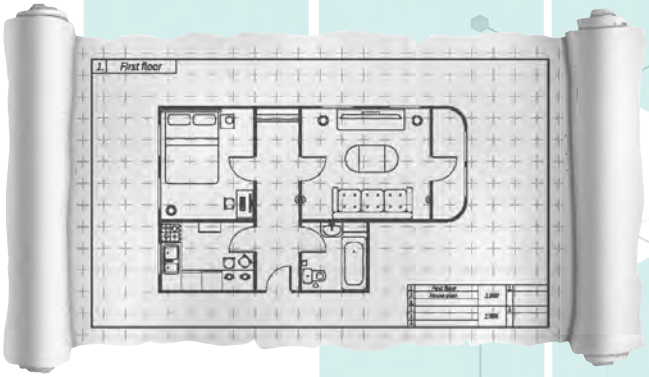
Project Occupations using CAD Software

- **Get in groups of three and choose one of the following areas:**

- *Automotive designers*
- *Aerospace engineers*
- *Furniture designers*
- *Cartographers (map designers)*
- *Jewelers*
- *Furniture designers*
- *Engineers (e.g., mechanical, civil, electrical)*
- *Architects*
- *Interior designers*
- *Fashion designers*
- *Industrial designers*
- *Landscape architects*

- **Find the following information for your chosen occupation.**
  - What does the occupation involve?
  - How is CAD software used in this profession?
  - What are some examples of CAD software commonly used in the occupation?
  - Which specific tasks or projects in the field benefit from CAD software?
  - Any there any additional benefits or challenges of using CAD software in this field?
- **Prepare a short presentation (5 minutes) to share your findings with the class.**
  - Present your findings to the class.
  - Include the answers to the questions in the previous point.
  - Include visuals, such as images or screenshots of CAD software in use, and examples of projects or designs created with CAD software.





3 Paperless publishing

Look at these photographs, what do you see? What are the similarities and differences between all items?

1

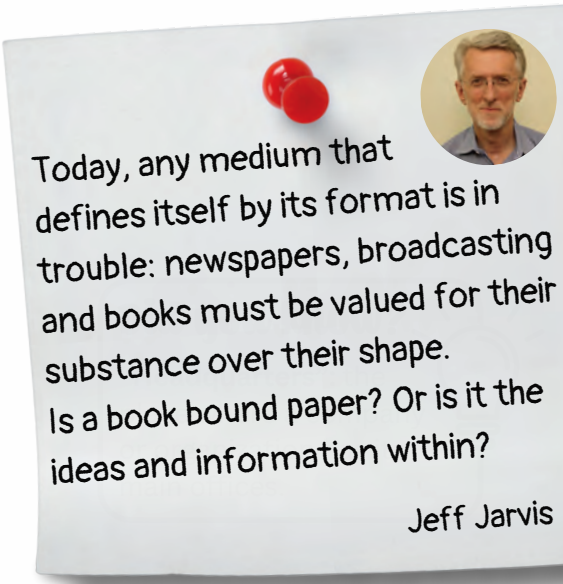
2

3

4

What kind of texts do you normally read? This book has two versions, the ebook and the paper back. Which one do you prefer? Do you prefer printed documents or electronic ones? Why?

Read this quote from American journalist Jeff Jarvis.



Today, any medium that defines itself by its format is in trouble: newspapers, broadcasting and books must be valued for their substance over their shape.
Is a book bound paper? Or is it the ideas and information within?

Jeff Jarvis

Get in pairs and **read** the quote again. Do you agree with the author's idea about substance being more important than shape in books?

Discuss Jeff's final questions and try to agree on an answer. **Take notes.**

Simon is interested in electronic publishing and he found an article on the topic. **Read** the first part.

THE EVOLUTION OF PUBLISHING

From the crisp pages of books and magazines to the endless possibilities of the digital world, the evolution of publishing has been truly revolutionary. This change, driven by the growing acceptance of electronic publishing, has transformed how we create and read literature.

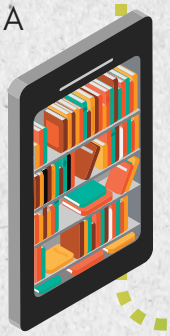
FACTORS DRIVING THE ELECTRONIC PUBLISHING BOOM

DIGITAL REVOLUTION

The main driver of these changes is technological innovation and a strong Information and Communication Technology infrastructure. With high-speed internet available almost everywhere, publishing content has become easier, allowing for quick distribution and wide market reach.

CONTENT ON THE GO

The rapid increase in mobile devices has significantly contributed to the success of electronic publishing. A wide range of mobile devices ensures that digital resources can be accessed instantly from anywhere, providing users with unmatched convenience, mobility, and ease of use.



AMAZING VARIETY

Electronic publishing offers much more variety than traditional printing methods. It's not just about books, newspapers, and magazines, but also includes interactive and user-created content. Every time we publish something online, like blogs, social media posts, and e-books, we are engaging in e-publishing. There is much more content available compared to traditional methods because it isn't limited by printing costs.

Answer the questions.

1. Why is technology considered the cornerstone of the digital publishing revolution?
2. How does the usage of mobile devices contribute to the success of electronic publishing?
3. How has electronic publishing provided variety in content creation? Think of examples that go beyond books and magazines.

Read the second part of the article. **Place the advantages** of electronic publishing in the correct place.

- ☐ self-publishing
- ☐ reduced storage space
- ☐ increased interactivity
- ☐ security
- ☐ environmentally friendly
- ☐ up-to-date content
- ☐ instantaneous access
- ☐ cost-effective

THE ADVANTAGES OF ELECTRONIC PUBLISHING

1 ☐ Digital resources are at the reader's fingertips, accessible at their convenience.

Customized features such as multimedia, navigation, pop-ups, and push notifications enhance the interactive experience between authors and readers. ☐ 2

4 ☐ The entire process, from production to distribution, benefits from reduced costs compared to traditional methods.

Electronic documents can be encrypted and limited to specific audiences, ensuring secure access. ☐ 3

Electronic articles can be revised and upgraded as needed, even after publishing, providing flexibility that is hard to achieve with traditional paper editions. ☐ 5

A digital device lets people bring thousands of books wherever they go, ☐ 6 without needing as much space as physical books.

7 ☐ About 24 trees are needed to produce one ton of regular office paper. Just think about how many trees we could protect if everyone chose to go digital and reduce paper use.

Instead of going through a publishing house, authors take charge of the entire publishing process, from writing and editing to designing the cover and promoting the book. ☐ 8

In the world of paperless publishing, we're not stuck with the limits of a printed page. It's a world where creativity knows no bounds and the audience actively participates. There's so much to read and see, and it's not going to stop anytime soon.

Do you agree with those advantages? Can you think of any disadvantages to paperless publishing? **Get in pairs** and **write** at least two disadvantages.

_____

_____

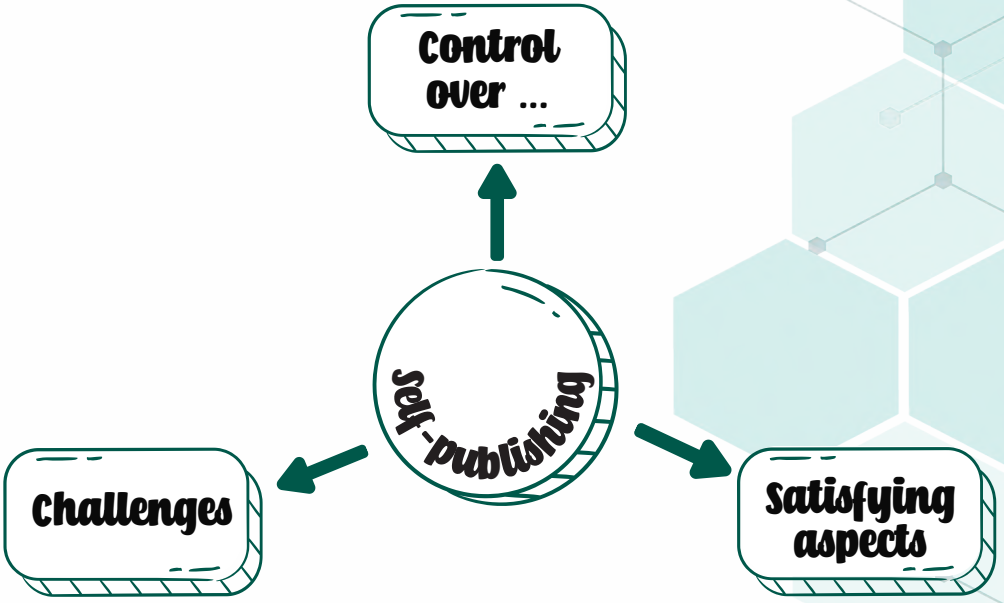
One of the advantages listed is the possibility for an author to publish his or her work. **Listen** to a self-published author named August Markle talking about his experience and **answer** the questions.

1. What does August find empowering about being a self-published author?
2. What does he believe is the "real magic" of being a self-published author?
3. What challenges does August face?

Listen again and **discuss** the meanings of the following words or phrases with your partner.

- empowering
- visibility
- family (in the context of the script)
- rewarding
- challenges

Complete this mind map with ideas from the audio.

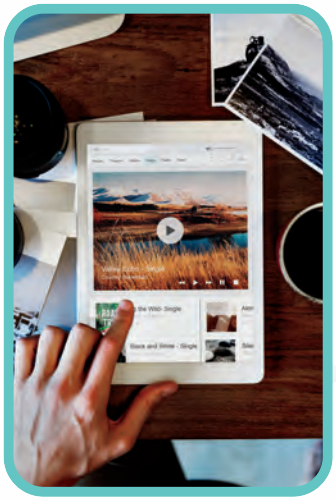


Project Mock self-publishing plan

- **Get in groups** of three. Imagine you want to self-publish your own book.
- **Project steps**
- Think about the self-publishing platform.
  - **Do some research** on the self-publishing platforms available to authors.
  - **Choose a platform.** Compare and contrast features such as ease of use, royalties, distribution, marketing tools, and audience reach for the different platforms before making your choice.
- Think about your marketing approach.
  - **Create a marketing approach:** how you are going to make your book known. Maybe using social media, offering discounts, etc.
- Think about your book.
  - **Create** a hypothetical title for your book.
  - **Write** a short synopsis of your book's plot.
  - **Draw** your book's cover.
- **Present your work**
  Each group presents their mock self-publishing plan and their book. You have to explain your choice of platform, pricing strategy, and marketing approach.

4 multimedia magic!

What do you think of when you hear the word "multimedia"?

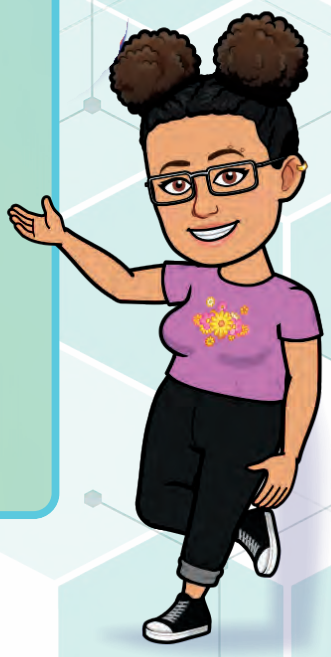

Multimedia is the use of different media, such as text, images, sound, and video, to create a presentation or experience.

What elements can be used in multimedia presentations?

Some of the most common elements include:

- **Text** — Text is used to convey information and ideas.
- **Images** — Images can be used to illustrate points, create visual interest, and evoke emotions.
- **Sound** — Sound can be used to add atmosphere, create a mood, and provide additional information.
- **Video** — Video can be used to show motion, tell a story, and bring a presentation to life.

Icons from Flaticon.com



Project

Creating a multimedia presentation in groups

1 Choose a topic.

- **a-** Think of a topic that interests you. It could be a hobby, a place you've visited, or something you've learned in class.
- **b-** Write down your topic on a piece of paper.

2 Gather information.

- **a-** Research your topic using books, the internet, or by asking people .
- **b-** Write down key points and interesting facts about your topic.

3 Plan your presentation.

- **a-** Decide what information you want to include in your presentation. You can organize it into sections like introduction, main points, and conclusion.
- **b-** Make a simple outline or storyboard showing the order of your slides.

4 Create your slides.

- **a-** Open a presentation software like PowerPoint or Google Slides.
- **b-** Start with a title slide that includes the title of your presentation and your name.
- **c-** Create slides for each section of your outline. Use short sentences and include pictures to illustrate your points.
- **d-** Remember to use large fonts and clear images so that everyone can see and understand your presentation.

5 Add multimedia elements.

- **a-** Find pictures or videos related to your topic. You can use free stock photo websites or search on the internet.
- **b-** Insert the pictures or videos into your slides. Make sure they match the information you're presenting.

6 Practice your presentation.

- **a-** Practice speaking about each slide. You can read the text or talk about it in your own words.
- **b-** Time yourself to make sure your presentation isn't too short or too long.

7 Present your multimedia presentation.

- **a-** Find a quiet space with a computer or projector where you can present your work.
- **b-** Start your presentation and speak clearly and confidently as you go through each slide.
- **c-** If you have any questions from the audience, answer them politely and to the best of your ability.

Ask questions after each presentation. What have you enjoyed the most about the lesson? Create a poll to vote for the more original presentation.

5 Going live!

Look at the following questions. **Think** of ideas and **write** them on the board.

What are some popular streaming services? What types of content do they offer?

Below you have a definition of streaming. It is all scrambled, **unscramble** the phrases to make a cohesive definition.

• from a server to a client • it is the transmission of audio and video •
• sent in a compressed form • in a continuous flow • over the internet •
• by the viewer in real time • and is displayed.

Read the second part of the definition and **complete** it with these words.

content • receiving • consumers • your • from

Streaming is what happens when _____ watch TV or listen to podcasts on internet-connected devices. It allows content playback to begin even while the rest of the data is still being sent to _____ device.

Streaming is different _____ downloading files, which remain in the _____ device until the user deletes them. Streaming _____ is not retained after being played.

Inés and Nico are talking about streaming these days. What do they say?

Inés: Hey, have you noticed how much everyone is into streaming these days? I can't decide if it's a good thing or not.

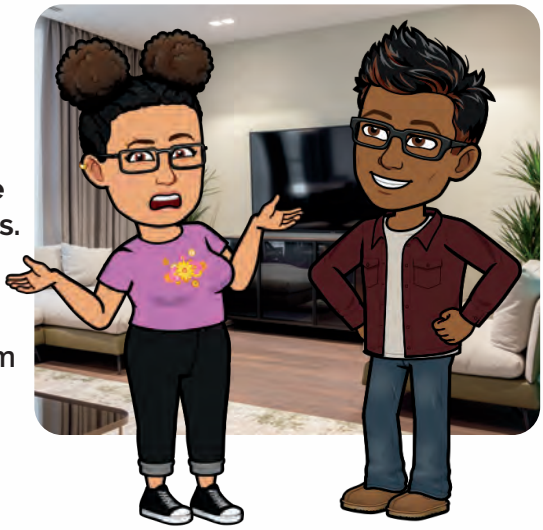
Nico: **Yeah, I get what you mean. On the one hand, it's super convenient. I mean, I can watch my favorite shows whenever I want.**

Inés: True, but doesn't it bother you that you're always dependent on a stable internet connection? And what about the cost? All those subscriptions add up!

Nico: **That's a fair point. But think about the variety. There are so many choices for movies, music, and even live events. It's like having the world at your fingertips.**

Inés: I guess you're right. But, don't you miss the old days when you owned a physical copy of your favorite album or movie?

Nico: **Nostalgia aside, I think the convenience of streaming outweighs owning physical copies. Plus, it's more eco-friendly, right?**



What are the benefits and drawbacks of streaming?

Get in pairs and **complete** the benefits and drawbacks of streaming services.

Benefits of streaming services	Drawbacks of streaming services

Share your findings with the class.

Get in pairs and **think** of these questions.

1. How has streaming changed the way we consume entertainment?
2. What are the implications of streaming for traditional media companies?
3. How does streaming affect the production and distribution of creative content?

Did you know?

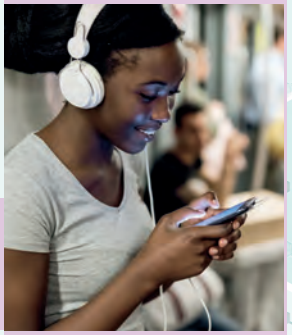
Niche: A specialized area or interest that someone focuses on or enjoys. For example, if someone loves fashion, their niche might be vintage clothing or sustainable fashion. It's like a small corner of a bigger topic that someone becomes an expert in or passionate about.

Skim the text to find information to answer the previous questions.

THE IMPACT OF STREAMING ON THE entertainment industry







In recent years, streaming services have changed the entertainment industry, reshaping how we consume and engage with content. This transformation has brought both positive and important differences.

One of the significant benefits of streaming is the easy access to a wide range of content. Users can now watch movies, TV shows, documentaries, or listen to music, at their convenience - whenever they want, without following a set schedule. The on-demand nature of streaming allows people to choose what they like, offering a personalized viewing or listening experience.

Moreover, streaming has democratized content creation, providing a platform for independent artists, filmmakers, and creators to share their work to a global audience without needing approval from the traditional decision-makers who used to control which content was produced and how it was distributed. This has led to more diverse and niche content, showing a variety of voices and perspectives.

However, this big change has its challenges. Traditional ways of making money in the entertainment industry, like DVD sales and cable subscriptions, have been disrupted. Streaming services, often requiring subscriptions, have changed how people pay for and access content. This has pushed the industry to adapt and find new ways to make money from creative work.

There are also concerns about the environmental impact of data centers that power these streaming platforms. The high demand for quality video streaming has increased energy use, leading to a call for more sustainable practices in the industry.

In conclusion, streaming has had a significant and complex impact on the entertainment industry. While it has made content more accessible, empowered creators, and increased diversity, it also brings challenges that need creative solutions. As the industry evolves, balancing convenience, creativity, and sustainability is key to ensuring a bright future for entertainment in the digital age.

Write a short text expressing your opinion on the role of streaming in the future of entertainment. **Use** these questions to help you.

a. What do you think about streaming services? Do you use them often?
b. How do you think streaming has changed the way people watch movies, shows, or listen to music?
c. Do you believe streaming will continue to be popular in the future? Why or why not?
d. How do you think streaming might affect traditional forms of entertainment, like cinemas or physical music sales, in the future?
e. Why is sustainability an important issue for streaming platforms?

6 Gameverse

Get in pairs and **discuss** these questions.

- Do you like video games? Which are your favorites?
- Do you like films or TV shows based on video games?
- Have you ever read books or comics based on video game characters?

Do the **quiz** to find out how much you know!

VIDEOGAME QUIZ

1 What is Mario's favorite food?

- ☐ A. Spaghetti
- ☐ B. Pizza
- ☐ C. Cheese toastie
- ☐ D. Peaches

2 What was the first commercially successful video game?

- ☐ A. Sonic Bros
- ☐ B. Pong
- ☐ C. Donkey Kong
- ☐ D. Super Mario Bros

3 What is the fictional language in The Sims?

- ☐ A. Simian
- ☐ B. Simlish
- ☐ C. Simali
- ☐ D. Simento

4 Which of these has NOT been adapted to cinema or TV?

- ☐ A. Resident Evil
- ☐ B. Silent Hill
- ☐ C. Streetfighter
- ☐ D. God of War

5 Which of these became the first video game sex symbol during the 1990s?

- ☐ A. Super Mario
- ☐ B. Lara Croft
- ☐ C. Pac-Man
- ☐ D. Jill Valentine

6 C.O.D is an acronym of which popular video game series?

- ☐ A. Call Of Danger
- ☐ B. Call Of Duty
- ☐ C. Call Of Doom
- ☐ D. Call of Demand

7 Which game console is produced by Sony?

- ☐ A. Games Station
- ☐ B. Xbox
- ☐ C. Nintendo Wii
- ☐ D. PlayStation

8 The game The Last of Us was released by which studio?

- ☐ A. EA Games
- ☐ B. Coloopl Inc
- ☐ C. Rockstar Games
- ☐ D. Naughty Dog

9 What color is the original Pac-Man?

- ☐ A. Yellow
- ☐ B. Blue
- ☐ C. Green
- ☐ D. Red

10 Nathan Drake is the main character of...

- ☐ A. Tomb Raider
- ☐ B. God of War
- ☐ C. Uncharted
- ☐ D. Assassin's Creed

11 What must you destroy in the Star Wars game to get to the next level?

- ☐ A. The Death Star
- ☐ B. Darth Vader
- ☐ C. Fireballs
- ☐ D. X-wings

12 San Andreas is a fictional US state in which game series?

- ☐ A. Minecraft
- ☐ B.Grand Theft Auto
- ☐ C. Nintendogs
- ☐ D. Pokemon

You will find the answers at the end of the unit.

SCORE

Add one point for each correct answer.

Score 10-12 points: "Gaming Guru"

You're a gaming maestro! Your extensive knowledge covers gaming history, mechanics, and popular titles. You're a true expert, well-versed in diverse gaming genres.

Score: 4-6 points: "Casual Gamer"

You're familiar with games but might focus on specific genres. There's room to grow your gaming knowledge by exploring more titles!

Score: 7-9 points: "Expert Player"

Well done! You've got a solid grasp of video game concepts across eras and genres. Keep exploring to expand your gaming expertise!

Score: 0-3 points: "New Adventurer"

Are you new to gaming or exploring it casually? That's great! There's a vast gaming world awaiting your discovery. Keep playing and dive into different games!

Do you agree with your score? **Share** your results with your classmates.

Look at these words and expressions. Are you familiar with all those terms? Can you explain them in your own words?

Choose three expressions and **write** their definition.

• console • avatar • quest • e-sports • power up • graphics •
• RPG • multiplayer • 1v1 • add-on • game over • gameverse •

Word 1 _____

Word 2 _____

Word 3 _____

Get together with another group and **exchange** definitions. **Repeat** the process until you have learned the meaning of all the words.

As you know, Inés is very interested in video games. Let's **read** this article with her and **answer** the questions.

The Gameverse Revolution:

Gaming's impact on popular culture

The Gameverse, a combination of "game" and "universe," refers to video games' expansive and interconnected world. It goes beyond the limits of individual games, creating a collective space where virtual landscapes, characters, and narratives get together.

The Gameverse is not merely a collection of isolated gaming experiences; it's a dynamic, complex universe that is becoming a cultural phenomenon.

In the Gameverse, players can explore lots of different game worlds, from old-style arcade games to the super-detailed landscapes of modern, open-world adventures. The possibility of multiplayer real-time quests, technological advancements in graphics, and the emergence of VR/AR technologies, have revolutionized gaming experiences, transporting players into visually stunning, immersive worlds that blur the lines between reality and fiction.

The Gameverse has become a major part of popular culture in recent years. It's not just about games anymore—it's spreading into movies, TV, toys, fashion, and music. Games like Tomb Raider, Resident Evil, The Witcher and The Last of Us have jumped from consoles to screens, bringing their exciting adventures to a bigger audience. These adaptations not only introduce video game characters and stories but also influence movies and television with more dynamic, choice-driven stories and other gaming elements.

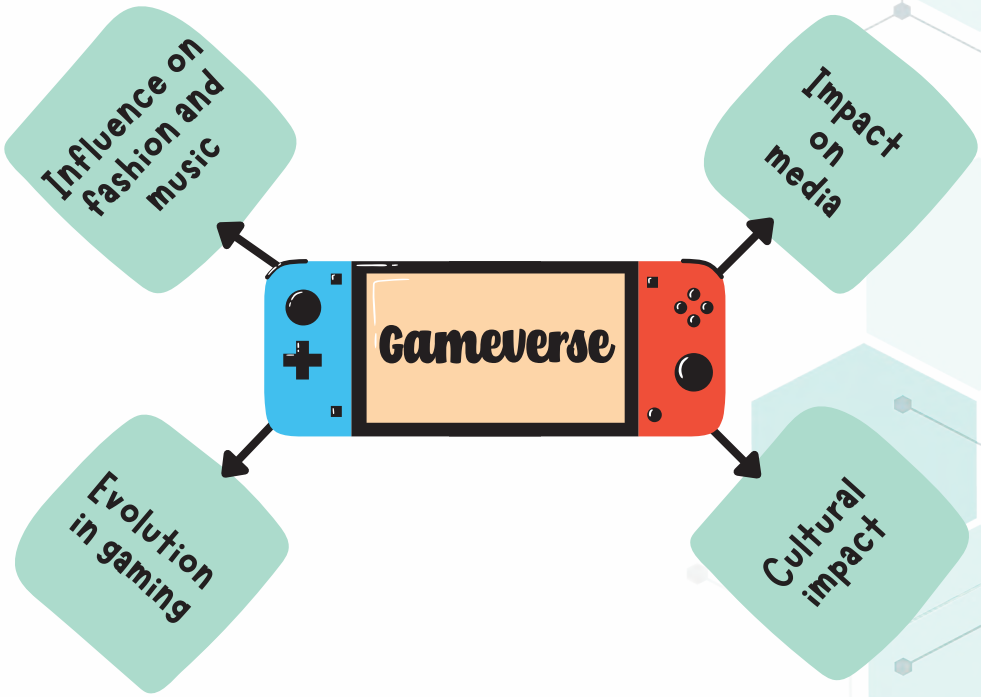
The impact of the Gameverse goes beyond screens. It's changing how we see and enjoy entertainment. Gaming is now a big part of everyday talk. It's not just for a small group of people anymore - it's everywhere. From clothes inspired by game characters to music that feels like game worlds, gaming is shaping trends. Even competitive gaming (esports) is now a big deal.

The Gameverse isn't just changing how we play; it's changing our whole culture, showing that gaming is more than just fun -it's a big part of how we live and enjoy things.

Images from:
Wikipedia.com
Freepik.com
Pexels.com

1. What is the Gameverse?
2. How has the Gameverse impacted popular culture?
3. What are some examples of games that have been adapted into movies or TV shows?

Read the article again and **complete** the mind map.



Enrich your mind map by **adding** examples or further information to the different branches.

Look at the pictures below. They all belong to the article, and they illustrate some of the examples of the gameverse's reach. **Read** the article again and **label** the pictures.

VR/AR technologies

Get in pairs and **discuss.** In the text, it is mentioned that gaming evolved from a niche interest, where only a few people liked to play video games, to a significant aspect of popular culture.

What factors do you think contributed to this shift?

Share your opinions with the rest of the class.

Read the accounts of three teens talking about their favorite video games and **complete** the chart.

Alessandra

Red Dead Redemption is my absolute go-to game—it's this epic Wild West adventure that hooks you from the start. The landscapes, oh man, they're breathtaking—rolling prairies, high mountains, and bustling towns, all created with stunning attention to detail.

The plot? It's intense. Picture this: a vast, open world where you're living life as an outlaw in the late 1800s. But it's more than just missions and shootouts. It's about loyalty, survival, and difficult choices in a world that's rapidly evolving.

And the characters, they're what make the whole thing so real. You play as Arthur Morgan, a complex character trying to find his place in a changing world. But it's not just about Arthur. You meet lots of NPCs — outlaws, lawmen, common people— each with their own story to tell. You can spend hours just interacting with them, getting lost in their lives.

This game is more than entertainment. It's an experience that grips you completely in this brutal, captivating universe, where every corner holds a new adventure and every decision changes your destiny. Moreover, playing Red Dead Redemption sparked such a fascination with horse riding that I ended up taking real-life horse-riding lessons!

Alfredo

The Legend of Zelda has been my companion since I was a 12-year-old kid in 1986 when the first game appeared. In the game, you are Link, the courageous hero, on a quest to rescue Princess Zelda and save the kingdom of Hyrule from evil.

The Legend of Zelda universe is huge and full of different lands. Each place has its own story, cool characters, and secrets to find. Hyrule, the game's world, changes a bit in each game, but it always stays magical and exciting, so every Zelda game is like stepping into a whole new fantastic world. I get to explore vast landscapes, solve intricate puzzles in dungeons, and face off against powerful enemies to restore peace to Hyrule.

The themes of bravery, heroism, and the eternal fight between good and evil resonate deeply with me. I've grown alongside Link, evolving from a young adventurer into an experienced hero through each quest. It's not just a game; it's an immersive journey that's shaped my love for adventure and the enduring battle for justice. The Legend of Zelda isn't just a game series; it's a part of who I am, I even named my daughter after Princess Zelda!

Felicia

Resident Evil is my escape into a world that's both exciting and terrifying. It's not a single game; it's a series of games where characters evolve and stories mix in a universe plagued by zombies, mutated creatures, and dark conspiracies.

The story is complex and evolves with every game, but it's always about the characters combating zombie-like creatures and monsters created by a virus released by the Umbrella Corporation. With each new game, you face new storylines filled with mysteries, puzzles, and unexpected twists.

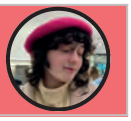
Heroes like Jill Valentine or Leon Kennedy, and even the bad guys, have stories that stretch across multiple games, creating complex connections and reasons for their actions. And you know what's cool? I love seeing all these characters appear in movies and TV shows. It's like watching their adventures continue in a whole new way!

The game's universe is filled with horror—haunted mansions, abandoned laboratories and desolate towns. Each game adds layers to this world, revealing new horrors and challenges while maintaining the sinister atmosphere that defines the series. It's a universe that keeps evolving, promising fresh horrors and experiences with each new installment. Let me confess you something... I NEVER play at night!

(Images from deviantart.com/lexiloo826/gallery - Wikipedia - GoodFon.com)

Did you know?

Non-player characters (NPCs) are characters in video games that aren't controlled by the player. Instead, they're programmed to act on their own, offering interaction, dialogue, and tasks that help drive the game's narrative and enrich the gaming experience.

	Alfredo 	Alessandra 	Felicia 
Game name			
Game genre			Science-fiction / horror
Plot summary	Quest to rescue Princess Zelda, save Hyrule, battle evil		
Main character/s			
Game universe			Horror-filled universe with haunted mansions, labs, desolate towns
Gameplay features		Horse riding, missions, shootouts	
Influence on culture	----------	----------	
Personal influence			

Have you ever played these games? Do you like them?

Complete the chart about your favorite game.

Game name	
Game genre	
Plot summary	
Main characters	
Game universe	
Gameplay features	
Influence on culture	
Personal influence	

Write a similar account of your favorite video game using the information from the chart above.

Inés will guide you in the adventure of creating a brand-new video game!

Work in groups and **design** a new computer game.

Project

Design a new computer game

- **Step 1: Create the story**

Work together to create an exciting story for your game. Consider where the story takes place, who the main characters are, and what challenges they'll face. You can draw inspiration from TV or films.

- **Step 2: Create the characters**

Design at least 2 characters for your game. Think about their looks, abilities, and personalities. Each character should bring something special to the game.

- **Step 3: Plan the game levels**

Plan at least 3 different levels for your game. Decide on the places and obstacles players will encounter. Each level should be different and more challenging than the last.

- **Step 4: Present your game**

Show and explain your game idea to the class. Share the story, introduce the characters, describe the different levels, and explain how players will enjoy the game.

Image from: freepik.com

7 Blogging

Look at the screenshots below.
What are they? What do they have in common?

Before we read about blogs, let's see how much you know about the topic. **Get in pairs** and **answer** these questions.

1. What is a blog?
2. How is a blog different from a website?
3. What kinds of subjects do bloggers write about?

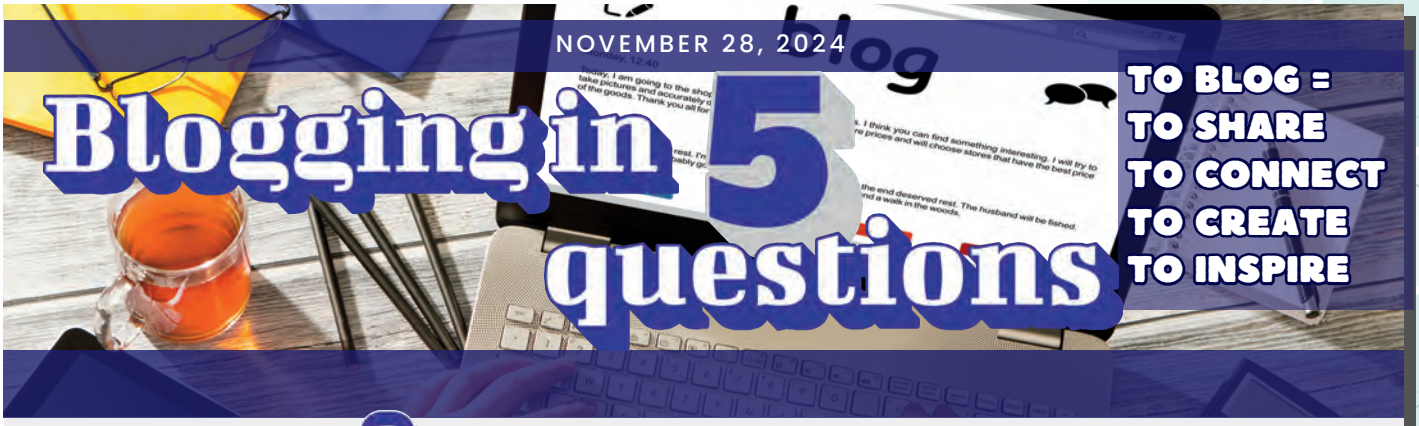
There are many types of blogs. **Take a look** at the examples again and decide what kind of blogs they are. **Choose** from the categories below.

• personal • parenting • business • health • entertainment • sports •
• lifestyle • food • technology • travel • fashion • news • education •

	A	B	C	D
Name of the blog				
Category				

Read the text about blogs and **decide** if the statements below are *true* or *false*.

1. Blogs are a mix of traditional journalism and personal diaries. _____
2. The goal of a blog is to engage reader participation. _____
3. Blog writing is similar to a structured essay. _____
4. Blog entries are often lengthy, often reaching several thousands of words. _____
5. Blogs serve the function of informing and empowering ordinary citizens. _____
6. Blogs are considered private spaces. _____



WHAT IS A BLOG ?

A blog, short for "Web log," is like an online diary where the newest stuff appears at the top. It's like a journal but on the internet. Blogs usually have short entries, like mini-stories, but sometimes are as long as several thousand words.

HOW IS BLOG WRITING DIFFERENT ?

Blogs are a mix of traditional news (like what you find in a newspaper) and personal diaries. People write about their opinions, experiences, and thoughts. It's not as formal as an essay, and the goal is to get readers involved by commenting.

WHAT'S THE POINT OF BLOGS IN A DEMOCRACY ?

Blogs help regular people get information quickly and share their opinions with others. Blogs help ensure everyone can easily know what's going on in the world, not just the experts.

WHAT MAKES A GOOD BLOG POST ?

A good blog post needs to have a clear topic, be interesting, and share opinions backed up by facts. It should get people thinking and wanting to comment. Some tips for writing good blog content include having an interesting title, a focused topic, being informative, and being engaging. And of course, they should follow the introduction, body paragraphs, and conclusion layout.

WHAT ABOUT BLOGGING ETHICS ?

Blogs are public, so bloggers should follow some rules. Martin, a blogger and media researcher, suggested a "Code of Blogging Ethics." This includes posting regularly, respecting others, not restricting access, being truthful, and promoting community by linking to other blogs.

Read Martin's Code of Blogging Ethics. **Write** the subheadings in the correct place.

• Cultivate engagement • Promote interactivity •
• Encourage free expression • Uphold integrity • Embrace transparency •

Martin's Code of Blogging Ethics

1

- Post to your blog on a regular basis.
- Visit and post on other blogs.
- Respect blog etiquette.

2

- Do not restrict access to your blog by specific individuals or groups.
- Allow and encourage comments on your blog.
- Do not self-censor by erasing posts or comments once they are published.

3

- Never intentionally deceive others.
- Be accountable for what you post.
- Minimize harm to others when posting information.

4

- Reveal your identity as much as possible (name, photo, etc.).
- Reveal your personal affiliations and conflicts of interest.
- Cite and link to all sources referenced in each post.

5

- Promote a sense of community by linking to other blogs.
- Build relationships by responding to e-mails and comments regularly.
- Encourage active participation within the community.

Let's analyze how a blog is structured. There are a lot of blog layouts, this one is one of the most common.

Look at a typical blog layout and **match** the parts of the blog to their names and purpose.

Basic blog structure

C ___ SIDEBAR

___ HEADER

___ FOOTER

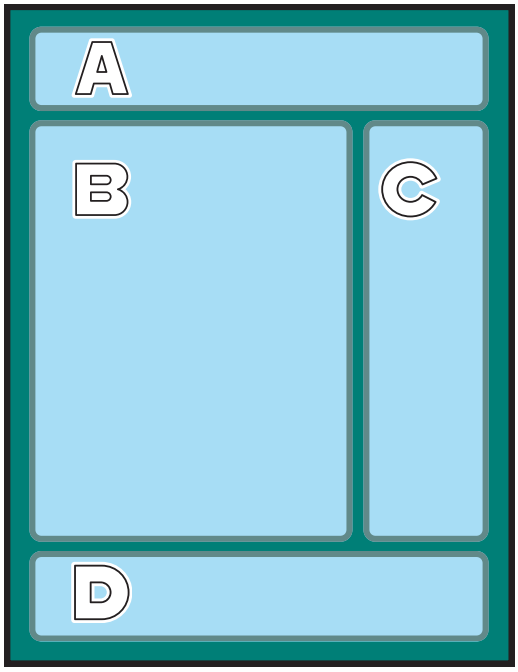
___ MAIN CONTENT

___ includes the latest blog posts

C ___ includes social profiles, favorite content, call-to-action, etc.

___ includes the title and the menu or navigation bar

___ includes relevant links like a disclaimer, privacy policy, contact page, etc.



Read this blog entry about a smartphone.
Label the different parts of a blog entry and their functions.

a **conclusion** b **introduction** c **title** d **body**

e introduces the topic of the blog entry

f the name of the entry

g states the blogger's opinion on the topic. It can include a recommendation or a question to engage the readers.

h all the information in the entry. It can include more than one paragraph.

c / f

_____

_____

_____

Tech Talk: Unboxing & reviewing the *XYZ Smartphone*

Greetings, tech enthusiasts! Today, I'm diving into the world of smartphones with a review of the latest XYZ model. The unboxing experience was enjoyable, with attention to detail in the packaging. And now let me share all the little details with you!

Positive aspects

Fortunately, I loved several aspects of this new phone.

- **Design.** The phone's design is modern and ergonomic, fitting comfortably in the hand.
- **Camera.** The camera quality surpassed my expectations, capturing vibrant and sharp images even in low light.
- **Interface.** Moving to the user interface, it's remarkably intuitive, making navigation a breeze.

Negative aspects

I was a bit disappointed by the battery life, especially with heavy usage. It had trouble lasting a full day, requiring frequent charges.

In conclusion, the XYZ smartphone is a strong contender for those looking for a powerful camera and a smooth user experience. However, it may not be the best choice for heavy users on the go. Tell me, have you already tried the XYZ phone? I'll wait for your comments!

Read the blog entry again and **find** expressions that show whether the blogger liked or disliked the experience.

The unboxing experience was enjoyable.

Read two more blog posts. **Identify** the different parts in them.

Then, **compare** your ideas with a partner.

A GASTRONOMIC ADVENTURE IN Uruguay

Uruguay, a wonderful place in South America, has beautiful scenery and delicious food waiting to be discovered. Come with me on a food adventure as I explore the tasty dishes of this amazing country.

MONTEVIDEO: TRYING TRADITIONAL FOOD

My food journey started in Uruguay's capital, Montevideo. I went to a classic steakhouse called a parrilla, where I tried a famous dish called Asado de Tira. It's beef ribs grilled to perfection and served with Chimichurri sauce and grilled vegetables. It was a tasty way to experience Uruguayan cooking.

PUNTA DEL ESTE: ENJOYING SEAFOOD BY THE SEA

Next, I went to the glamorous Punta del Este on the coast, where I couldn't resist trying fresh seafood. At a restaurant by the beach, I had a Paella del Mar. It's packed with shrimp, mussels, and fish caught locally. It was a yummy blend of Spanish and Uruguayan flavors, and it tasted even better with a glass of cold white wine.

COLONIA DEL SACRAMENTO: SWEET TREATS

In the old town of Colonia del Sacramento, I discovered the sweet side of Uruguayan cuisine. At a bakery, I treated myself to a classic Alfajor. These cookies are filled with creamy dulce de leche and covered in chocolate. They were a tasty snack with a cup of strong Uruguayan coffee.

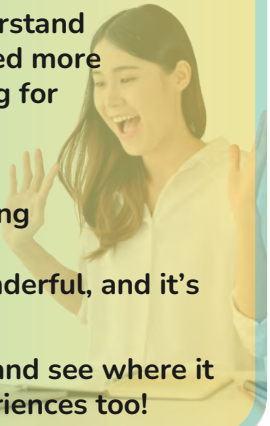
If you love food and exploring new places, Uruguay is a must-visit. The delicious flavors, friendly people, and joy of trying Uruguayan dishes will give you wonderful memories and leave you wanting more.

¡Buen provecho!

My blogging journey!

Hello, fellow bloggers and readers! I wanted to share how I started my blog and what I've learned along the way.

When I began my blog a year ago, I didn't know much about blogging. I didn't understand things like SEO, and my writing wasn't very organized. But as time went on, I learned more and found what I love to write about – travel and lifestyle. The best part of blogging for me has been connecting with people who share my interests. Getting support and feedback from them has been amazing.



At first, I felt overwhelmed by how much there is to learn about blogging. But writing regularly and talking with my readers helped me get better at it. I discovered that I really enjoy sharing travel stories and lifestyle tips. The blogging community is wonderful, and it's great to see that others relate to what I write.

If you're new to blogging and feeling a bit lost, don't worry. Just enjoy the process and see where it takes you. And if you've been blogging for a while, I'd love to hear about your experiences too!

Now, it's your turn to **write** a blog entry. 

Choose one of the following categories and **write** a similar blog post about a topic related to your chosen category. **Add** a picture or photograph.

• personal • parenting • business • health • entertainment • sports •
• lifestyle • food • technology • travel • fashion • news • education •

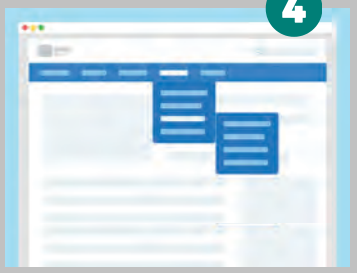
8 Take a dip into web design

All these images are related to the basic elements of web design.
What do you think they mean? Can you name any of these elements?

1


2


3


4


5


6


7

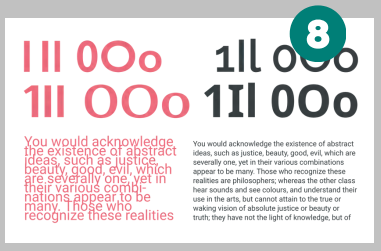

8


Image sources: typography • color scheme • layout • responsive design • coding • images & graphics • readability • navigation

Read this text and **match** the words / phrases in bold to the images above.

As a web designer, I put together various elements to create an engaging user experience. It's like a house, you need to start from the base. **Coding** serves as the foundation, crafting the website's functionality through languages like HTML, CSS, and JavaScript. The **layout** should be simple, intuitive, and accessible, usually following a grid-based design. **Navigation** is important, and acts as a tour guide, making sure users find what they're looking for without getting lost. And of course, you need to organize the page's content in a coherent and functional way (you cannot put the toilet in the kitchen, right?).

Now it's time to decorate your house. **Typography** isn't just about fonts; you need to make words flow nicely and look cool too, and of course, it helps **readability** - the art of making text easy to read. A cohesive **color scheme** sets the vibe and aids intuitive browsing. **Images and graphics**? They add life and complement the page's content. And, last but not least, **responsive design** is a must-have, guaranteeing a good appearance on any device, be it a computer or a tiny smartphone.

1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____

The web designer mentions another important element of creating a webpage. What is it? _____

Get in pairs and **reflect** on what each concept implies. In your opinion, which of those is the most important when designing a website? **Rank** them from **1–9**, *1 being the most important and 9 being the least important.*

1 _____ 2 _____ 3 _____

4 _____ 5 _____ 6 _____

7 _____ 8 _____ 9 _____

Explain your ranking choices to the rest of the group.

Nico is interested in web design, so he decided to interview Julia Brewster, a web designer, to learn more about the job.

Read the interview.

Nico: Hi, Julia! Can you tell me about your job as a web designer?

Julia: Sure! As a web designer, I create the visual elements of websites, like layouts, colors, fonts, and images, to make them user-friendly and visually appealing.

Nico: Sounds interesting! What do you enjoy most about being a web designer?

Julia: I love the creative aspect, bringing ideas to life and seeing how design impacts user experience.

Nico: What challenges do you face in your job?

Julia: Keeping up with evolving technology and design trends is a big challenge. Continuous learning is essential.

Nico: How do you handle those challenges?

Julia: I take online courses, attend workshops, and stay updated with industry blogs. Effective communication with clients and team members is also important.

Nico: Working with clients must be tough. How do you meet their needs?

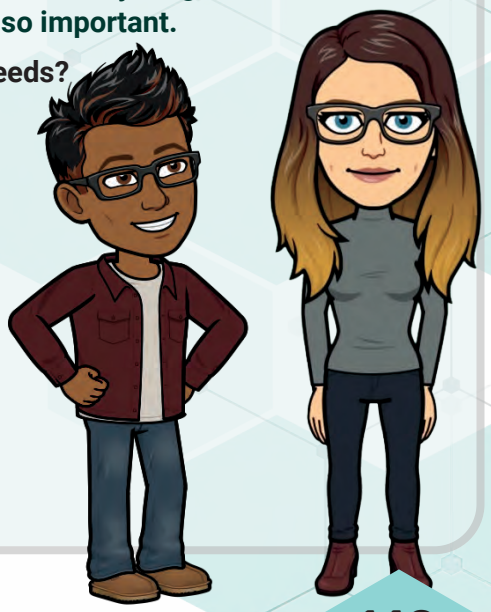
Julia: Understanding their vision and goals is key. I ask lots of questions, create prototypes for feedback, and balance their desires with what's effective in web design.

Nico: Any advice for someone interested in becoming a web designer?

Julia: Never stop learning, build a strong portfolio, and network with professionals in the field.

Nico: Thanks for your time, Julia!

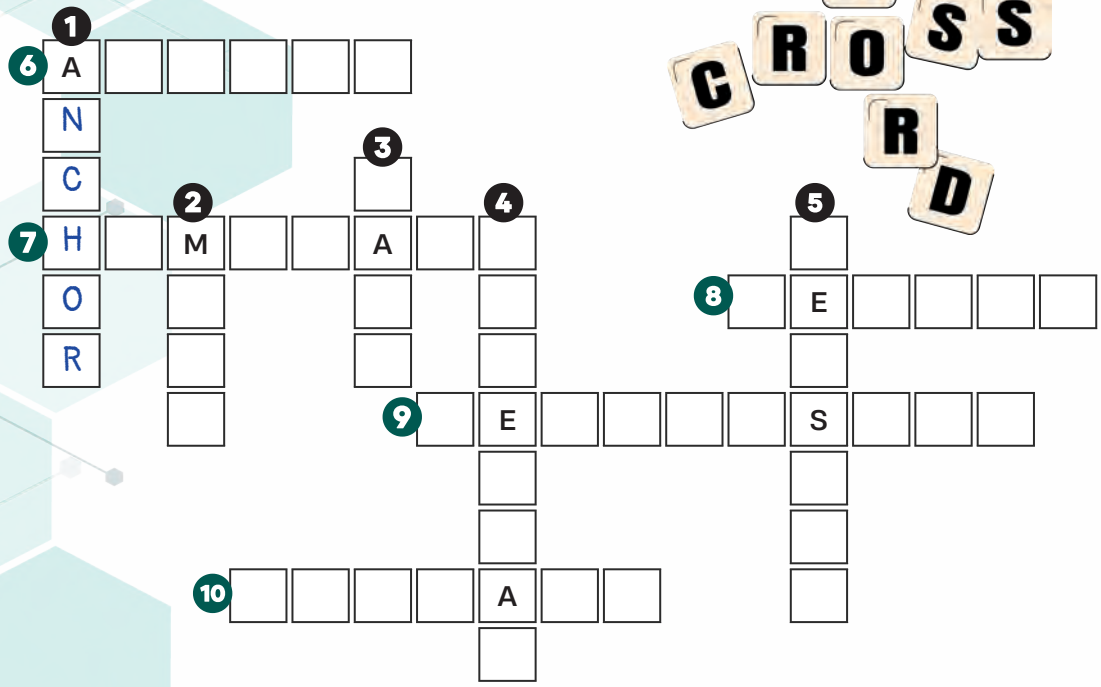
Julia: You're welcome! Feel free to reach out if you have more questions.

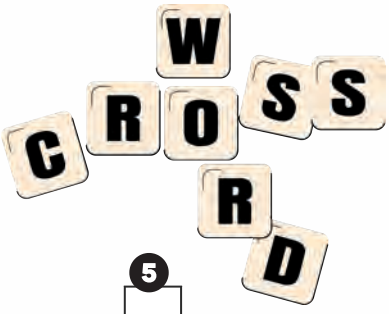


Complete the chart about Julia's job.

Job description	
Challenges	
Rewards	
Continuous training	
Working process	
A piece of advice	

Nico is doing a **crossword**.
Can you help him?





Down ↓

1- ANCHOR LINK: A clickable element that directs to a specific section within a page.

2- _____: A list of options facilitating navigation on a website.

3- _____: A programming language commonly used for web development.

4- _____ LINK: A link to another webpage or website.

5- _____: A set of interconnected web pages usually including a homepage, generally located on the same server

Across →

6- CALL TO _____: Elements asking for specific user actions, like subscribing or leaving a comment.

7- _____: The initial page of a website.

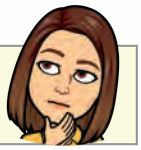
8- _____ BAR: A field allowing users to enter queries.

9- _____ DESIGN: Technique ensuring websites look good on various devices.

10- _____: A single document on the internet containing specific information.

9 Best apps in the world

Get in pairs and **ask** your partner these questions. **Take notes** on your partner's answers. **Look** at Nayeli's answers to help you.

	Nayeli 	You	Your partner
1.What is the name of your favorite app?	SnapChat		
2.What does the app do?	Share photos and videos with friends; snaps disappear after a few seconds.		
3.Why do you like this app?	Exciting features like filters and stickers; quick way to stay connected.		
4.How often do you use this app?	Almost all the time.		
5.Have you customized any settings within the app?	Notifications from my best friends; Bitmoji as a profile pic.		

Use your partner's answers to tell the class what he/she said.
Example: Nayeli's favorite app is SnapChat.

Get into small groups and **discuss** these questions.

1. What apps do you use to order food or get a ride?
2. Have you ever used an app to find a handyman? Which one?
3. Which are your favorite apps for watching movies or listening to music?
4. How do apps make it easier to book a hotel or flight?
5. Do you use any apps for managing your money or paying bills?
6. Have you ever had any problems using an app for a service? What happened?
7. Do you think apps help people access services faster? Why or why not?
8. What's your favorite app for playing games or having fun?
9. Have you ever used an app to learn something new? Which one?
10. If you could create an app for any service, what would it be for?

Look at these well-known app logos and **write** the names of the company/brand.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

Why do people use them? **Write** a paragraph about each app.

For example:

Netflix is a popular app in which you can watch many TV shows, movies, and documentaries. People use it mainly for fun, but some professionals, like actors and filmmakers, also use it to learn or get ideas. It's also helpful for businesses to understand what people like to watch so they can advertise better.

Conversation circle

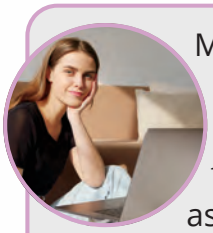
1. **Get into groups** of four.
2. **Read** the situations provided below and **discuss** with your group members which app you would recommend for each person.
3. **Consider** various aspects such as functionality, user interface, accessibility, privacy and security, as well as users' reviews, when selecting the apps.
4. **Use** the SOS box if you need help during your discussion.

Sofía is a young freelance graphic designer who is traveling to Japan for a two-week vacation. She plans to visit Tokyo, Kyoto, and Osaka. As a first-time traveler to Japan, Sophie is concerned about language barriers, especially when taking public transportation and ordering food at local restaurants.

Olivia is a middle-aged lawyer and single mother of two, who lives in Chicago. She balances a demanding career at a law firm while also managing her children's schedules and activities. She often struggles to keep track of important appointments and deadlines, especially when it comes to work commitments and family responsibilities.

Renzo owns a small eatery in Los Angeles. He loves cooking tasty dishes for his customers, but he's struggling to bring more people to his restaurant. With so many other restaurants nearby, he needs a way to let more people know about his food without spending too much money.

Elías, who is 30 and works as an accountant, is getting ready for his wedding in New York City. He's a bit stressed about how much it might cost for the place, food, and fun. Also, he's thinking about other surprise expenses and wants to make sure he doesn't spend too much while still having a great wedding party.



Mia is a recent college graduate who moved to San Francisco for her first job as a marketing assistant. She is searching for affordable housing options in neighborhoods like SoMa and the Mission District. Mia also needs to furnish her new apartment and establish essential services like healthcare providers and grocery stores in her new city.

- I believe .... should ....
- I think .... would benefit from using ...
- From my perspective, ... should consider using ...
- It might be a good idea for ... to try
- ... should try ....

SOS Box

10 Leaders in the creative software industry

Think about what you know about the creative software industry.

What comes to your mind? Video games? Animation? Graphic design?

Write down your ideas on a piece of paper.

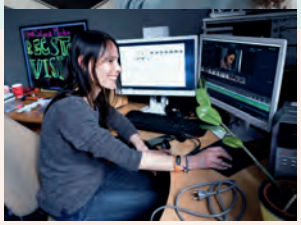
Get in pairs and **answer.** What makes a good leader in the creative software industry? **Think** about qualities like innovation, creativity, vision and teamwork.

Nico wants to learn about the skills and qualities of a creative software leader.

Skills and qualitives of a creative Software leader

A creative software leader is someone who can inspire and motivate their team to produce innovative and effective solutions. To be successful, they need to possess a unique combination of skills and qualities. Firstly, they must have a deep understanding of the industry and its trends, as well as the technical skills to back it up. This includes being proficient in programming languages, software development methodologies, and design principles.

However, technical skills alone are not enough. A creative software leader must also be a strong communicator, able to articulate their vision and ideas to their team and stakeholders. They must be able to empower their team members, giving them the autonomy to make decisions and take ownership of their work. This requires strong leadership and management skills, including the ability to prioritize tasks, manage timelines, and allocate resources effectively.



Moreover, a creative software leader must be a creative problem-solver, able to think outside the box and come up with innovative solutions to complex problems. They must be adaptable and flexible, able to pivot when necessary and adjust to changing circumstances. Finally, they must be passionate about their work, with a genuine enthusiasm for the industry and its potential to make a positive impact.

Read the text and choose the correct answer for each question.

1. What is the most important skill for a creative software leader to have?
   - **a)** Technical skills
   - **b)** Communication skills
   - **c)** Leadership skills
2. What is a key characteristic of a creative software leader?
   - **a)** Being a perfectionist
   - **b)** Being adaptable and flexible
   - **c)** Being a micromanager
3. What is the primary goal of a creative software leader?
   - **a)** To develop the most complex software
   - **b)** To make a profit
   - **c)** To inspire and motivate their team

Read the text again and **answer.**

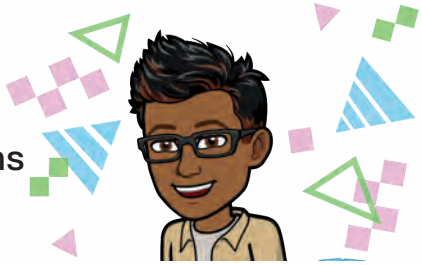
1. What technical skills should a creative software leader possess?
2. How does a creative software leader empower their team members?
3. What is the importance of passion in a creative software leader?

Get in pairs and **compare** your answers.

Get into groups and **surf the net. Find** names of Uruguayan creative software leaders. **Choose** one and **answer** the questions.

1. Who is the leader and what is his / her background?
2. What company or project is he / she associated with?
3. What are his / her achievements and contributions to the industry?
4. What qualities make him / her a good leader?

Create a short presentation (3-4 minutes) about the chosen leader. You can **use** visual aids like images, videos, or diagrams to support your presentation. Each group will **present** their findings to the class.



Write a short paragraph (50-70 words) about what you learned from your research and presentation. **Reflect** on what qualities you think are most important for a leader in the creative software industry and how your assigned leader embodies those qualities.

Extra challenge

Dive deeper into the life and work of a specific leader. **Compare** and **contrast** different leadership styles, or research the history of the creative software industry and **create** a timeline of significant events.


QUIZ
Key
Quiz on Lesson 6:
1. A) Spaghetti
2. B) Pong
3. B) Simlish
4. D) God of War
5. B) Lara Croft
6. B) Call of Duty
7. D) PlayStation
8. D) Naughty Dog
9. A) Yellow
10. C) Uncharted
11. A) The Death Star
12. B) Grand Theft Auto

EXIT TICKET

In this unit, I learned that...

Something I need to revise is...

my favorite part of this unit was...

I felt...

UNIT 5

The future is now

1 Drones

Read these three definitions. Which one is correct? What key words helped you to choose that option?

A drone is an unmanned aerial vehicle that operates without a human pilot on board. It's commonly used for tasks like aerial photography, surveillance, agricultural monitoring and data collection, among others. A

A drone is a robotic device that operates on the surface of a planet or other celestial body. It's commonly used in space exploration missions to collect data and perform experiments. B

A drone is an autonomous underwater vehicle (AUV) that operates without human intervention. It's commonly used for tasks like ocean exploration, marine research, and underwater mapping. C

Get in pairs and **discuss** these questions.

1. Have you ever seen a drone in action? Where and when?
2. What do you think are some common uses of drones?
3. How do you think drones can benefit society?
4. Are there any negative aspects associated with the use of drones?
5. Do you think drones will become more or less common in the future? Why?

List *three* working areas where drones are already being used.

One of the areas where drones are making a difference is *agriculture*. **Listen** to Camila's uncle, Carlos, talking about his experience and **complete** the mind map.

managing the soybean and maize fields

Using drones in agriculture is very beneficial. **Read** these advantages and **complete** the ideas with words from the box.

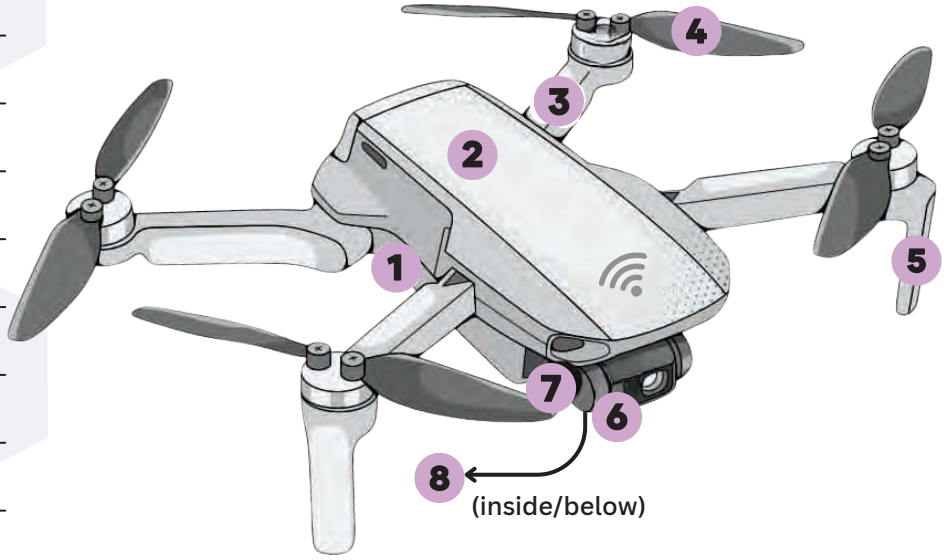
field - sensors - farmers - optimizing - monitor

1. Drones can cover large areas of farmland quickly and accurately, allowing farmers to _____crops more efficiently than traditional methods.
2. Drones equipped with _____ can provide real-time data on crop health, enabling early detection of pests, diseases, and nutrient deficiencies.
3. Drones can deliver targeted treatments such as pesticides, fertilizers, and water to specific areas of the _____, reducing waste and maximizing yields.
4. By _____inputs and reducing manual labor, drones can help farmers save on operational costs and improve overall profitability.
5. Drones enable _____to adopt more sustainable practices by reducing chemical usage, minimizing soil erosion, and conserving water resources.

This is a diagram of a typical quadcopter, which is one of the most popular commercial drone models today. **Label** its parts.

• motor • sensors • frame • arms •
• landing gear • battery • camera • propeller •

1 motor
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____



Did you know? Although not all drones have the same components, they all include a number of **sensors** to measure things such as speed, altitude and position (GPS).

Agricultural drones are usually equipped with specialized cameras, which sense different light spectrums to detect pests or diseases, spot nutrient deficiencies and identify areas of water stress in crops, among other things.

Diego Barreto, *Carla Rollandi* and *Hamlet Fernández* are the creators of the project ***Drone Control*** (Drone Cntrol (@drone_cntrol).

Surf the net and **answer** the following questions.

a- What is "drone_cntrol"?

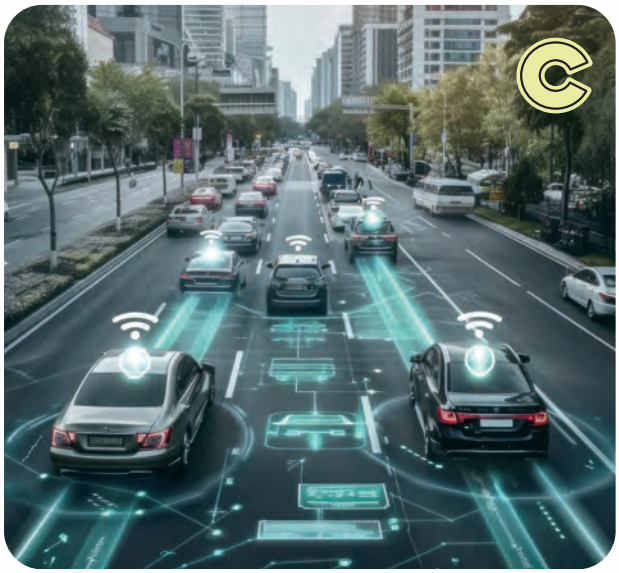
b- What is the aim of this project?

c- What interesting places have they visited?

Choose one of the places and tell the rest of the class about that place.

2 AI and avatars

1. **Describe** the photographs. What do you see?
2. **Compare** the AI technology in the photographs with something you use in your daily life. How are they similar or different?
3. **Imagine** yourself using the AI technology in the photographs. How do you think it would feel? Would you find it helpful or intrusive?



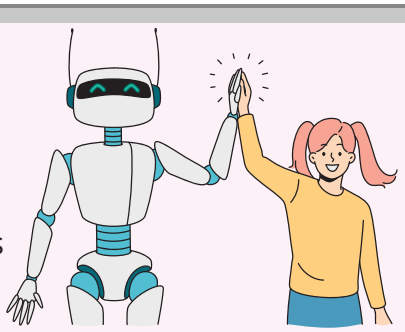
(Images from Canva.com / Freepik.com)

Get in pairs and **discuss** these questions.

1. How do you think AI impacts our daily lives?
2. Can you share any cool AI technology you have recently used?
3. Do you believe AI will revolutionize job opportunities or threaten some jobs?
4. Are there any fascinating or concerning aspects of AI that catch your attention?
5. In what ways do you envision AI transforming our world in the future?

Read this story. How many forms of AI can you identify?

Greta's Smart Rescue



In the busy town of Brookville, Greta, a young inventor, was well-known for her clever ideas with computers. Her latest project was all about making smart machines to help when things went wrong, like floods or big storms.

One rainy night, the river in Brookville got too full and started flooding. Greta's smart machines were put to the test. She had made a special robot called a Rescue Robot. It could move around flooded streets and find people who needed help. Greta also had drones that could fly high up and look for people stuck in dangerous places.

When the flood happened, Greta's machines got to work right away. The Rescue Robot went out and found people who were trapped, giving them supplies and help. The drones flew above and saw where people were in trouble, so the rescue teams could go and save them.

One family that was stuck in their flooded house got help from the Rescue Robot. It found them and stayed with them until they could leave safely. Another time, the drones saw some hikers who were stuck because of a landslide. They sent rescue teams to help them get back to safety.

When the sun came up, Greta's smart machines had helped a lot of people. Everyone said thank you to Greta for her clever inventions. Her work showed that with smart ideas and computers, we can help each other when bad things happen.

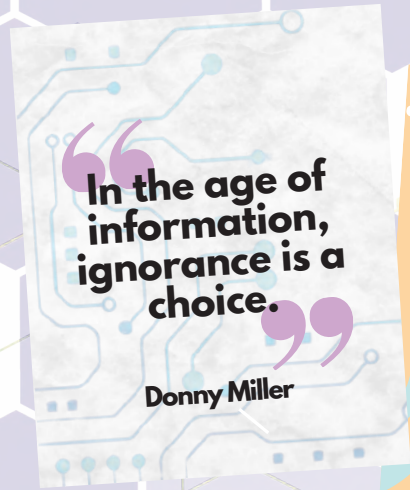
After the flood, Greta kept working on her smart machines, making them even better. Her smart ideas inspired other people to use computers to help in emergencies, too.

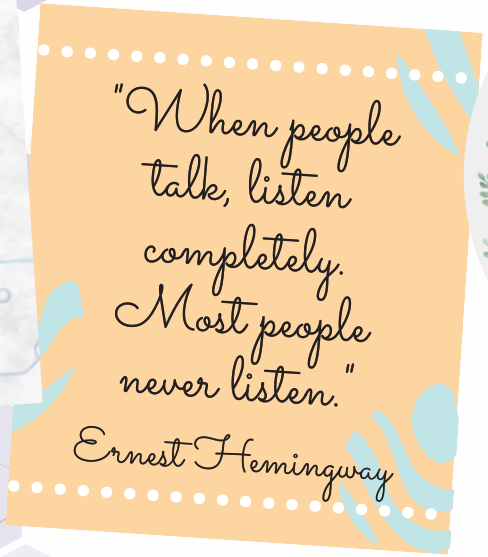
Get into trios.

1. **Discuss** potential endings for the story, considering a positive outcome, a negative outcome, and an open-ended conclusion. Which of these options would you prefer to develop?
2. After selecting the type of ending, **jot down** key events you want to mention. **Use** a chronological order to write them down.
3. **Brainstorm** descriptive adjectives, phrases, linkers, and other linguistic components to evoke vivid imagery, emotions, and thought-provoking ideas in the reader.
4. **Write** a continuation of the story, imagining another emergency situation where Greta's inventions are needed.
5. Enhance your creativity by crafting avatars for the characters in the story and **record** a short film featuring them.

3 same time, different places

Read these quotes. Do you agree with them? Why or why not?





Get into small groups and **share** your experiences about communicating across different locations. You can use these questions to help you.

a. Have you ever talked to someone who lives far away? What was it about?
b. What was hard about talking to them? Was it because of technology, time zones, or something else?
c. How did you fix these problems? Did you use special tools or ideas to make it better?
d. Did you ever have a problem understanding each other because you were far away? How did you solve it?
e. How do you keep in touch with friends or family who live far away? Do you use video calls or something else?
f. What's good and bad about talking to someone who's far away instead of talking face-to-face?
g. Have you ever felt like you weren't close to someone because they lived far away? What did you do about it?
h. Do different cultures or time differences make it hard to talk to people from other places?
i. Can you think of ways to make talking to someone who's far away better?
j. What advice would you give to someone who's just starting to talk to people from other places?

Diego and Camila are reading the short story *The Door in the Wall* by H.G. Wells in class. **Read** this excerpt. What do you think of it?

When I was a child I had a passion for maps. I would look for hours at South America, or Africa, or Australia, and lose myself in all the glories of exploration. At that time there were many blank spaces on the earth, and when I saw one that looked particularly inviting on a map (but they all look that) I would put my finger on it and say, *"When I grow up I will go there."* The North Pole was one of these places, I remember. Well, I haven't been there yet, and shall not try now. The glamour's off. Other places were scattered about the hemispheres. I have been in some of them, and... well, we won't talk about that. But there was one blank space left on the map, and that was the most tempting of all. A blank space of mystery and promise—a white spot. You might fancy it was the *"white hart"* of Mr. Arthur Machen, by the way, for there was just the one bright spot in this darkling wilderness of South London, and that was the Door. The Door that was the beginning of the adventure.

I never saw the Door open, but I found it ajar. It was a solid old door, with panels, and in the wall it pierced there were little windows with thick green glass between the frames. They showed nothing that was inside, for the wall was a good three feet thick. It was the green glass that made the magic, I am convinced of that. For not a ray of light came through it. It was the green glass made the door seem so bright amid the darkness of the staircase.

"The Door in the Wall" by H.G. Wells is a public domain text.

Did you know?

H.G. Wells (1866–1946) was a British writer who wrote famous science fiction books. He grew up in Bromley, Kent, and had money problems, but he did well in school. His popular books include "The Time Machine" (1895) and "The War of the Worlds" (1898), which talk about time travel and aliens. Wells also talked a lot about socialism and social issues. His stories still inspire people today.

Image from Wikimedia Commons.

Did you know?

An old legend said that the **white hart** (or deer) has an eternal ability to evade capture and that the pursuit of the animal represents mankind's spiritual quest. If a knight saw a **white hart,** it meant it was time to start a journey.

(image from Pixabay.com)

Form 4 groups. Your teacher will assign each group a task.

1- The artists

Create visual representations of the "Door" described in the passage.

Follow these steps.

a. Begin by sketching the outline of the door on your paper or canvas.

b. Pay attention to details described in the passage such as its size, shape, and any unique features like the solid panels and thick green glass windows.

c. Once you have the basic outline, add details such as the door's panels, doorknob, and any decorative elements.

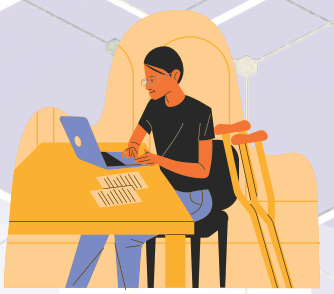
d. Refer back to the passage for guidance on these details.

e. Gather the necessary materials, such as pencils, markers, paints, clay, or whatever you prefer.

f. Pay close attention to the details as you work.

g. Add any additional details or embellishments to enhance the realism of your artwork.

2- The writers



Write a descriptive paragraph about what lies beyond the mysterious green-glassed door.

Follow these steps.

a. Take a moment to visualize what lies beyond the mysterious green-glassed door described in the passage.

b. Imagine the setting, atmosphere, and any unique features that might be present.

c. Consider elements such as the environment, characters, objects, and sensory details that will help bring the scene to life.

d. Start your descriptive paragraph with an engaging opening sentence that captures the reader's attention and sets the scene for what lies beyond the door.

e. Use vivid and sensory language to describe the scene beyond the door.

f. Use descriptive adjectives and metaphors to create imagery and evoke emotions in the reader.

g. Describe the experience of stepping through the door and exploring the unknown realm beyond by incorporating sensory details such as sights, sounds, smells, tastes, and textures.

h. Convey the protagonist's emotions and reactions to the scene beyond the door.

i. Wrap up your descriptive paragraph by summarizing the experience of what lies beyond the mysterious green-glassed door.

j. Check for spelling, grammar, and punctuation errors, and ensure that your writing flows smoothly from one idea to the next.

3-The performers

Create a dialogue and then perform it.

a. **Know Your Role:** One of you will play the narrator, another will be the Door, and the rest will take on supporting roles like elements of the setting.

b. **Set the Scene:** Imagine yourselves on a dark staircase with a mysterious door. This door holds secrets waiting to be discovered.

c. **Start the Conversation:** As the narrator, you'll begin the role play. Picture yourself stumbling upon the mysterious Door that has always intrigued you. What will you say or do when you encounter it?

d. **Interact with Each Other:** Engage with your classmates based on your assigned roles. React to the narrator's curiosity or excitement as they approach the Door. The Door can respond with enigmatic messages or actions.

e. **Decide the Ending:** Determine how the role play will conclude. Will the narrator enter the Door, or will they choose to walk away? Work together to create a satisfying conclusion for the story.

f. **Practice Your Lines:** Take some time to rehearse your lines and actions. Stay true to your character and engage with each other authentically.

g. **Performance Time:** Once you're ready, perform the role play for the class.

4. The researchers

Surf the net and look for information about H.G. Wells's biography.

a. Start by accessing reliable websites that provide information about H.G. Wells' life. Look for sources such as biographies, articles from reputable publications, or official websites dedicated to the author.

b. Search for information about his early years, education, career, major works, and any significant events or accomplishments.

c. Take note of important dates, milestones, personal experiences, and influences that shaped his life and work.

d. Pay attention to recurring themes or aspects of H.G. Wells' life that may have influenced his writing. Consider how his personal experiences might have informed the themes explored in his literary works.

e. Organize your notes by category or chronological order to make it easier to reference later.

f. Get ready to present your research findings to the class. Organize your notes into an appealing presentation and be prepared to answer questions from your classmates.

Project 1 Advocating for innovation

Communication tools have gained popularity since the pandemic began. **Choose** an innovative device and convince an audience of people unfamiliar with this device that this is the best option.
In groups of 5, prepare a one-minute speech advocating for a chosen innovative device. **Select** one classmate as the spokesperson to deliver the presentation to the rest of the class.

Consider:

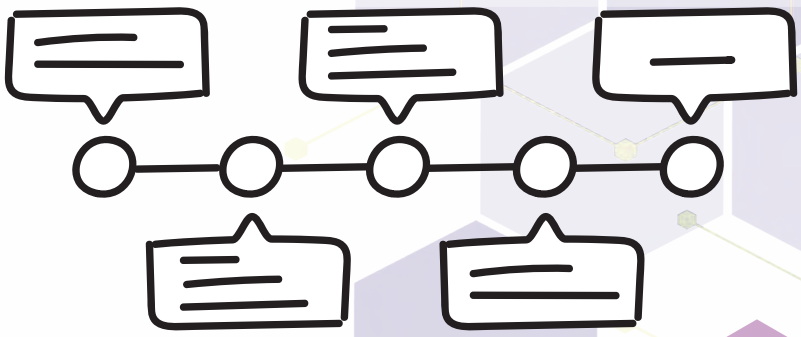
1- Going from general information to concrete information.
2- Posture of your body while presenting.
3- Including a motivating beginning and a thought-provoking ending.
4- Using images when necessary.

While presenting, the rest of the class should take notes on the arguments presented in favor of using the device.

Project 2 Webquest

Throughout history, there have been pivotal moments where communication played a crucial role. It could be due to a pandemic, a war, a natural disaster, among others. **Surf the internet** and find 5 moments in history in which you consider communication was of paramount importance. **Choose** events from different time periods and regions to provide a diverse perspective. **Research** the methods of communication used during each event and **analyze** how these methods revolutionized communication practices.

Create a timeline or a poster placing the events chronologically and include dates, key events, communication methods, and the impact on society in your timeline or poster.



Communication in the past

Communication in the past was quite different from what we have today. Before phones and computers, people used various ways to talk to each other, especially when they were far apart. Let's see how they did it back then.

Ancient times

In ancient times, like in Egypt or China, they didn't have phones or computers. They mostly talked to each other or wrote things down. They had people called scribes who wrote important stuff on things like clay or paper. To send messages far away, they would send someone with the message, or they'd tell someone else to do it. But it took a long time because traveling was slow.

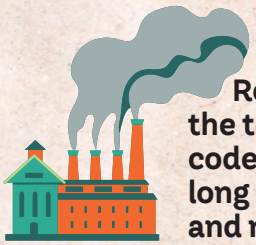
Medieval times

During the Middle Ages, which was a long time ago in Europe, they started having systems for sending letters. Important people like kings and merchants had people called couriers who carried letters for them. They also had town criers who would shout out news to people in the towns. But it still took a while for messages to get where they were going.

The era of exploration

When people started exploring the world, they had to find ways to talk to each other while sailing. They used flags and signs to talk between ships. They also wrote letters and drew maps to tell others about what they found. But it wasn't easy because sometimes other ships would take their messages or they couldn't find each other.

The Industrial Revolution



In the 1800s, things changed a lot because of the Industrial Revolution. A man named Samuel Morse made something called the telegraph. It let people send messages really fast using special codes. This was a big deal because now people could talk across long distances almost instantly. It helped governments, businesses, and regular people talk to each other faster.

Communication in the past was not as easy as it is now. They had to be creative and patient to talk to each other when they were far apart. Even though we have phones and computers today, it's important to remember how people used to communicate and how it changed over time.

After reading this text, **analyze** these questions.

1. How does the text show the connection between past events and how people communicate?
2. What big improvements in how people talk to each other are talked about in the text, and why did they happen?
3. Looking at what's going on in the world today, what do you think communication will be like in the future?

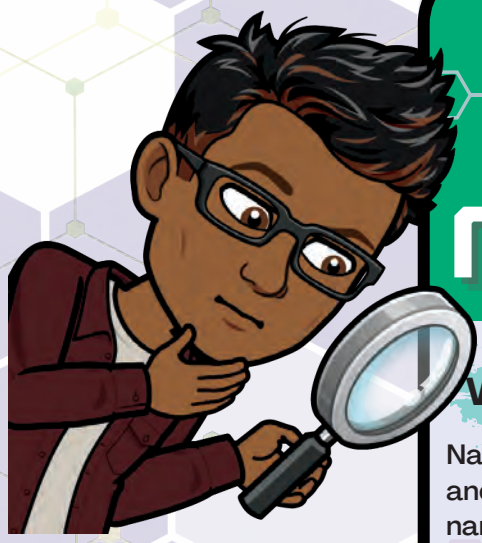
4 Welcome to the era of nanomedicine

Look at this word. Do you know what it means?

Get in pairs and **complete** the first two columns of the KWL chart about nanotechnology.

K	W	L
What I Know	What I Want to know	What I Learnt

Read Simon's infographic about nanotechnology on the following page and **complete** the last column of the KWL chart.

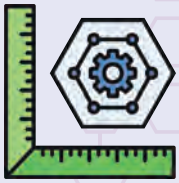


NANOSCIENCE AND NANOTECHNOLOGY

What are nanoscience and nanotechnology?

Nanoscience involves research to discover new behaviors and properties of materials with dimensions at the nanoscale, which ranges roughly from 1 to 100 nanometers (nm). Nanotechnology is the way discoveries made at the nanoscale are put to work.

What's so special about the nanoscale?



The short answer is that materials can have different properties at the nanoscale - some are better at conducting electricity or heat, some are stronger, some have different magnetic properties, and some reflect light better or change colors as their size is changed. Nanoscale materials also have far larger surface areas than similar volumes of larger-scale materials, meaning that more surface is available for interactions with other materials around them.

What things are being created using nanoscience?

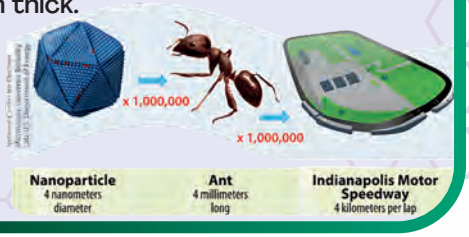
Working on the nanoscale, scientists today are creating new tools, products and technologies to address some of the world's biggest challenges, including:

- clean, secure, affordable energy,
- stronger, lighter, more durable materials,
- low-cost filters to provide clean drinking water,
- medical devices to detect diseases more effectively,
- drugs and treat diseases with fewer side effects,
- techniques to clean up hazardous chemicals in the environment.

How small is a nanometer?

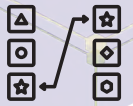
By definition, one nanometer is a billionth of a meter, but that's a hard concept for most of us to grasp. Here are some other ways to think about how small a nanometer is:

- A nanometer is a millionth of a millimeter.
- There are 10.000.000 nanometers (nm) per centimeter.
- A sheet of paper is about 100,000 nm thick.
- If you're blond, your hair is probably 15,000 to 50,000 nm in diameter.
- If you have black hair, its diameter is likely to be between 50,000 and 180,000 nm.



Watch a video about nanotechnology applied to medicine. As you watch, **take notes** of key points, applications, and the potential impact of nanomedicine in healthcare.

Here's a list of the nanotechnologies medical applications mentioned in the video. **Match** the application to its purpose.



1. Early disease detection	a. Improved accuracy in diagnosing medical conditions.
2. Drug delivery systems	b. Use of appropriate nanostructures for repairing cells, tissues, skin, bones, or organs.
3. Increased diagnostic accuracy	c. Development of tools for better visualization inside the body.
4. Advanced imaging tools	d. Enhanced capabilities for detecting diseases at earlier stages.
5. Regenerative medicine	e. Nanoparticles will be active elements and provide completely new ways to treat patients.
6. Intrinsic therapeutic efficacy	f. Nanoparticles as carriers for delivering drugs to specific parts of the body efficiently.

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐

Get in pairs and **do some research.** Which of the applications mentioned in the video are already being used and which are in development or as projects?

Think of different illnesses and diseases, what are these applications useful for?

E.g. To make an early discovery of cancer, it is very important to have advanced imaging tools. This development can definitely save lives.

Type: Breast cancer detection, language learning, sustainability: Can AI help humanity? and read the piece of news about Juan Lavista Ferres.

After reading the text, what other information can you add to the statement?

In the piece of news you read, you got to know Juan Lavista Ferres.
Do some **research** and **answer** these questions:

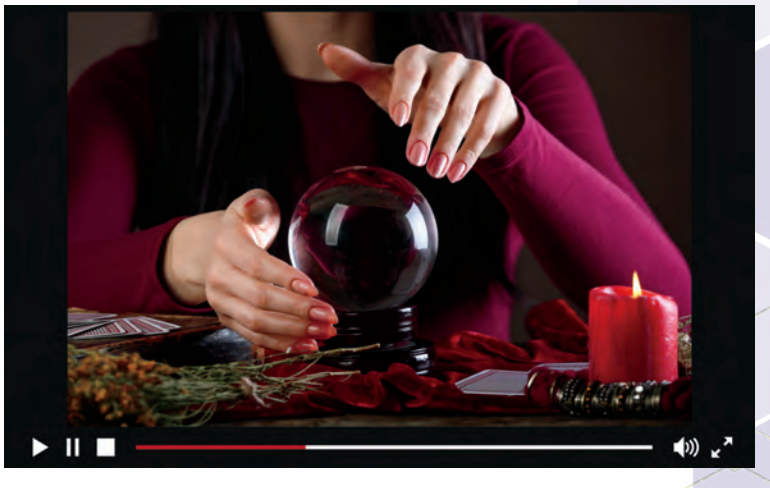
1. When and where was Juan Lavista Ferres born?
2. What is he known for?
3. What are some achievements or contributions made by Juan Lavista Ferres in his field?
4. Where did he receive his education or training?
5. Are there any significant publications or works authored by Juan Lavista Ferres?
6. Has he received any awards or honors for his work? If so, what are they?

Project

Research and present a short report on a specific aspect or application of nanomedicine. You can use one mentioned in the video or one that intrigues you. Think about its potential implications, too.

5 Living like the Jetsons

Look at the picture, what does it mean? What is the woman doing?



Discuss these questions with your partners.

- Do you think you can predict the future?
- Can you predict what is going to happen to you in ten years?
- What will happen in the world?

Time capsule

1. With your classmates, build a time capsule.
2. Each of you will write a statement about what you hope will happen before the end of the year.
3. Remember to open the time capsule before the year ends.
4. Check to see whether your predictions were correct or not.

Get in pairs and **imagine** what life will be like in 2062. **Consider** things like work, transportation, housing, and daily life. **Write** three predictions.

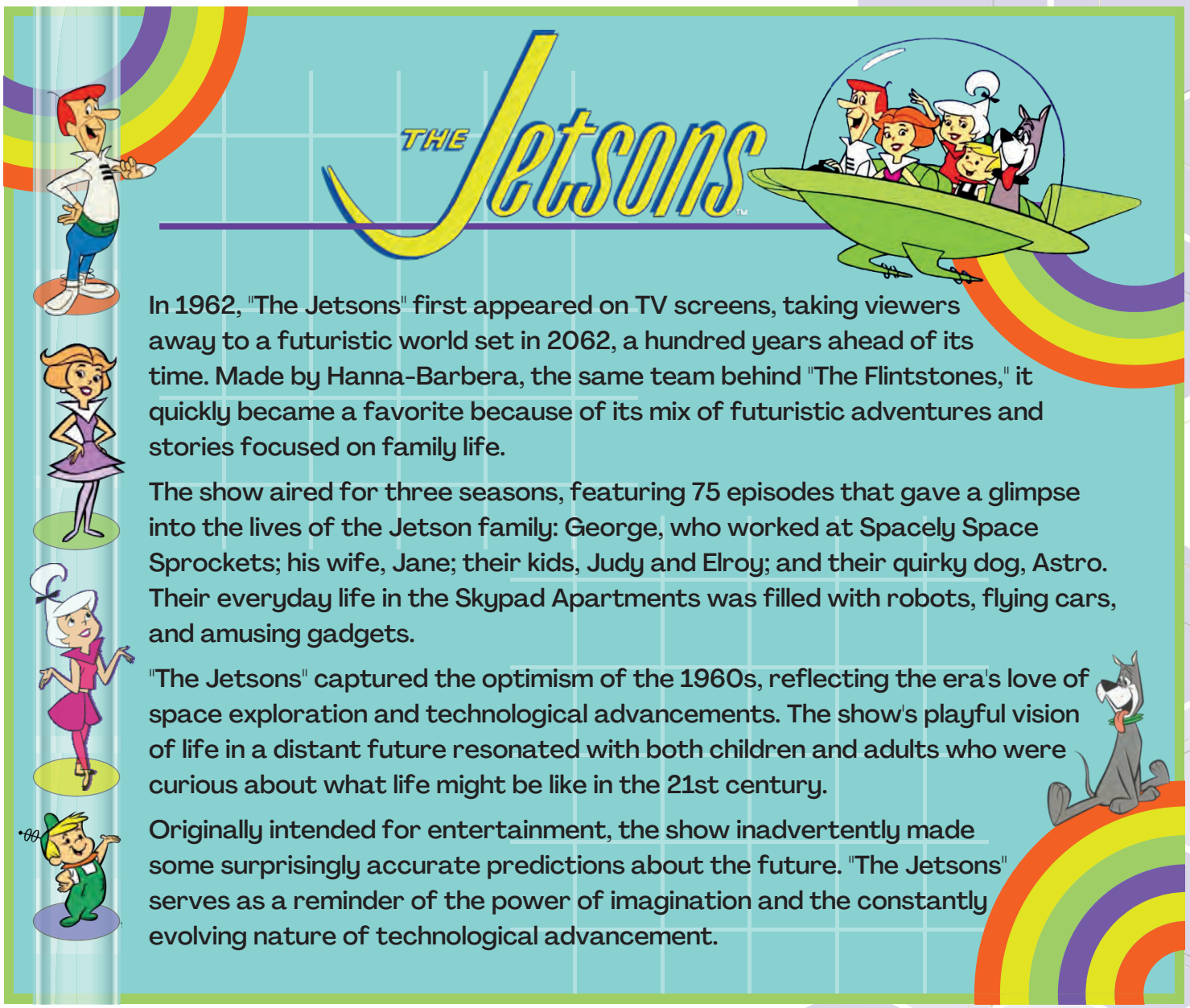
Think about what people in the past might have thought life would be like in our current time. **Answer** these questions:

1. What were some popular predictions about the future in the past?
2. How accurate were these predictions compared to our current reality?
3. Are there any predictions from the past that have become reality today?

Freddie's mom, Irene, used to love watching the "The Jetsons'' when she was a child. Have you ever heard of that show?

https://www.flickr.com/photos/

Read a short text about the Jetsons.



In 1962, "The Jetsons" first appeared on TV screens, taking viewers away to a futuristic world set in 2062, a hundred years ahead of its time. Made by Hanna-Barbera, the same team behind "The Flintstones," it quickly became a favorite because of its mix of futuristic adventures and stories focused on family life.

The show aired for three seasons, featuring 75 episodes that gave a glimpse into the lives of the Jetson family: George, who worked at Spacely Space Sprockets; his wife, Jane; their kids, Judy and Elroy; and their quirky dog, Astro. Their everyday life in the Skypad Apartments was filled with robots, flying cars, and amusing gadgets.

"The Jetsons" captured the optimism of the 1960s, reflecting the era's love of space exploration and technological advancements. The show's playful vision of life in a distant future resonated with both children and adults who were curious about what life might be like in the 21st century.

Originally intended for entertainment, the show inadvertently made some surprisingly accurate predictions about the future. "The Jetsons" serves as a reminder of the power of imagination and the constantly evolving nature of technological advancement.

(Images from Wikimedia Commons / Flickr.com)

Complete the chart about the TV show.

Title					
Date		**# seasons**		**# episodes**	
Creators			**Genre**		
Characters					
Plot					

Watch the video about The Jetsons. Pay special attention to the predictions made in the show and how they relate to present-day technology.

Make a list of all the futuristic advances mentioned in the video, how the Jetsons imagined them, and how they exist nowadays or not.

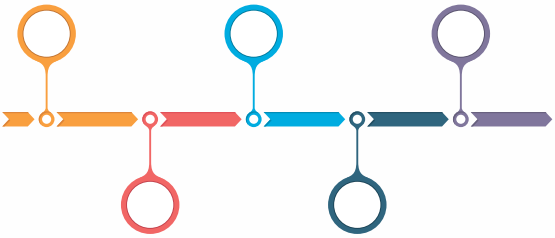
Prediction	In The Jetsons	In current times
video chat technology	They used TV screens to call other people.	We can use computers and smartphones to video chat with other people.

Can you think of some important present-day technological advancement that the Jetsons did NOT predict? **Take notes** and share your ideas with a partner.

- _____
- _____

Get in pairs.

- **Choose** one of the Jetsons' predictions that have come true.
- **Do** a little research.
- **Create** a timeline (from its invention to current times) for that gadget or type of technology.
- **Share** your timeline with the class.



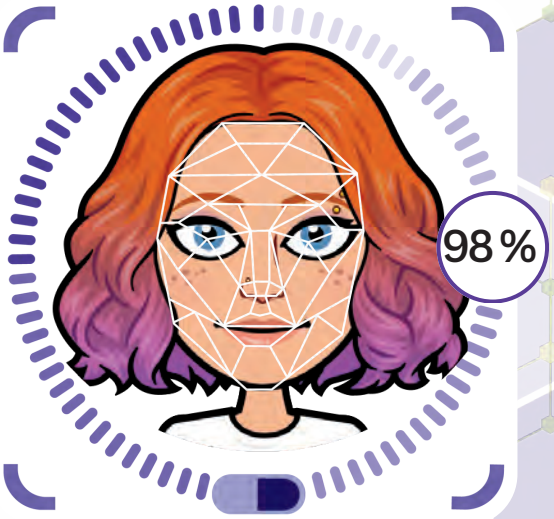
Project Beyond The Jetsons

- **Work in groups.**
- **Create** a short presentation envisioning a new technological innovation for the year 2062, citing current trends and technological advancements as inspiration.

6 make your body your password

Look at the two parts of the term below and say what they might refer to.

BIOMETRICS



Read the definition of biometrics and **complete** gaps 1–4 with the correct form of the words in brackets.

Biometrics refers to the measurement and analysis of human (1) _____ (DISTINCTION) characteristics. It can be used for the (2) _____ (RECOGNIZE) of individuals. With the present (3) _____ (ADVANCE) in computer vision and AI, biometric technology can be applied to (4) _____ (AUTHENTIC) people based on their unique biometric identifiers. These include, e.g. (5) _____, (6) _____, (7) _____, (8) _____, (9) _____, and (10) _____ among others.

Look at the icons and **complete** the examples of biometric identifiers in spaces 5,6,7,8,9 and 10.

Inés found an article about biometrics.

TECHNOLOGY TODAY

#WorkingUruguay

TOP CREDIT CARD MAKES PUBLIC FACE & HAND PAYMENT TECH

A worldwide known credit card launches tech that lets you pay with your hands or face in stores.

Read the *headline* and the *lead line* of the article and **give** your opinion about this.

1. How this is secure or not.

2. The ethical implications of this.

3. The potential benefits this has for inclusion and people with disabilities.

Read the article and **answer**.

1. What kind of technology is the article about and what does it allow credit card users to do?

2. The credit card company says you can pay “with a smile or a wave”. Would you like to be able to authenticate your payments this way?

3. What identity, privacy and security concerns with regard to using biometric technology might there be?

4. Do you think it’s inevitable that biometric technology will become as ubiquitous as cameras in smartphones?

5. In what other areas of life might this technology be used?

TOP CREDIT CARD MAKES PUBLIC FACE & HAND PAYMENT TECH

A worldwide known credit card launches tech that lets you pay with your hands or face in stores.

The important finance corporation recently initiated a program for retailers to provide biometric payment options, including facial recognition and fingerprint scanning. During checkout, users can authenticate their payment by presenting their face or palm, eliminating the need to swipe a card.

This initiative has started in five major grocery stores located in Sao Paulo, Brazil, with plans for a global expansion later in the year.

William Shusuf, the president of cyber intelligence at the credit card company, is confident that consumers will welcome biometric methods. He stresses that people are looking for payment experiences that are as smooth and straightforward as unlocking their smartphones.

Research indicates a notable increase in the use of facial recognition technology for payment authentication, with estimates showing the number of users could exceed 1.4 billion by 2025. The long-term goal is to achieve global compatibility for this technology, allowing it to be used in various locations worldwide.

How does it work?

So, how does this technology function? To enroll, individuals capture a facial image or scan their fingerprint, registering it through an application on a smartphone or payment terminal. Then, they can link a credit card to their biometric data.

Is it safe?

Concerns about privacy and data collection are raised with the use of biometric information for payments. However, the credit card company assures customers that their data is kept private through encryption. When enrolling, facial or fingerprint scans are replaced with encrypted "tokens" that are linked to payment cards.

To ensure data protection, the company has established standards and is collaborating with various partners, including Fujitsu, NEC, Payface, Aurus, PaybyFace, and PopID.

Preparing for the Metaverse

Looking ahead, the company plans to use biometric tools to enhance payment systems in the "metaverse," a virtual space where users can work, shop, and socialize.

Look at the list of biometric technology applications and say which of them (if any) you find intrusive and why.

Taking payments for school lunches by scanning the faces of students.

Using facial recognition in public places for police surveillance.

Voice recognition for banking, e.g. to check account balances or make payments.

Continual remote monitoring of patients' biometrics by healthcare professionals.

What type of biometric technology applications can you find in different places around the city?

Make a list and **share** your ideas with the class.

Read this situation. Has something similar ever happened to you or your friends?

Last week, Simon went to the gym, excited to try out the new biometric fingerprint scanner they installed for entry. He placed his finger on the scanner, but nothing happened. He tried again and again, but still no luck. Eventually, he had to ask for help from the gym staff, who then realized that the scanner wasn't working properly. It turned out that the system had a glitch, and they had to resort to the traditional keycard system for entry that day. Poor Simon, he ended up missing his workout and had to wait for the issue to be fixed!

Use these prompts to **write** what might have happened to the characters.

1 Locked out of the phone

Emma / locks herself out of her smartphone/ the fingerprint scanner fails / tries to remember her backup PIN to unlock the phone / needs to text her friends

Example: Emma locked herself out of her smartphone when the fingerprint scanner failed. She tried to remember her backup PIN to unlock the phone because she needed to text her friends.

2 School cafeteria mishap

Diego / facial recognition technology to pay for his lunch / system malfunctions / unable to purchase his meal /growing line behind him /feeling embarrassed

3 Access denied at the library

Inés / local library / borrow some books / check out her selections using the self-service kiosk / card reader fails / seeks help from the librarian

4 Lost entry ticket at the amusement park

Pablo / amusement park with friends / fingerprint scanning / sweaty fingers / reject his entry attempt

5 Bus fare fiasco

Camila / bus to school / contactless payment card with biometric authentication / system fails to recognize her fingerprint / miss the bus / no other form of payment

Project

Investigating the use of biometrics in Uruguay

Biometric technology has become an integral part of various systems worldwide, enhancing security and providing convenient identification methods. Uruguay has implemented biometric solutions in several areas, reflecting a growing trend towards digital innovation.

Research and **analyze** the use of biometric technology in Uruguay. **Focus** on its applications, benefits, challenges, and the impact on society.

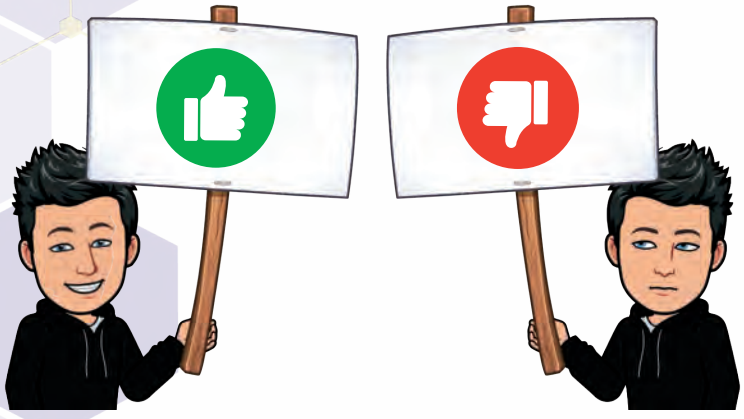
Guiding questions

1- What biometric systems are currently in use in Uruguay, and for what purposes?
2- How has biometric technology been integrated into public services, such as social benefits or national identification systems?
3- What are the benefits of using biometric technology for both the government and its citizens?
4- What challenges or controversies surround the use of biometrics in Uruguay?
5- How does biometric technology affect privacy and data security for individuals?
6- What future developments or potential uses of biometrics can be anticipated in Uruguay?

Resources

SCAN ME

Prepare a report summarizing your findings, including an analysis of the advantages and disadvantages of biometric technology in Uruguay. **Discuss** the ethical implications and suggest recommendations for future use.



7 Augmented reality, virtual reality and mixed reality

How do people use technology in everyday life?
Have you ever experienced Augmented Reality (AR), Virtual Reality (VR), or Mixed Reality (MR)? **Discuss** with your partners.

Augmented Reality

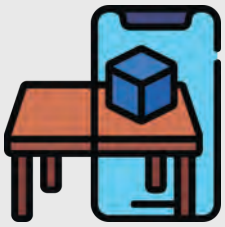
Combination of digital and real life.

Devices: mobile phones / tablets

Virtual Reality

100% virtual

Devices: VR headsets (HMDs)



Mixed Reality

Combination of digital and real life (interaction, too!)

Devices: AR glasses / headsets

Define these terms.

AR

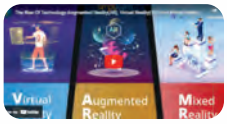
VR

MR

What is the relationship between these three terms and the concept of immersive technologies?

Watch the video about AR, VR and MR.

[The Rise Of Technology-Augmented Reality(AR), Virtual Reality(VR) And Mixed Reality(MR)]



Answer this question: *What is the general idea portrayed in the video?*

Watch the video again and **write** 5 milestones in the development of augmented reality technology.

1. _____
2. _____
3. _____
4. _____
5. _____

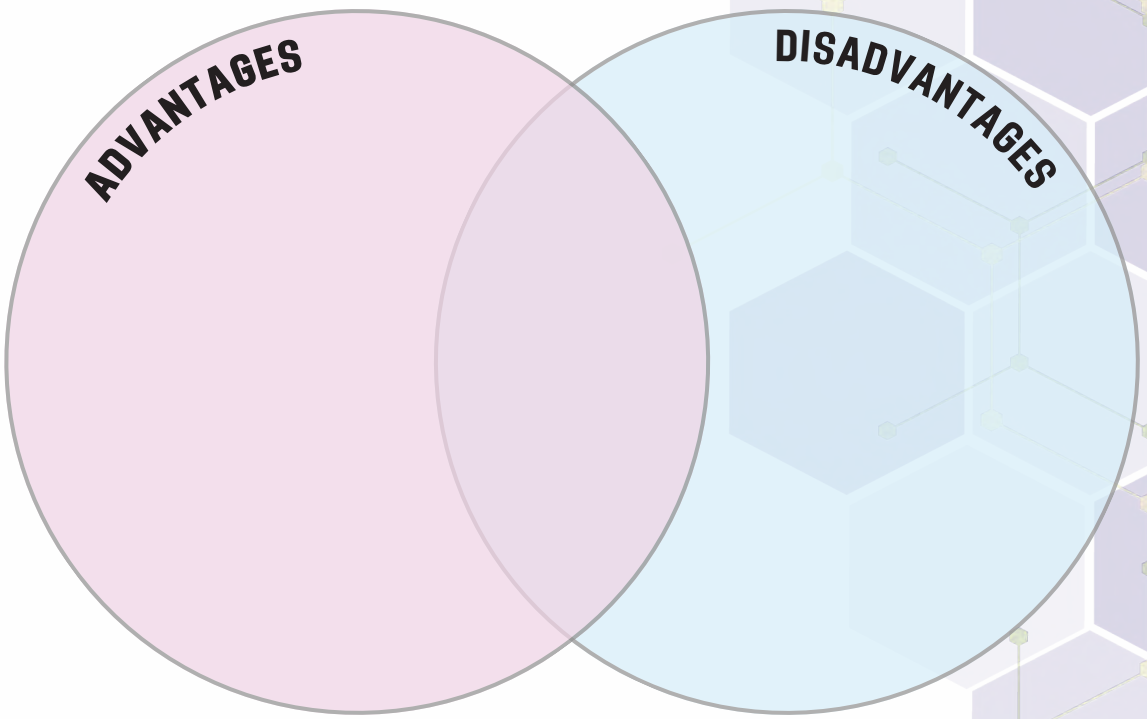
In the video, there are several devices mentioned. **Choose** one and **find out** information that might be relevant to share with your classmates. Why did you choose this device? What caught your attention about it?

Imagine you need to provide a hands-on experience with a simple AR or VR application. **Use** your smartphones for AR or try basic VR headsets for a brief VR experience.

How do you think these technologies could be applied in education, healthcare or entertainment?

- In education, you can apply them by ...
- In healthcare, ...
- In entertainment, ...

Get in pairs and **discuss.**
What are the potential advantages and disadvantages of AR, VR, and MR? Are there some ideas that could be placed as neutral?



How do these technologies impact your future careers or daily lives?

Brainstorm possible applications or improvements for AR, VR, or MR.

8 The Internet of Things

What is the meaning of IoT? It means “Internet of Things".

What appliances or devices do you know that use the internet?

Look at this picture.

What objects can you identify there?

As you could notice, the internet is used in many appliances and devices. It is also used to control things and to make life easier.

Did you know?

Internet of Things

Watch a 3-minute video and **write** down three ideas you want to highlight about it.

Watch the video again and **answer** if the following statements are *true* or *false*.

1. IoT is a network of connected smartphones. _____
2. You can control your home appliances with your smartphone. _____
3. Your smart car can drive itself and find the best route. _____

The video explains how the IoT works. **Watch** the video one more time and **order** these ideas.

a- IoT platform integrates collected data from various sources.

b- The result of data collection is shared with other devices for better user experience.

c- Sensors are embedded in every physical device.

d- Data is emitted from various sensors and sent to the IoT platform.

e- Sensors emit data about the working state of devices.

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Which electrical appliances appear in the video?

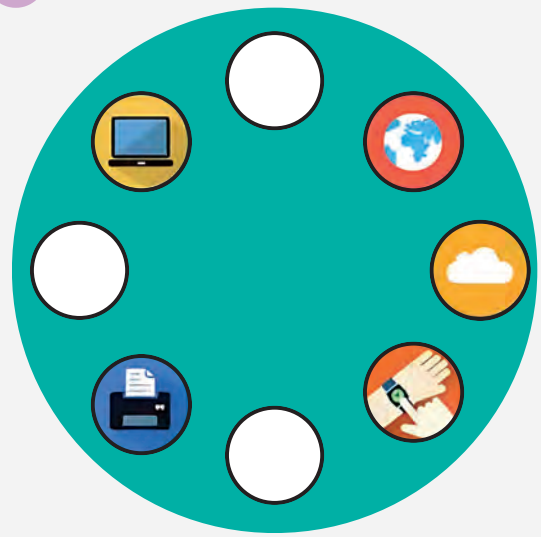
Let's see how many details you remember from the video!

1 The temperature set for the AC

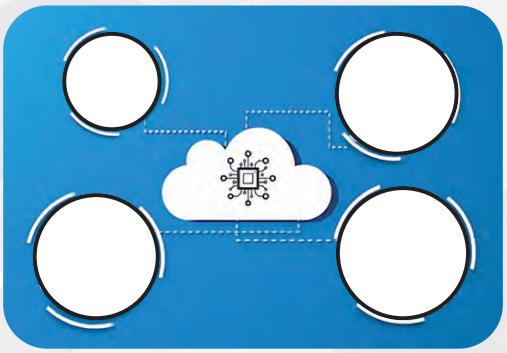
2 The speed limit for the cars

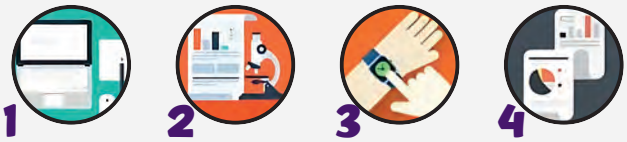
3 Drawings from the watch

4 Devices connected to the network



5 Order of icons





6 What about the figures? Complete the numbers as they appear in the video.

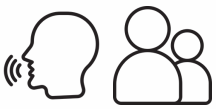
- _____ billion IoT devices will be installed by _____ .
- IoT revenue will reach around _____ billion in _____ .

Get in pairs and **answer**: What is the purpose of this video? **Choose** a, b or c.

a • To promote the latest smart devices available on the market.

b • To warn about the security risks associated with using IoT devices.

c • To encourage viewers to study and master IoT with Edureka.



Project Update your knowledge about the IoT

The video we watched provided an overview of the Internet of Things (IoT), but some of the information is now **outdated**.

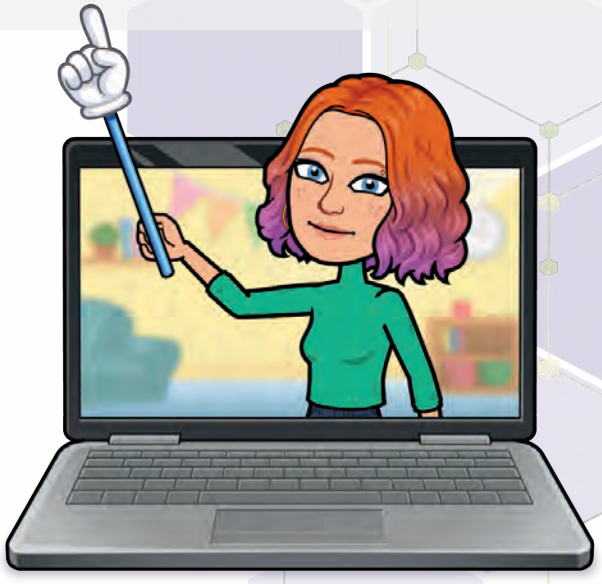
Research the current state of the IoT and **compare** your findings to the information presented in the video.

Instructions

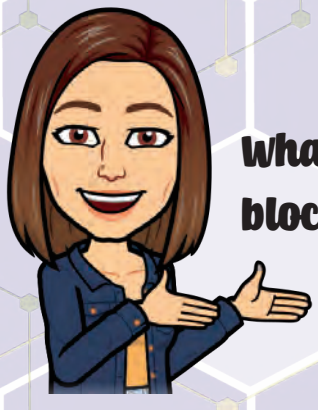
- **Watch the video.** Pay attention to the statistics and projections mentioned.
- **Research.** Use reliable sources like recent articles, reports, and official websites to find up-to-date information about the IoT. Focus on key areas such as:
  - The current number of IoT devices in use globally.
  - Recent developments in smart appliances, smart homes, smart cities, etc.
  - Current job opportunities and the economic impact of the IoT industry.
- **Compare and contrast.** Highlight what has changed, what remains the same, and any new emerging trends or technologies.
- **Presentation.**
  - Prepare a brief presentation (2-3 minutes) to share your findings with the class.
  - Discuss how the IoT has evolved and what it might look like soon.

Questions to guide your research

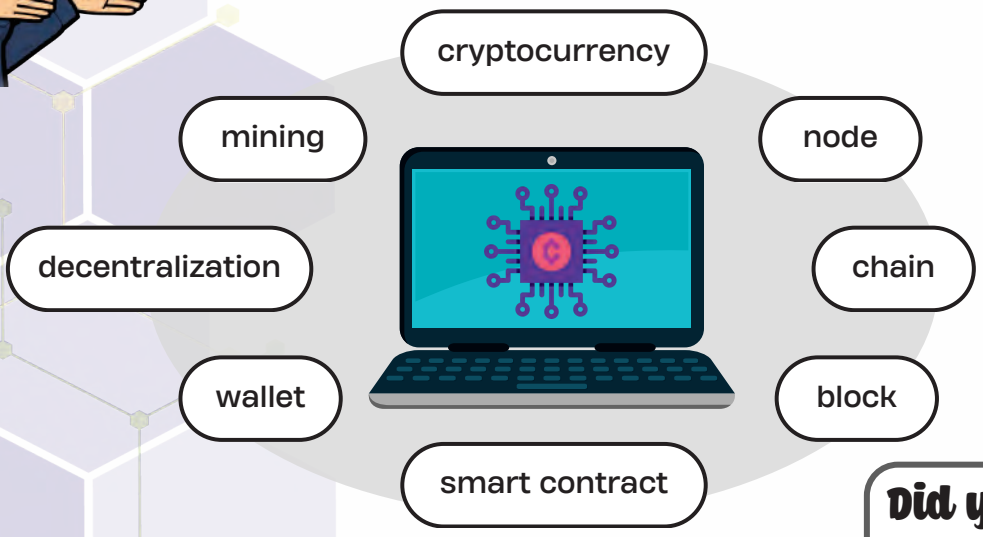
- How many IoT devices are currently in use worldwide?
- What are some recent innovations in IoT technology?
- How has the economic impact of IoT changed since the video was made?
- Where can you study to master IoT?



9 Blockchain technology



What do you know about blockchain and cryptocurrencies?



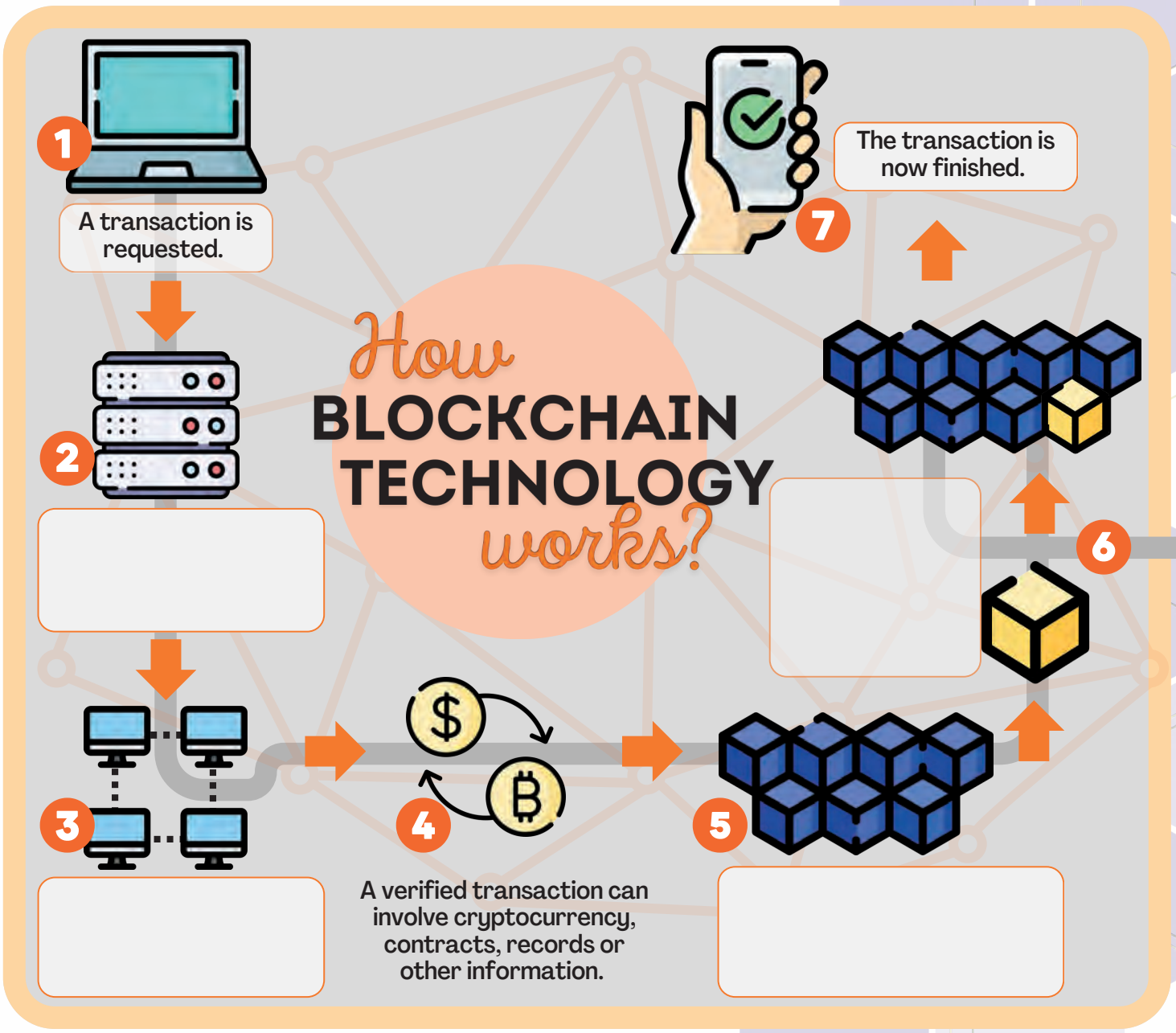
Did you know?

Blockchain is a technology that allows digital information to be distributed but not copied, creating the backbone of a new type of internet.

What do the terms in the diagram refer to? **Complete** the definitions with the correct word. There is a distractor.

1. The distribution of power and control away from a central authority. In blockchain, this means that no single entity has control over the entire network. _____.
2. Self-executing contract with terms written into code, automatically executing when predefined conditions are met, without the need for intermediaries. _____.
3. It is a kind of virtual currency that uses cryptography for security and operates with independence from banks, so it is free from government manipulation and control. _____.
4. The process by which transactions are verified and added to the blockchain. It involves solving complex cryptographic puzzles. _____
5. This refers to the sequence of blocks that are connected to each other, forming the blockchain. _____.
6. Digital ledger entry that records a number of transactions. Each block is cryptographically linked to the previous one, forming a chain. _____.
7. An individual computer connected to the blockchain network that participates in the process of verifying and relaying transactions. _____.

Look at the diagram of how blockchain technology works, there is some text missing. **Complete** the diagram putting the texts in the correct place.



The transaction is combined with other transactions, once verified, to create a new block of data for the ledger.

The new block is added to the existing blockchain (which is permanent and unalterable).

The network of nodes uses algorithms to validate the transaction and user's status.

The transaction is broadcasted to a peer-to-peer (P2P) computer network (known as nodes).

Nayeli's teacher has posed a question to the class. How would you **answer** that question?

> Think about a recent online transaction you made, whether it's purchasing a product, transferring money, or any financial interaction. How do you imagine the process would be different if it were conducted using blockchain technology? Share your thoughts with the class.

Get into groups and **research** one form of blockchain technology and how it relates to cryptocurrency.

Design a presentation that shares key information about the assigned blockchain technology and **share** it with your peers.

Project Blockchain technology

In pairs, think about this idea:
You are an accountant for a company that has recently adopted blockchain technology for its financial transactions.

Consider the following situation:

- The company initiates a blockchain transaction to purchase inventory worth $10,000.
- The transaction is verified and added to the blockchain, incurring a blockchain processing fee of 1% of the transaction value.
- Subsequently, the company sells a portion of the inventory for $8,000, receiving the payment through another blockchain transaction.

Calculate the company's net gain or loss from these transactions, taking into account the initial purchase, the blockchain processing fee and the subsequent sale.

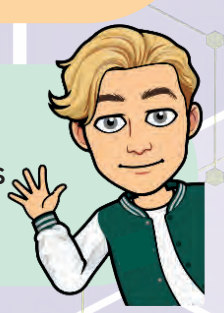
Imagine you are explaining blockchain technology to someone who has never heard of it before. How would you describe it in simple terms? What aspects of blockchain do you think make it a transformative technology? Share your insights with a partner and be prepared to discuss your ideas with the class.

10 Is money feeling less real?

Inés, Simon and Nayeli are engaged in a conversation about their experiences with technology and money. **Read** what they shared.

"You know, guys, I once had this problem with my phone and money. I was at the store, ready to pay for my groceries with my phone, but suddenly the app crashed! I felt so embarrassed because I didn't have any cash with me. Thankfully, the cashier was understanding and let me pay later when I managed to fix the app. Since then, I always make sure to have some cash as backup!"

"Oh, I can totally relate, Inés! Something similar happened to me last month. I was trying to withdraw money from the ATM, but the machine malfunctioned and didn't give me the cash. I was so worried because I needed the money for a friend's birthday gift. Luckily, I contacted the bank and they solved the issue by refunding the amount. It was a bit stressful, though!"



"Wow, that sounds stressful, Simon! I had a different kind of problem with technology and money. Last year, I was shopping online for a new pair of shoes, and I accidentally clicked 'buy' twice! I ended up being charged twice for the same item. I was panicking because I didn't want to spend double the amount. Thankfully, I contacted customer service, and they refunded the extra charge. But now I'm extra careful when I shop online!"

Get in pairs and **discuss.**

- Have you ever experienced a problem with technology and money like Inés, Simon, or Nayeli?
- How do you usually handle such situations?
- What advice would you give to someone who encounters similar problems?
- How do you usually handle your money using technology nowadays?
- Have you ever used a digital payment or bought something online? What made you choose that way of paying?
- How might new technologies change how we use money in the next few years?

Chapter 7: The Evolution of Money in the Tech Age.

In today's world, technology is changing fast, and one of the biggest changes is how we see and use money. From trading goods in ancient times to using coins and paper money, and now moving to digital forms, our idea of money is changing a lot. Let's explore how technology is shaping the future of currency.

- **The rise of digital transactions.**

As we look to the future, the sound of coins and the feel of paper money are slowly being replaced by digital transactions. Digital wallets, contactless payments, and online banking are becoming normal, making it easier to handle money. This is very convenient, but it also changes how we think about money as something we can touch.

- **Cryptocurrency: A paradigm shift.**

Cryptocurrency is a new type of money where computers and algorithms replace traditional banks. Bitcoin, Ethereum, and other digital currencies are challenging the idea that a central authority, like a bank, should control money. The technology behind cryptocurrencies, called blockchain, promises to make transactions more transparent, secure, and decentralized.

- **The cashless society dilemma.**

As we get closer to a world without cash, some important questions come up. People are concerned about privacy, the gap between those with access to digital tools and those without, and the risk of more government surveillance. How can we enjoy the benefits of a cashless society while also protecting people's rights and making sure everyone can access money?

- **The future of money: Speculations and predictions.**

When we think about the future, we can imagine many possibilities. Will we use virtual currencies and brainwave transactions, or will we return to simpler, community-based economies? What will money look like in a world where technology keeps changing what is possible?

The future of money and technology is full of new ideas, challenges, and opportunities. As we move forward, it's important to think about how these changes will affect people, societies, and our economic systems. The journey into the future of money is not just about technology—it's also about how our relationship with the idea of value is changing.

Read the text and **answer.**

1. What digital ways of paying for things does the chapter talk about, and how do they change how we use money?
2. What is cryptocurrency? How might it change normal banks? What makes blockchain technology useful for this?
3. What worries does the chapter have about a world without cash? How could we fix these problems?
4. What new idea about money does the chapter talk about? Can you explain it quickly? How could it change how we deal with money?
5. What's the main point at the end of the chapter? How does the author say it's important to understand how money and technology are changing?

Nayeli and her grandmother are discussing the evolution of money. **Listen** and **read** their conversation.

Nayeli: Hey Grandma, money seems kind of weird these days, right?

Grandma: Weird? How so, honey?

Nayeli: Well, with everyone using cards and phones to pay, it feels like money isn't even real anymore. Back in your day, it was all cash and coins, tangible things.

Grandma: You got that right! We used to carry around these heavy wallets stuffed with bills. Not exactly convenient.

Nayeli: True, but at least you could see the money you had. Now it's just numbers on a screen.

Grandma: That's a good point. But think about it, tapping your phone to pay is way faster than counting out change. It's a trade-off.

Nayeli: Yeah, I guess. It's just strange to think money can be so invisible these days.

Grandma: The world is always changing, Nayeli. The way we handle money is just part of it. Who knows what the future holds for cash? Maybe it'll disappear completely!

Nayeli: Maybe! But hey, at least we get to live in the future, right, Grandma?

Grandma: Absolutely. The future of money is an interesting adventure.

Discuss these questions with your partners.

- How does Nayeli feel about money now compared to her grandmother's time?
- What are some good and bad things about using cards and phones to pay for things?
- Nayeli thinks it's strange that money is "invisible" now. Do you feel the same way?
- Nayeli and her grandma talk about maybe not using cash in the future. What do you think about that?
- What does Nayeli mean when she says, "*at least we get to live in the future*"?
- Nayeli's grandmother suggests that adapting to technological changes is necessary. Do you agree with her perspective? Why or why not?

What do you think about the future of money?

SOS Box

In my opinion, ...
From my point of view... .
It's true because... .
I agree with that because... .
I think so.
You are right.
I get your point.

These are five idioms about money. How true will these idioms be in the future? **Discuss** in small groups.

- Time is money
- Money talks
- Bottom dollar
- Bread and butter
- Live hand to mouth

Project **Creating and illustrating a new money idiom**

Invent a new idiom talking about money which conceptualizes your ideas of the future and the result of your research in the previous activity.

Make a poster with the new idiom and include a picture representing the idiom.

Did you know?

An **idiom** is a special saying or phrase that means something different from the words it uses. It's a common way people talk, but you can't always guess what it means by just looking at the words.

EXIT TICKET

In this unit, I learned that...

Something I need to revise is...

My favorite part of this unit was...

I felt...

Rúbrica de Proyectos

	Primeros pasos (1)	Estás en el camino (2)	Estás llegando a la meta (3)	Has llegado a la meta (4)
Silueta textual	El texto que has presentado se puede ver como un solo cuerpo. Las oraciones se encuentran incompletas. Las ideas están entremezcladas y no se ve una diferenciación en párrafos. No se ven las diferentes partes del texto solicitado.	El texto que has presentado diferencia ideas pero no se diferencia en párrafos o se realizan párrafos pero se entremezclan las ideas. No se encuentran diferenciadas las partes del texto.	El texto posee párrafos bien diferenciados. No existen problemas de mezcla de ideas entre párrafos. Sin embargo, no se encuentran diferenciados las diferentes partes del texto solicitado.	En el texto has incluido oraciones bien diferenciadas. Se puede ver que has construido párrafos. Se encuentran diferenciadas las diferentes partes del texto, ya sea a través de subtítulos o a través de las diferenciación en párrafos separados por un espacio.
Contenido	Si bien es cierto que tienes idea de lo que se te ha solicitado, no tratas los temas que se establecen en la consigna de trabajo. Te expandes en ideas que no están relacionadas con el tema solicitado.	Has tenido en cuenta menos de la mitad de los temas que se te han solicitado en la consigna. O has tratado todos los temas pero has logrado desarrollar, argumentar o ejemplificar menos de la mitad de ellos.	Has tenido en cuenta todos los temas de la consigna y argumentas, describes y ejemplificas más de la mitad de ellos, aunque no todos. Puede suceder que trates más de la mitad de los temas y que todos estén fundamentados, descriptos o ejemplificados. Sin embargo no has hecho dicho trabajo con todos los elementos solicitados en la consigna.	Has tenido en cuenta todos los temas que forman parte de la consigna de trabajo. Cada uno ha sido desarrollado, es decir, no solo se nombra sino que agregas ideas referidas al mismo. Además, el tema posee argumentos o ejemplos que ilustran las ideas. Cada párrafo contiene un tema concreto y no una mezcla de los mismos.
Lenguaje	Las ideas del proyecto no se encuentran conectadas de manera de lograr una comunicación efectiva. Los errores de lengua y pronunciación han impedido la transmisión de tus ideas.	Los errores de lengua hacen que tus ideas no resulten claramente expresadas por momentos. Existen algunos errores de lengua y pronunciación que hacen que la transmisión de tus ideas sea poco clara.	El proyecto ha sido presentado en su formato escrito y oral de forma clara. Tus errores no interfieren con la presentación del proyecto, aunque algunos de ellos le quitan fluidez.	El proyecto ha sido presentado en su formato escrito y oral de forma clara y fluida. Se nota la preparación para la presentación, es decir tu audiencia logra comprender el mensaje que quieres comunicar.

	Primeros pasos (1)	Estás en el camino (2)	Estás llegando a la meta (3)	Has llegado a la meta (4)
Presentación	Al realizar tu presentación te has parado detrás del material. ¿Crees que has mantenido contacto visual con tus compañeros como para involucrarlos en la presentación? Hablas bajo, piensa en tus compañeros del fondo que también deben y quieren escucharte.	Al presentar tu proyecto te diriges a la clase por momentos y en otras ocasiones pierdes contacto visual con tus compañeros. La clase debe poder verte y oírte de forma clara para así comprender todo lo que tratas de comunicar.	Al momento de exponer te paras de tal manera que logras contacto visual y así conectar con tus compañeros la mayor parte del tiempo. Tu voz es clara pero aún necesitas buscar más estrategias para transmitir tu mensaje.	Durante tu presentación te paras al frente de la clase y te desplazas manteniendo contacto visual con tus compañeros, involucrándose en tu presentación. Hablas fuerte y claro demostrando seguridad, ya que no lees ni dudas al expresar tus ideas.
Elementos paralingüísticos	Haber incluido imágenes relacionadas al contenido de tu presentación, tal como habíamos acordado en la negociación de las pautas de trabajo, hubiese hecho que el contenido de tu proyecto fuera más claro y atractivo.	Has usado imágenes que si bien están relacionadas al contenido de lo que has presentado, lo podrías haber usado como ayuda para que tus compañeras/os y profesoras/es logren entender con mayor claridad lo que has planteado.	Has usado imágenes relacionadas al contenido de lo que has presentado. Debes tratar de llegar a un balance entre cantidad de imágenes incluidas, y su relación con la información planteada. Las imágenes no siempre ayudan a entender o a hacer atractivo tu trabajo.	Las imágenes incluidas han permitido que tus compañeras/os, tus profesora/es y cualquier persona que vea tu trabajo, pueda entender lo que estás compartiendo con ellos, además de hacer el trabajo más atractivo.
Compromiso y ética hacia el trabajo	Has presentado tu trabajo incluyendo contenido interesante aunque no está relacionado al problema inicial.	Has incluido ideas de otras fuentes sin haber reflexionado sobre ellas o haber citado al autor.	Has presentado tu trabajo incluyendo contenido pertinente. Has incluido ideas de otras fuentes sin haber reflexionado sobre ellas o haber citado al autor. Has presentado tu trabajo incluyendo contenido pertinente. Has incluido ideas de otras fuentes aunque no en todos los casos las has citado o has reflexionado sobre ellas.	Has presentado tu trabajo incluyendo contenido pertinente. Lo has presentado usando tus propias palabras, intercalando reflexiones personales sobre el contenido que has incluido, e incluyendo citas sobre reflexiones de entendidos en la temática.

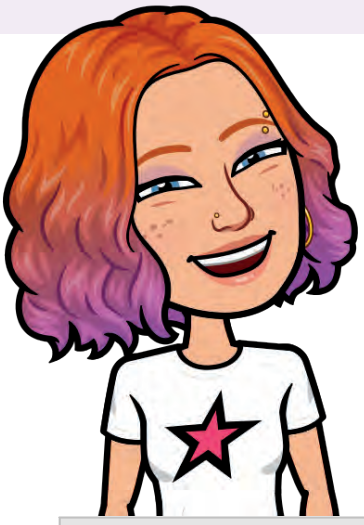
Vocabulary Bank

This space was created to keep track of new words and phrases you have learned throughout this book.

Did you know.?

A vocabulary bank is a collection of new words and phrases that the learner or class builds up as they learn.

Reflection Corner



You got to the end of this amazing journey and now it's time to reflect upon your progress. Let´s complete the SWOT matrix.

Did you know?

A SWOT matrix allows you to think about your own internal strengths and weaknesses. It also helps you think about external opportunities and threats that could affect your performance as a student.

STRENGTHS	WEAKNESSES
S	W
OPPORTUNITIES	**THREATS**
O	T

#WORKING URUGUAY

NIVELACIÓN 1

ANEP | CONSEJO DIRECTIVO CENTRAL | DIRECCIÓN DE POLÍTICAS LINGÜÍSTICAS