WELCOME TO ENGLISH CLASS

El futuro digital es de todos

MinTIC

HOW ARE YOU?

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WELCOME TO ENGLISH CLASS

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“Make your life a masterpiece; imagine no limitations on what you can be, have or do."

- Brian Tracy

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ALGORITHMS

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DATE

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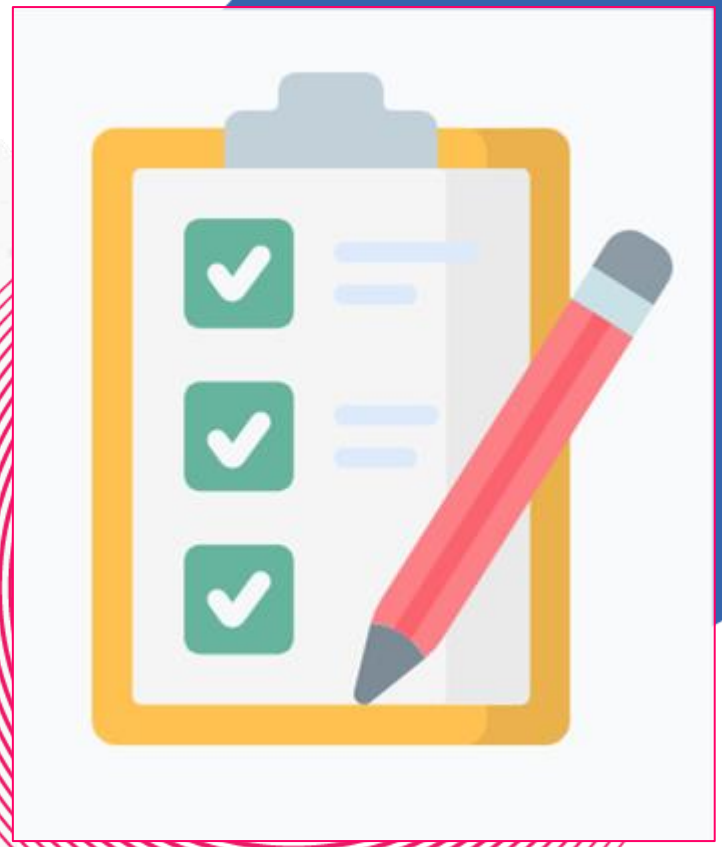
DATE

Objective:

Students will demonstrate their understanding of the topic Algorithms with a graphic organizer.



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AGENDA

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WARM UP:

Acrostic to introduce the main topic

CLASS ACTIVITY:

- Let’s share the Vocabulary
- Match the questions with the correct and logical answer.
- Reading Strategy
- Read the text : Algorithms

Wrap- Up

Answer these True/False questions about the text.

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VOCABULARY

- Programmers
- Broad
- Far-reaching
- File
- Share
- Layout
- Focial networks
- Features
- Proficient
- Unlock

VOCABULARY

WORD	Definition	synonym	Picture
Programmers	People who writes computer programs.	Computer specialist	
Broad	Covering a large number and wide scope of subjects.	Extensive	
Far-reaching	Having an extensive influence	Wide- ranging	
File	A folder or box for holding loose papers together and in order for easy reference.	Binder	
Share	Have a portion of (something) with another or others.	Divide	
Layout	The way in which the parts of something are arranged or laid out.	structure	

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VOCABULARY

Social networks	a dedicated website or other application which enables users to communicate with each other by posting information, comments, messages, images, etc.	social media
Features	a distinctive attribute or aspect of something.	characteristic
Proficient	competent or skilled in doing or using something.	Expert
Unlock	undo the lock of (something), typically with a key.	open

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Match these questions with the correct and logical answers

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Questions:

1. What are some examples of *social networks*?

1. What are some examples of a cell phone *features*?

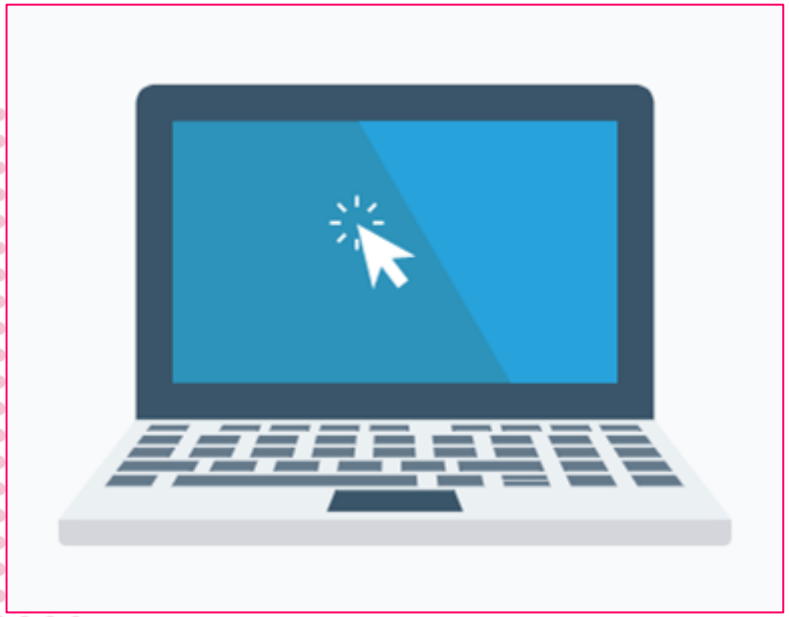
1. What are you *proficient* in?

1. How do you *unlock* your cellphone?

1. What are the *broad* terms for these groups of words?

- *Example: rose, orchid, lily => flowers*
  - *apple, orange, banana =>*
  - *dog, cat, hamster =>*
  - *cell phone, computer, tablet =>*

6. What *file* types do you know?



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Answers (in the correct order)

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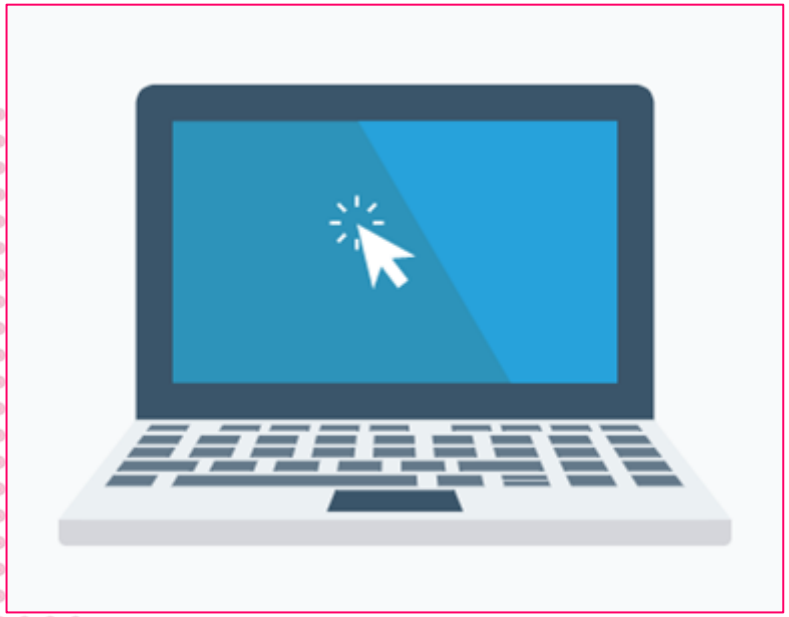
1. Facebook, Instagram, TikTok.
2. Make calls, send messages, listen to music, calculator.
3. I am very good at mathematics and physics.
4. I have a password and I use my fingerprint.
5. Answers:
   - Fruits
   - Animals
   - Devices
6. PPT, Excel, Word.
7. No, because I like to keep my things private.
8. Answers:
   - Both
   - In the office
   - Computers (or other devices)

It is different because the positions of some symbols is not the same.



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Video Reading Strategy: Using graphic organizers

https://youtu.be/uU0v8eFO53g

Text Algorithms

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Algorithms: a common language for nature, human, and computer. ” — Avi Wigderson

What is an algorithm? Algorithm can be defined as a method for solving a problem. Some people think that it is something new, but the study of algorithms dates at least to Euclid – 300 BC! It was formalized by Church and Alan Turing in 1930s and developed more in the 20th century. It is interesting that some important algorithms were discovered by university students and not by expert **programmers**!

The impact of algorithms is **broad** and **far-reaching**. First, the Internet is full of them, for example, the web search, packet routing, and distributed **file sharing**. Second, the world of biology also works with algorithms: think of human genome project and protein folding. In the 20th century, algorithms contributed to the development of computers with the circuit **layout**, file system, compilers and many other things.

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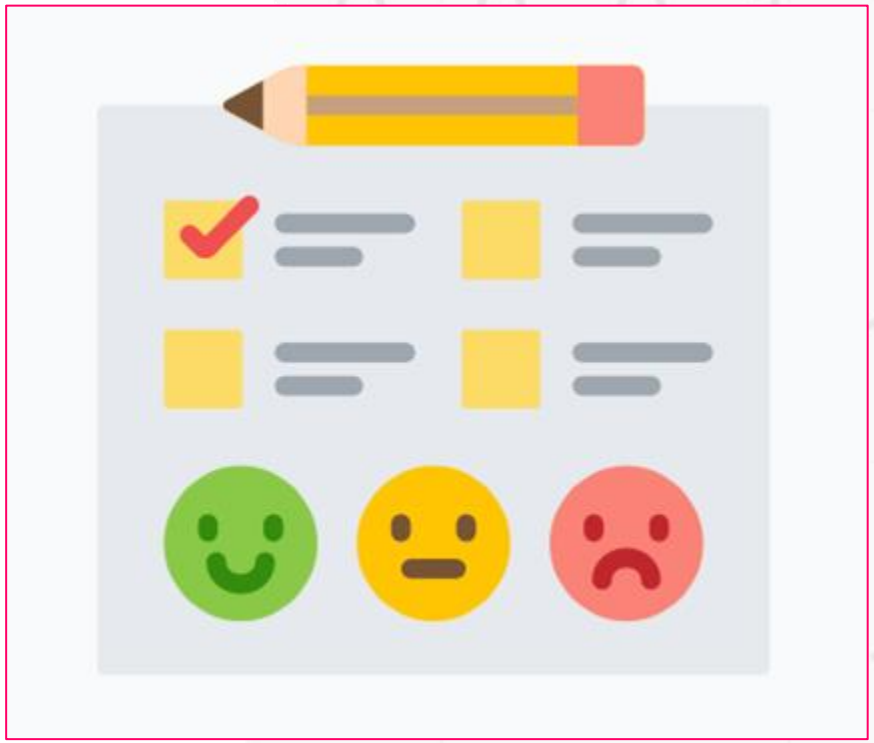
Text Algorithms

Consequently, computer graphics appeared and introduced movies, video games and virtual reality in our lives. In the 21st century, algorithms have been used for different **social networks features** like recommendations, news feeds, advertisements, and so on. Did you know that voting machines also use algorithms to count the votes in elections? So they are even used in politics!

So why should we study algorithms? They can help us solve problems that cannot have other solutions. If you want to stimulate your intellect and become a **proficient** programmer, it is also a good idea to study algorithms. Additionally, they may **unlock** the secrets of life and of the universe. Finally, computational models are replacing math models in scientific inquiry and will become more and more important in the future.

Adapted from: Coursera, Algorithms Part I

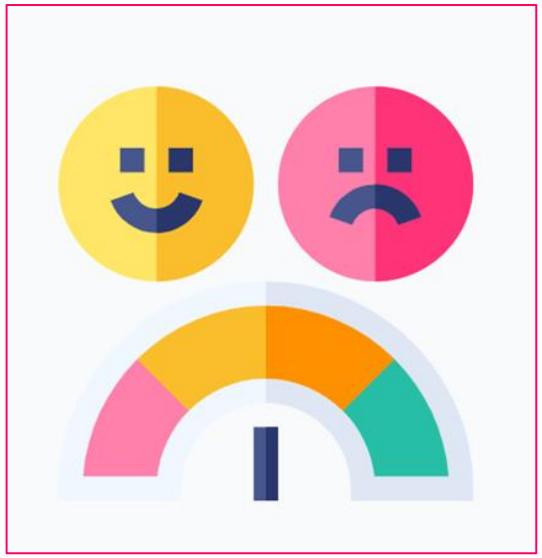
WRAP-UP



Answer these True/False questions about the text.

1. The study of algorithms appeared in the 20th century.
2. Algorithms are only used in programming.
3. University students can discover algorithms.
4. Recommendations on social networks are results of algorithms.
5. Math models are more important today that computational models.

SELF-EVALUATION



Answer the questions.

1. Los organizadores gráficos me ayudan a organizar la información que leo.
   Si 😊 No ☹ De pronto :|
2. Los organizadores gráficos me ayudan a visualizar la información que leo.
   Si 😊 No ☹ De pronto :|
3. Entiendo que son los algoritmos y cómo se usan.
   Si 😊 No ☹ De pronto :|