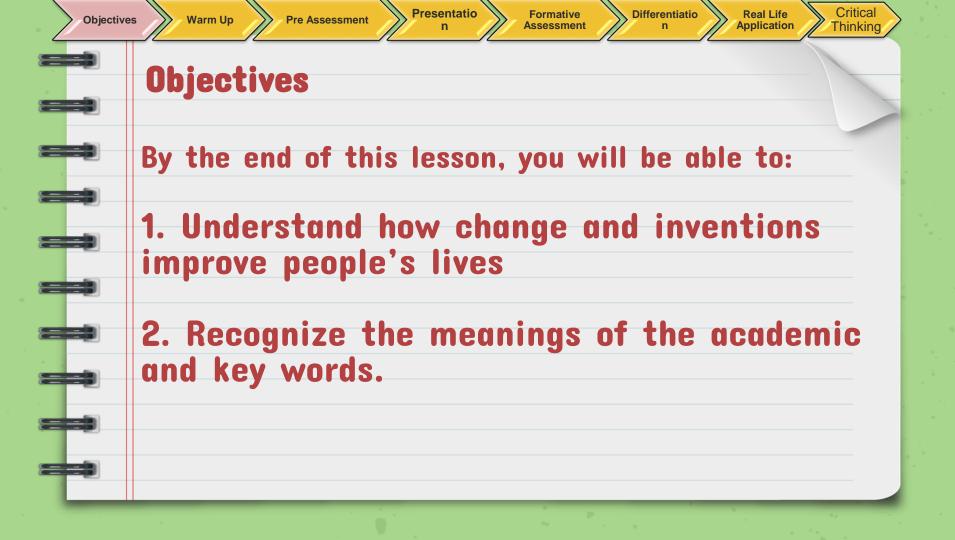
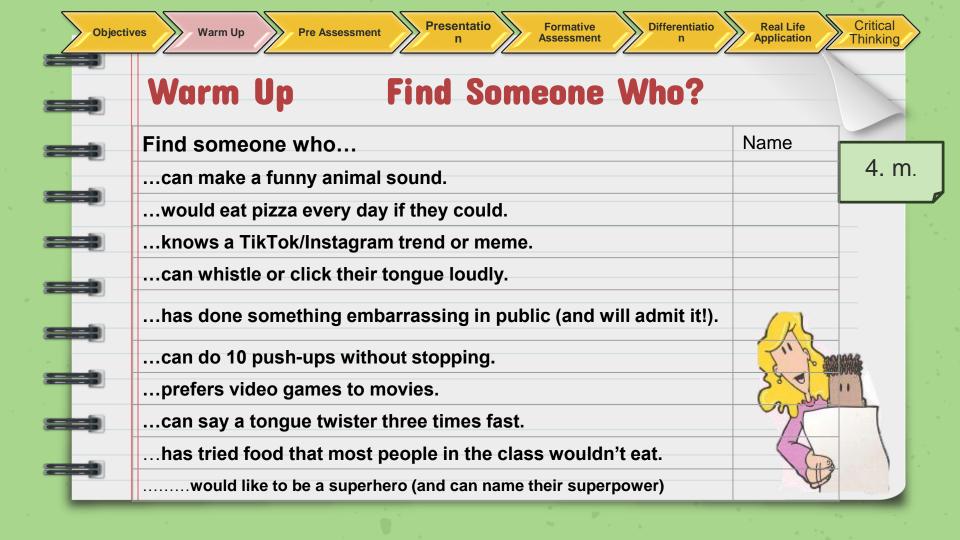
# Unit (1) Early Inventions Lesson (1) The Big Question

Here starts the lesson!

BUILD BUILD







## Read this quotation, then answer the questions

If you fail, never give up because FAIL means "First Attempt In Learning"

**End** is not the end. In fact, E N D means "Effort Never Dies"

If you get **no** as an answer, remember N O only means "Next Opportunity"

POSITIVE!

positive part of

4. m.

1. How can failure be a learning?

Objectives

- 2. How does failure help people improve?
- 3. Why is it important to not give up after failing?

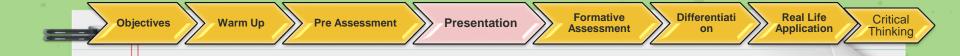
Discuss with your partner.

- 1. Thinking time solo (1 m)
- 2. Students answers orally -Group work (3 m)
- 3. Discuss your answers then praise each other (1 m)
- 4. Show your finish sign (1 m)





- 1. Failure can be positive because it helps us learn from mistakes, improve, and build resilience
- 2. by showing them what doesn't work, encouraging them to try new strategies and grow stronger.
- 3. It's important not to give up after failing because persistence leads to learning, growth, and eventual success.



### THE BIG QUESTION

How can change Improve people's lives? What kinds of tools or devices do you use on a daily basis? A toothbrush? Television? Computer? Pen? Copy the chart below into your notebook. List objects that you use every day. Include a brief description of how you use each item. Then share your chart with a small group. Discuss how people's everyday lives have been changed by these items.

Tool or Machine	How I Use It

4. m.

Objectives Warm Up Pre Assessment Presentation Formative Assessment Differentiati on Real Life Application Critical Thinking



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### Write the answer on your Classwork N.B

#### A suggested answer for the big question:

Change can be difficult, but it's often necessary for improvement and growth in all aspects of life. For example, technological and scientific changes lead to innovations that improve health, communication, transportation, and convenience. For example, medical advancements save lives, and new technologies make everyday tasks easier and faster. Briefly, Change can improve people's lives in many meaningful ways, both on a personal and societal level.

Using Al Search engines, search 5. m. When and where was the first robotic limb created? Buzz In

- 1. Thinking time solo (1 m)
  - 2. Students answers orally -Group work (3 m)
- 3. Discuss your answers then praise each other (1 m)
- 4. Show your finish sign (1 m)



5. m.

## Think of a useless invention How can you improve it?

Don't Forget to check the rubric!

What we look for	➤ Great (3)	⊕ OK (2)	Needs Work (1)
• Ideas	Very creative invention & smart improvement	Some creativity	Not creative
□ Teamwork	Everyone joined in	Most joined	Few joined
□ Structure	Clear sentences & good words	Some mistakes	Hard to understand
Presentation	Confident & clear	A bit shy	Very unclear

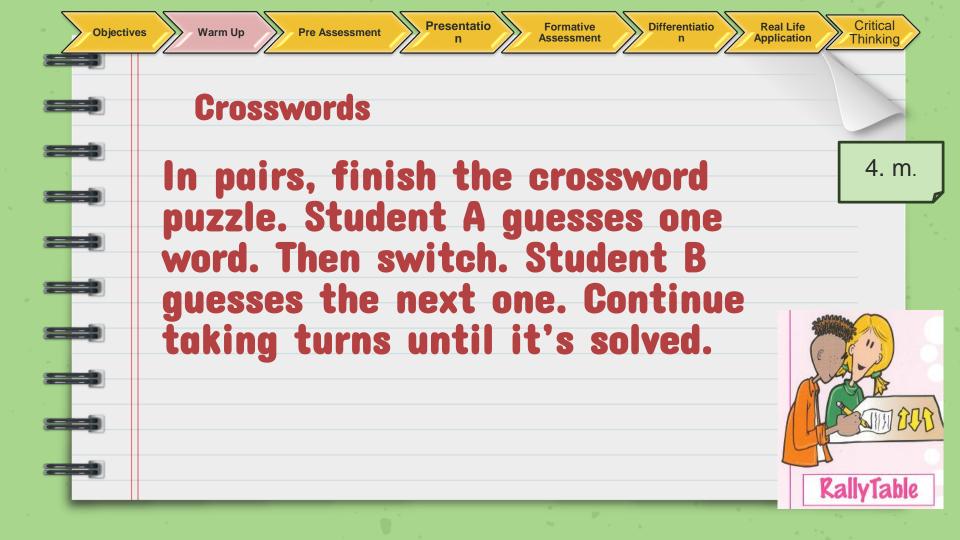


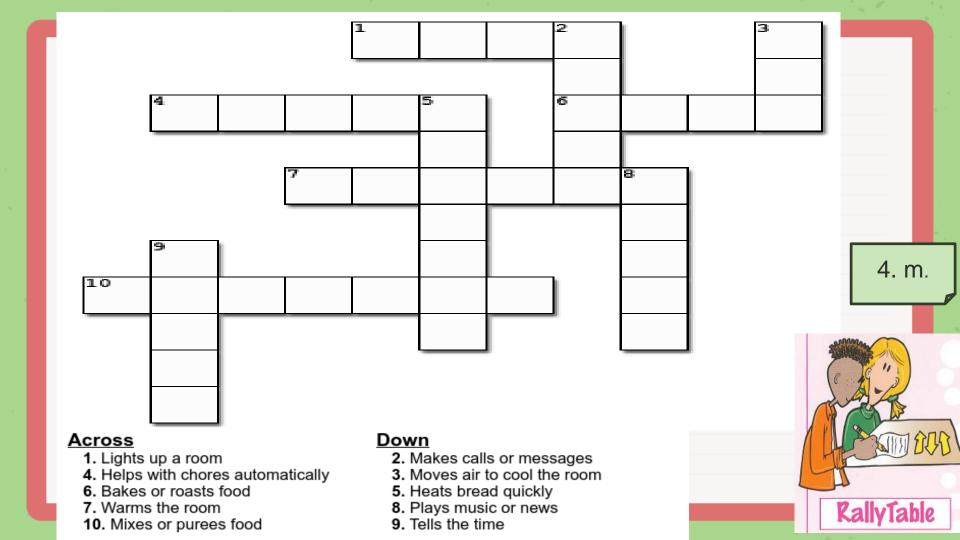
What have you learnt today?

Unit (1)
Early Inventions
Lesson (2)

RESERVED BY

Academic & Key Words





#### **Answers**

- 1. Lamp
- 2. Phone
  - 3. Fan
- 4. Robot
- 5. Heater
  - 6. oven
- 7. toaster
  - 8. radio
  - 9. clock
- 10. Blender



## Read the following paragraph, and guess the meanings:

A thief came up with an <u>idea</u> to steal a <u>device</u> from a local inventor. The <u>emergency</u> started when the inventor realized that the stolen device was <u>identical</u> to his own <u>invention</u>. The thief's plan showed some clever technology, but it was dishonest. The inventor had <u>patented</u> his <u>invention</u>, which had an important function and a significant impact on the community.

With the help of neighbors and friends, the inventor tracked down the thief. Realizing the consequences of his actions, the thief decided to return the <u>device</u> and apologize. In the end, the inventor forgave him, and together they created a new <u>invention</u> using the same technology, turning a troubling situation into a positive collaboration.



Idea

Invention

**Patent** 





Emergency

device

Identical

Objectives Warm Up Pre Assessment Presentation Formative Assessment Differentiati on Real Life Application Thinking

- 1. Thinking time solo (1 m)
- 2. Students answers orally -Group work (3 m)
- 3. Discuss your answers then praise each other (1 m)
- 4. Show your finish sign (1 m)



4. m.

## Match the words with their definitions

Device patent emergency identical Idea invention



- Serious unexpected situation
- •A new device created by somebody.
- •A document that proves you invented something
- •The same
- thought
- Tool or a gadget



Objectives Warm Up Pre Assessment Presentation Formative Assessment On Presentation Presentation

#### feedback

Device: Tool or a gadget
Patent: A document that proves you invented something Idea: Thought

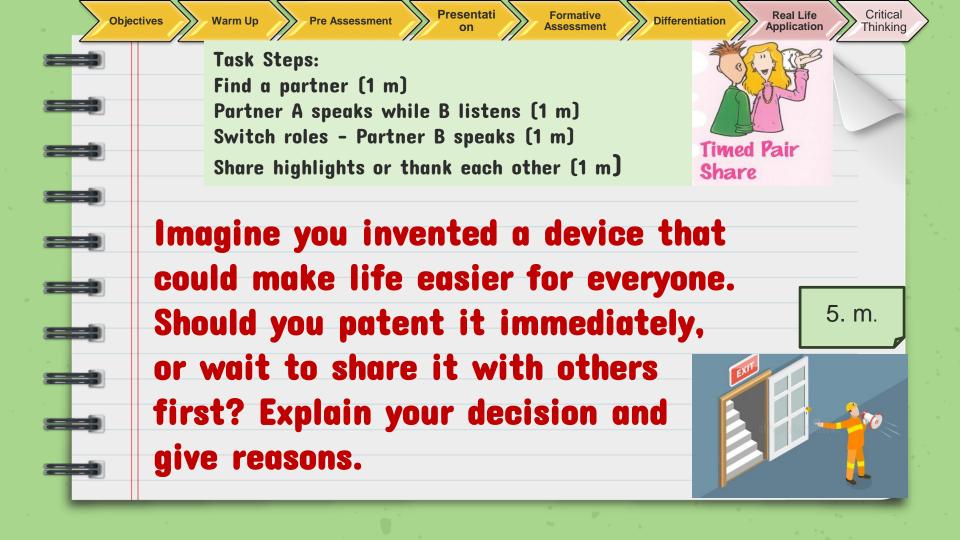
Emergency: Serious unexpected situation Invention: A new device created by somebody. Identical: the same





Using Al Search engines, search 3. m. What is the official department that is responsible for registering patents in Jordan? And how long does it takes? Buzz In

What we look for	➤ Great (3)	⊕ OK (2)	Needs Work (1)
• Ideas	Very creative invention & smart improvement	Some creativity	Not creative
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□ Structure	Clear sentences & good words	Some mistakes	Hard to understand
Presentation	Confident & clear	A bit shy	Very unclear





#### IRS

- What is the main purpose of a patent?
  - a) To make an invention public without protection
  - b) To protect an invention and its creator
  - c) To copy someone else's invention
  - d) To sell any invention for free

- 3. What does it mean if two inventions are identical?
- a) They are completely different
- b) They are exactly the same
- c) One is faster than the other
- d) One is better than the other
- Which of these is considered a device?
  - a) A table
  - b) A robotic hand
  - c) A chair
  - d) A book

- 1. She had a brilliant idea for a new school project.
- **2.** The telephone was an important **invention** in history.
- **3.** He registered a **patent** to protect his new design.
- 4. Call 911 in case of an emergency.
- **5.** The phone is a useful **device** for communication.
- 6. The twins wore identical clothes to the party.

## Unit (1) Early Inventions Lesson (3)

**Key Words** 

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CHEST SECTION

## Fill in the space with an appropriate word (device / identical/ patent / idea/ emergency/ inventions)

- 1. You should apply for a \_\_\_\_\_ when you invent something to protect your rights.
- 2. Nikola Tesla created many \_\_\_\_\_.
- 3. I have no \_\_\_\_ how to answer this question, I need help.
- 4. The \_\_\_\_\_ I bought was very useful. It helped me clean the house
- 5. Whenever there is an \_\_\_\_ situation, contact the principal.
- 6. I love this jacket, my brother has an \_\_\_\_ one. We look like twins when we wear it.

4. m.

## Match Words with their definitions

Technology [ ]

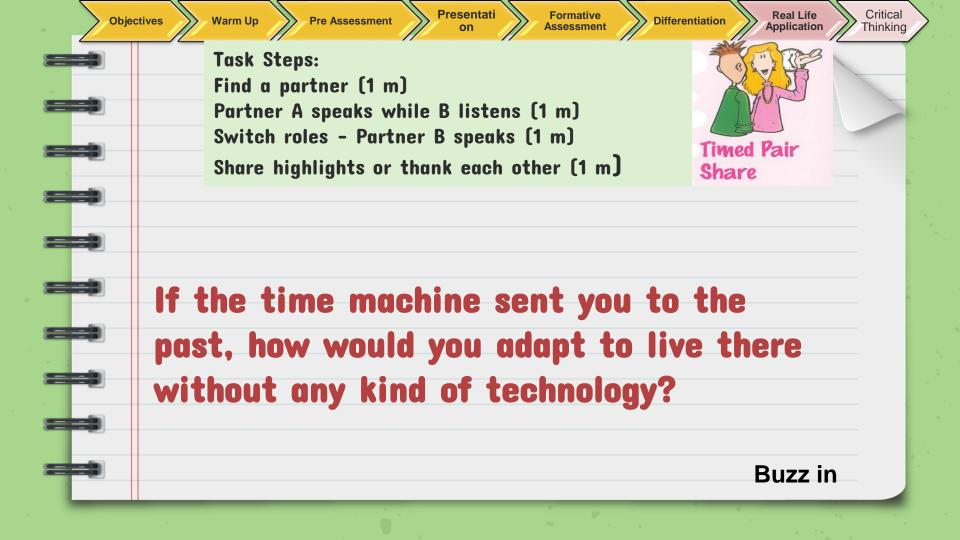
Created [ ]

Function ( )

Significant ( )



- \* Purpose or goal
- \* Highly important
- \* Made
- \* All the knowledge and equipment used in science



How has modern **technology** that was **created** in recent years changed the **function** of everyday devices, and why do you think this change is **significant** for our lives? Modern **technology** has **created** smart devices like smartphones and tablets. Their main **function** is not only to make calls but also to help us study, work, and connect with others. This change is **significant** because it saves time, makes communication faster, and improves learning.



#### IRS

- 1. Which sentence best shows the meaning of the word significant?
- a) The cat took a nap in the sun.
- b) The discovery of electricity was important and changed the world.
- c) I had a small snack after school.
- d) The shoes were too tight for me.
- 2. What does the *function* of a washing machine mean?
- a) Its color and design
- b) The way it works and what it does
- c) The price in the store
- d) The size of the machine

- 3. Which of these is the best example of *technology*?
- a) A tree growing in the forest
- b) A phone used to connect with friends
- c) A dog barking at night
- d) A ball used in a game

Unit (1)
Early Inventions
Lesson (4)

Reading

By the end of this lesson, you will be able to:

1-Recognize the information mentioned in the text.2- Answer the comprehension questions related to the text.



Tongue Twister

**Betty bought** butter but the butter was bitter, so Betty bought better butter to make the bitter butter better.

Randon Pick



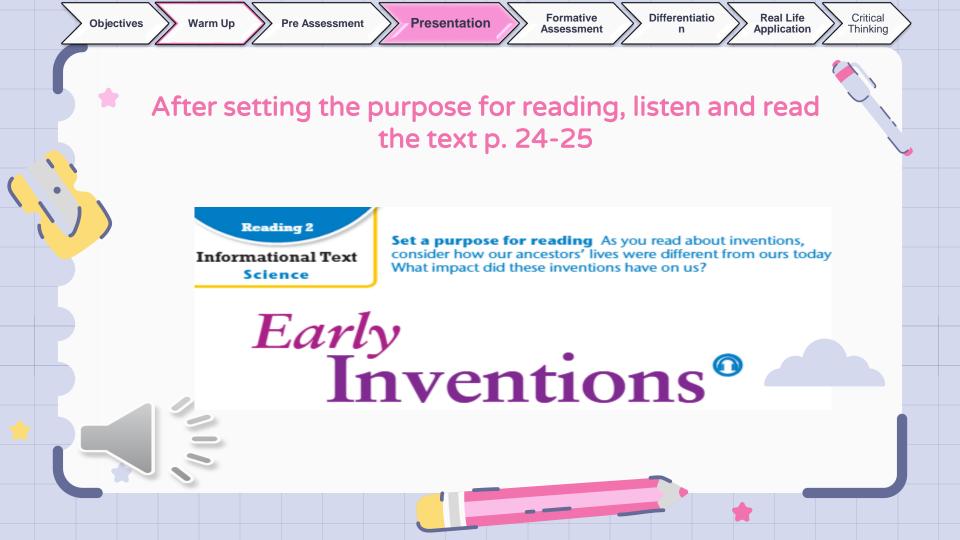


#### Wheel Of Names

#### Wheel of Nahttps://wheelofnames.com/mes

- Use created in a negative sentence
  Use Function in a sentence
- Use technology in a question
- What are the synonyms of significant
- Use Significant and function in a sentence
- Use created in a sentence
- Use technology in a question
- What are the synonyms of created

- Use created and device in a sentence
- Use emergency and device in a sentence
- Use identical in a question
- What are the synonyms of device
- Use patent in a negative sentence
- Use idea in a question
- What are the synonyms of idea



One good idea can change people's lives in surprising ways. Inventors spend hundreds of hours thinking of large and small inventions. Here are just a few of the thousands of inventions that have changed the way we work, eat, and play.

### Who? John Joseph Merlin What? Roller Skates When? 1760s

Belgian inventor John Joseph Merlin's big idea was to find a way to try **ice skating** on dry land. He attached some metal wheels to a wooden plate and took a very dramatic ride at a fancy party in London, England. Unfortunately, he could not control his new invention very well. He crashed into an expensive mirror and hurt himself badly. It took many years for people to develop safer roller skates.

ice skating, wearing shoes with sharp blades attached to move smoothly on ice

### Who? Seishu Hanaoka What? General Anesthesia When? 1804

Japanese doctor Seishu Hanaoka developed a way to use traditional ingredients to place his patients in a sleeplike state. Under this **general anesthesia**, the doctor could perform surgery without the patients feeling pain. He performed the first cancer operation, using general anesthesia in 1804. He went on to perform many successful operations and train more than 2,000 students.

general anesthesia, placing patients in a sleeplike state during surgery, instead of numbing just a small area of the body



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# p. 25

### Who? Philippe de Gi<mark>rard, Bryan</mark> Donkin What? Tin Can When? 1810

French inventor Philippe de Girard came up with a new way to store food: in metal containers. British **manufacturer** Bryan Donkin bought the rights to the idea. The first canned foods were made for Great Britain's Royal Navy in 1813. Today, more than 40 billion cans of food are produced every year.

### Who? Margaret E. Knight What? Flat-Bottomed Paper Bag When? 1871

Margaret Knight was working in a factory, making paper bags, when she got her big idea. Wouldn't it be a lot easier to put things into bags if the bags had flat bottoms? Paper bags at the time were more like flat envelopes. Knight got to work and invented a machine that folded and glued paper bags. Many grocery stores today still use paper bags that are almost identical to Knight's first designs.

## Who? Maria Beasley What? Life Raft When? 1880

Before Maria Beasley's invention, boats didn't carry special life rafts in case of emergency. They just had some wooden boards that were not very safe. Beasley invented a much better life raft that saved many lives. Her raft was **fireproof** and could fold. It also had railings that kept riders from falling off. Some of Beasley's life rafts were on board the *Titanic* in April 1912. When the boat sank, 706 people survived because of Beasley's life-saving invention.

manufacturer, someone who makes goods to sell fireproof, able to withstand fire or great heat

# Read the comprehension questions from the handout p. (5-6)Questions 1-10

- 1. Thinking time solo (1 m)
- 2. Students answer orally -Group work (3 m)
- 3. Discuss your answers then praise each other (1 m)
- 4. Show your finish sign (1 m)



How important is it for inventors to consider the safety and well-being of users? Can you think of inventions that changed safety standards in your community or daily life? Use online searching engines.

Task Steps:

Find a partner (1 m)

Partner A speaks while B listens (1 m)

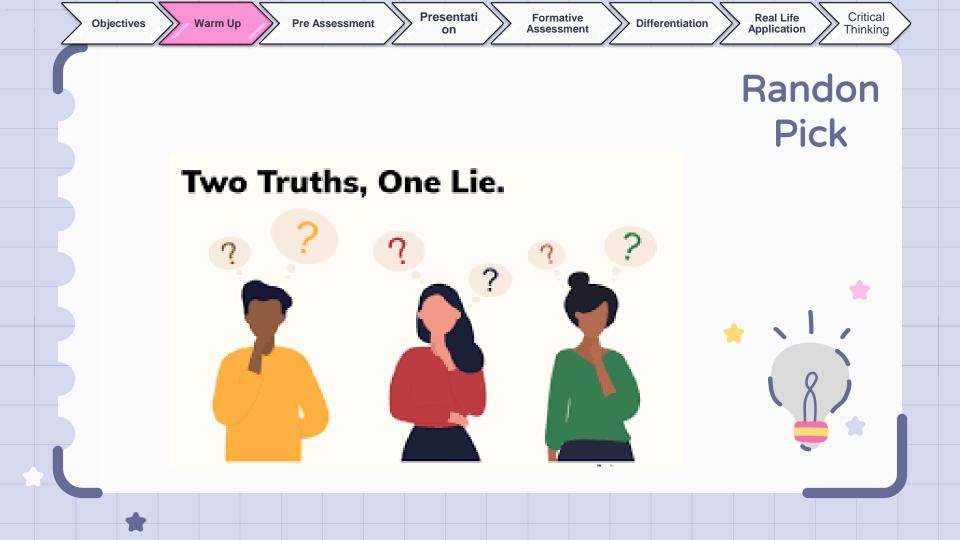
Switch roles - Partner B speaks (1 m)

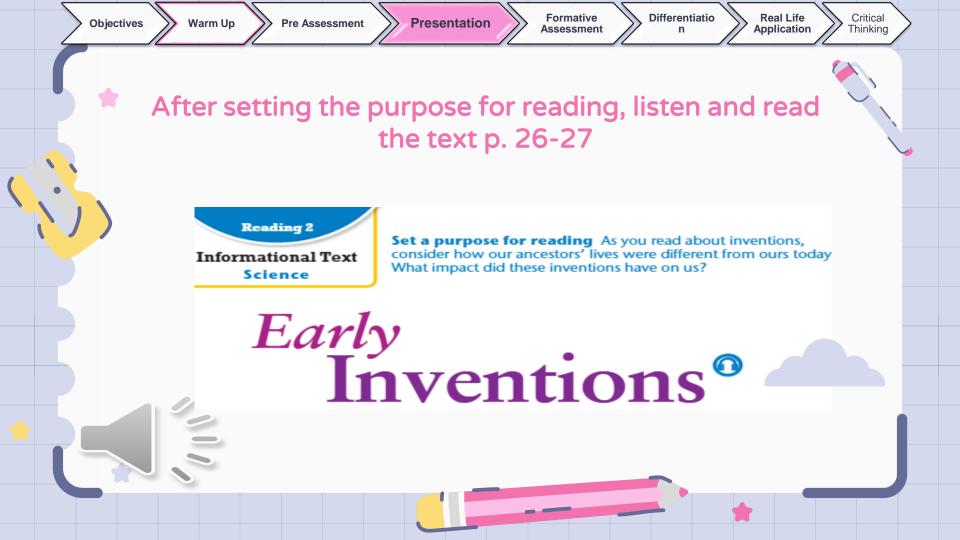
Share highlights or thank each other (1 m)



Unit (1)
Early Inventions
Lesson (5)

Reading





# Who? Mary Anderson What? Windshield Wipers When? 1903

Early cars didn't have **windshield** wipers. Drivers had to get out to wipe off snow and just drive through rain. Mary Anderson was riding a streetcar in New York City in 1902. It started to snow and she saw the driver get out to clear the windshield. She got the idea for automatic wipers. A year later, she received a patent for her invention—even though she didn't know how to drive herself!

#### Who? Victor Ochoa What? Electric Brake When? 1907

Mexican inventor Victor Ochoa patented the electric brake in 1907. This device uses magnetic attraction to make it easier for trains to slow down and stop. Later the same year, he received another patent for an improved version of the brake, which would soon be used in streetcars traveling through many cities. Ochoa also invented a clip to hold pens and pencils in a pocket and a small airplane with wings that could fold down for easy storage.

#### Who? Gideon Sundback What? Modern Zipper When? 1913

Like many inventors, Gideon Sundback came up with his most famous invention by improving earlier inventions. Earlier inventors, like Elias Howe and Whitcomb Judson, had created zipper-like closures. But they had some big problems. These early devices opened too easily. Sundback added more teeth to create something that looked a lot like the zippers we use today. His first closures were only used in boots and some pouches. But soon, they were used for everything from clothing to luggage. However, Sundback didn't invent the name zipper. That word was used ten years later in 1923 by B.F. Goodrich.



#### Who? Guillermo Gonzalez Camarena What? Color Television When? 1942

When he was just 17 years old, Guillermo Gonzalez Camarena changed the world by building the first color television, using parts he had found in flea markets. In 1942, he received a patent for his invention. Four years later, he made the first color broadcast from an office building in Mexico City. Soon, this new technology would bring bright colors to screens around the world.

### Who? Laszlo Biro What? Ballpoint Pen When? 1944

At the beginning of the nineteenth century, people used fountain pens, which had to be filled with wet, messy ink. Laszlo Biro came up with a new design that was much easier to use. He replaced the point of a fountain pen with a tiny ball. His new pen used quick-drying ink and could write for months without being refilled.

### Who? Momofuku Ando What? Instant Noodles When? 1958

Momofuku Ando realized that food shortages were a serious problem after World War II. He also saw that people in Japan were willing to wait in long lines for fresh noodles. These observations inspired him to invent instant noodles. The tasty noodles and broth are made by just adding hot water to a dry mix.

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# AllWrite RoundRobin

In teams, students take turns responding orally. All students write each response on their own paper.



Randon Pick

In what ways do inventions reflect the needs and challenges of the time they were created? How might future inventions address problems we face today?





Using Al Search engines, search Choose one inventor from the reading 3. m. (e.g., John Joseph Merlin, Maria Beasley, Mary Anderson, Victor Ochoa, or Guillermo Gonzalez Camarena). Find out more details about their life and other inventions they may have created. Post your answers to padlet using the QR -code. **Padlet**