BIG QUESTION 7

How do inventions change our lives?

What inventions do you use every day?

How do these inventions help you?

Which of these inventions do you use the most? Why?

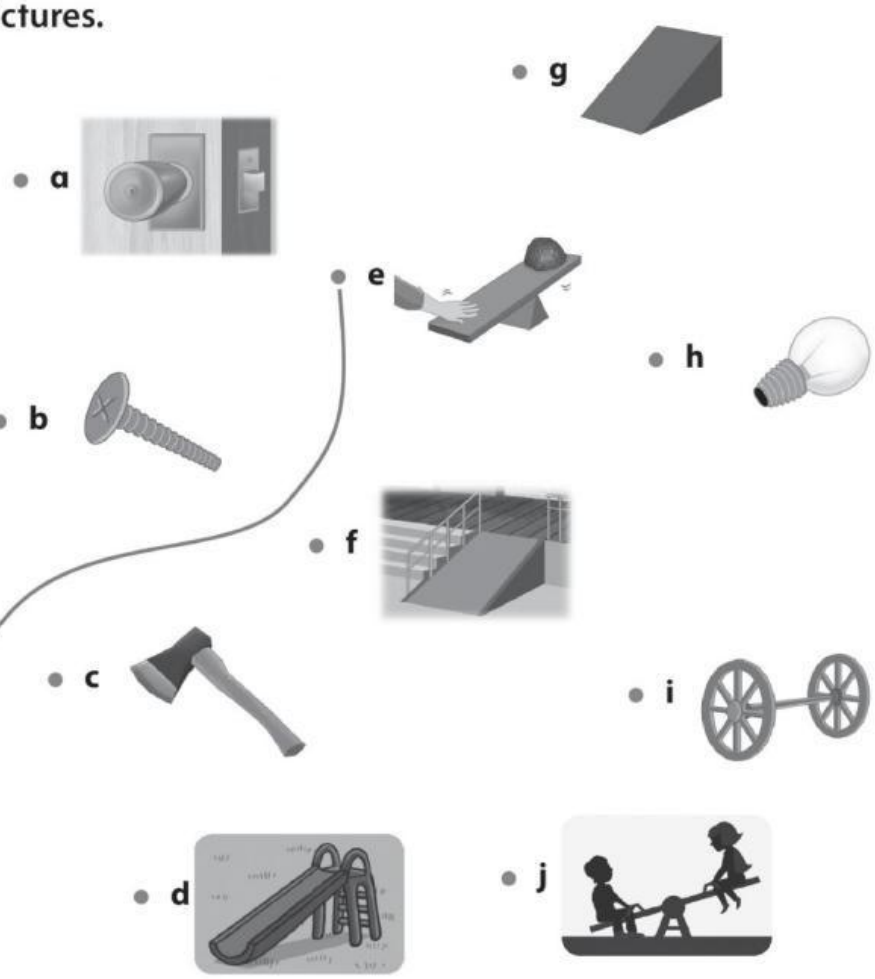
UNIT 13

Get Ready

Words

A Match the words to the pictures.

1 screw
2 slide
3 ramp
4 light bulb
5 seesaw
6 doorknob
7 axe
8 lever
9 wedge
10 wheel and axle



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LIVEWORKSHEETS

B Circle the correct answers.

1 A _____ is a type of screw.

a doorknob
b light bulb
c lever

2 A(n) _____ in a playground is an example of a lever.

a seesaw
b wedge
c axe

3 She used a _____ to push the cart into the building.

a slide
b screw
c ramp

4 He uses a(n) _____ to chop wood.

a axe
b seesaw
c doorknob

C Complete the chart. Write the words in the correct columns.

~~axe~~ doorknob ~~lever~~ light bulb ramp
screw seesaw slide wedge wheel and axle

Simple Machines	Tools and Household Items
lever	axe

LIVEWORKSHEETS

Read

A **Read the article. What simple machines make our lives easier?**

_____

B **Read the article again. Which inventions are levers? Which inventions are wheels and axles? Remember, when you read, put the items you read about into groups to help you remember them later.**

Inventions Then and Now

For centuries, people have been inventing ways to make our lives easier. Let's take a look at some simple inventions that have improved our lives.

Ramps

Around the year 2500 BC, the Egyptians built huge pyramids. The Great Pyramid of Giza was the tallest structure in the world for around 3,800 years. How was it built? People cut the big stones on the ground. Then they pushed them up **ramps**. It took about twenty years to build the Great Pyramid. Today, we use cranes to lift building materials. Today, we can build skyscrapers in less than one year.

Levers

Archimedes, an ancient Greek mathematician, was the first person to describe a **lever**, in around 260 BC. Levers help us lift heavy objects. People think that builders in ancient Egypt used levers to move and stand up stone pillars. Today, many of the tools we use are levers. Hammers and scissors are levers. **Seesaws** are levers, too.

Think Which inventions are levers?

Screws

The **screw** was first used in Greece in the first century. In ancient times, the screw was used to move heavy objects by rotating them around in a circle. Today, we use the screw to hold things in place. Think about the **light bulb**. It's a kind of screw.

Think Which inventions are screws?

Wheels and axles

The wheel was first used for transportation in around 3200 BC in Mesopotamia (modern-day Iraq). This wheel was a solid disk on an axle. It was probably used to move chariots. Today, our modern transportation, like cars, bicycles, trains, and airplanes, all use wheels to move. Even the **doorknob** is a **wheel and axle**. And when was the last time you went to an amusement park? The Ferris wheel is a wheel, too.

Think Which inventions are wheels and axles?

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LIVEWORKSHEETS

Understand

Comprehension

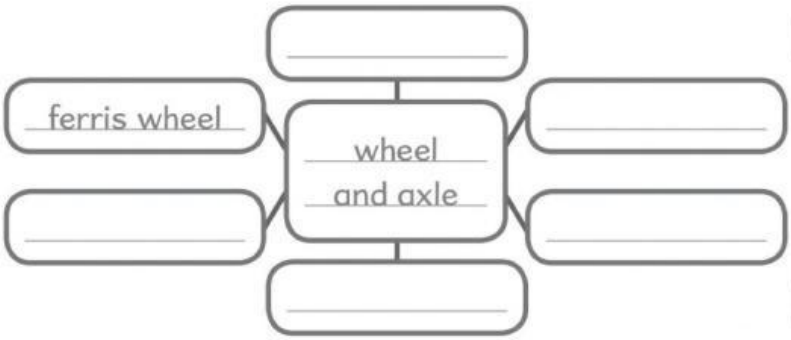
A **How do simple machines help to improve our lives? Give one or two examples.**

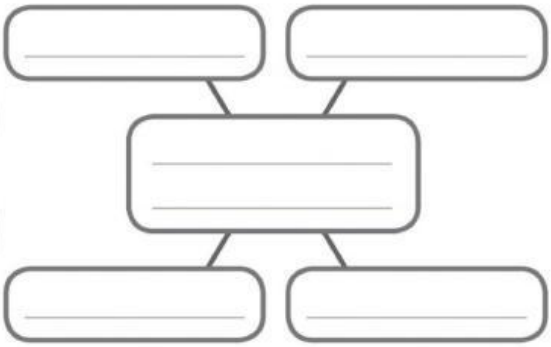
_____

_____

B **Classify and categorize. Complete the webs.**

Use the information in the reading to complete the first web. Then choose another simple machine. Use examples of it to complete the second web.





C **Words in Context** **Read, write, and match.**

jar lid	hammer	wheelchair

1 A _____ uses wheels and axles to help it move. • • **a**

2 A _____ is an example of a screw. • • **b**

3 A _____ is a lever that pulls out nails. • • **c**

D **About You** **What levers and screws do you use at home?**

_____

_____

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LIVEWORKSHEETS

Grammar in Use

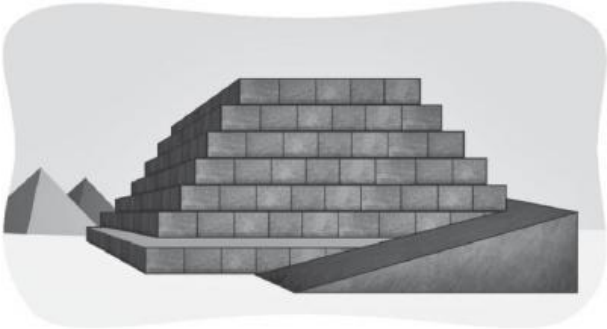
A Study the grammar.

Learn Grammar *Too* or *So* and *Either* or *Neither*

Affirmative Statements	Negative Statements
Hammers and scissors are levers. Seesaws are levers, **too**. / **So** are seesaws.	The wedge isn't a new invention. The ramp isn't a new invention, **either**. / **Neither** is the ramp.
I speak English. I do, **too**. / **So** do I.	He didn't call me. She didn't, **either**. / **Neither** did she.

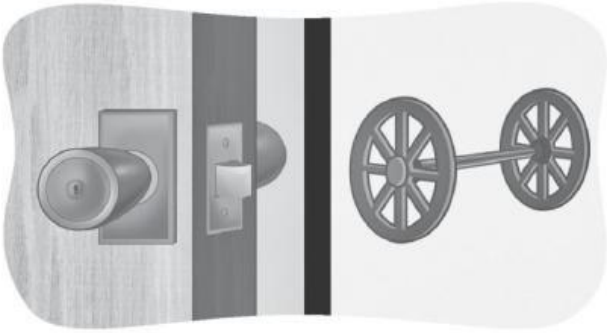
B Look and write. Complete the sentences with the phrases in the box.

is, too	isn't, either	~~were, too~~	aren't, either



1 Ramps were used by the Egyptians.
Levers were, too.

2 Scissors are a lever.
A seesaw _____.



3 Hammers are not screws.
Doorknobs _____.

4 A light bulb is not a wedge.
A wheelchair _____.

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LIVEWORKSHEETS

C **Circle *True* or *False*.**

1 A hammer is a lever. A bottle opener is, too. **True** **False**

2 A screw is not a new invention. A wedge isn't, either. **True** **False**

3 A light bulb uses wheels and axles. So does a train. **True** **False**

4 Levers don't help us lift heavy objects. Neither do ramps. **True** **False**

D **Read the sentences. Rewrite the second sentence two ways, using *too* and *so* or *either* and *neither*.**

1 A hammer is a lever. A seesaw is a lever.

A seesaw is a lever, too. / So is a seesaw.

2 A doorknob isn't a ramp. A light bulb isn't a ramp.

A light bulb isn't a ramp, either. / Neither is a light bulb.

3 A doorknob is a wheel and axle. A Ferris wheel is a wheel and axle.

4 Screws are used to move heavy objects. Levers are used to move heavy objects.

5 A Ferris wheel isn't a screw. A hammer isn't a screw.

6 Trains and airplanes are forms of transportation. Subways and buses are forms of transportation.

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LIVEWORKSHEETS

Communicate

Word Study

gramophone glasses gum globe glider garbage bag

A **Read the sentences aloud. Circle the words that begin with a hard *g* sound. Then number the pictures.**

1 Maggie put on her glasses to read the label on the jar.

2 Mr. Santos has a globe in his classroom.

3 A glider flies in the sky without an engine.

4 Tom handed Henry a stick of gum at the park.

5 People listened to music on gramophones over 100 years ago.

6 We raked up all the leaves and put them into a large garbage bag.

☐ a

☐ b

☐ c

☐ d

☐ e

☐ f

B **Complete the sentences using a word that begins with a hard *g* sound.**

1 A _____ is an airplane without an engine.

2 Mrs. Dixon listened to music on a _____ when she was young.

3 Chewing _____ is not permitted in gym class.

4 Dad wears _____ to help him see better.

5 I like to spin the _____ and watch the countries go by.

6 After the party, we picked up all the paper plates and put them in a _____.

LIVEWORKSHEETS

Writing Study

A **Rewrite the sentences with a compound subject. Change the verbs.**

1 A seesaw is a lever. (seesaw and hammer)

A seesaw and a hammer are levers.

2 A knife is a wedge. (knife and fork)

3 A light bulb is a screw. (light bulb and jar lid)

4 A hill is a ramp. (hill and mountain)

B **Write about an important invention and how it helps you.**

Read the example. Use **too** and **either** in your writing. Use compound subjects with correct verb agreement. For example:

Trains **and** buses **are** kinds of transportation.

> The wheel was a wonderful invention. All modern transportation uses wheels and axles. The car **and** the bicycle **are** great ways to move around. Trains **and** buses **are** great, **too**. What would we do without the wheel and axle?

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LIVEWORKSHEETS