

**Lesson**

**27**

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# Close Reading

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## **1<sup>st</sup> Read – Scratch the Surface**

- get the gist of the text

## **2<sup>nd</sup> Read – Discover New Words**

- highlight/underline any unfamiliar words
- use context clues to determine the meaning of the word
- write the definition on the text

## **3<sup>rd</sup> read – Dig a Little Deeper**

- determine the main idea of each paragraph or section of the text
- write the main idea on a post-it

## **4<sup>th</sup> read – Analyze the Text**

- teacher determines (identify theme, cause and effect, author's purpose, etc.)

# Lesson 27

## Maglev Trains

1 Have you ever heard of a maglev train? A maglev train is not your ordinary train. First of all, it doesn't even touch the tracks. It actually hovers above them. Second, a maglev train is fast—*very* fast. Unlike ordinary trains, which travel about 150 miles per hour, maglev trains can whiz by you at nearly 350 miles per hour! Just what is a maglev train, and how does it work?

*Maglev* is short for magnetic levitation. *Magnetic* refers to magnets. *Levitate* means "to float in the air." A maglev train uses magnetic forces to float and move above the tracks.

Like all magnets, the magnets used in maglev trains have ends, or poles. One pole of a magnet is called the north pole; the other pole is called the south pole. Opposite poles of magnets attract each other. Like poles repel, or push each other away.

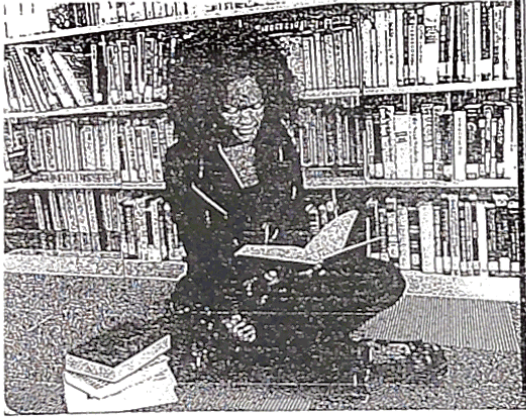
In one kind of maglev train, magnets in the train and magnets in the track repel each other. They don't allow the train and the tracks to touch, so the train is held above the tracks. Magnetic forces also pull the train forward.

2 What advantages does a maglev train have over a train that runs on steel tracks? Because a maglev train does not rub against the tracks, it can travel at much higher speeds than an ordinary train. Also, because it does not make contact with the tracks, a maglev train is much quieter than a regular train. Plus, a maglev train doesn't have an engine that burns fuel, so it doesn't pollute the air.

3 How would you like to ride on a maglev train?

## research

Sometimes artists need to do **research** to find out what things look like.



# Lesson 27

## Vocabulary Review

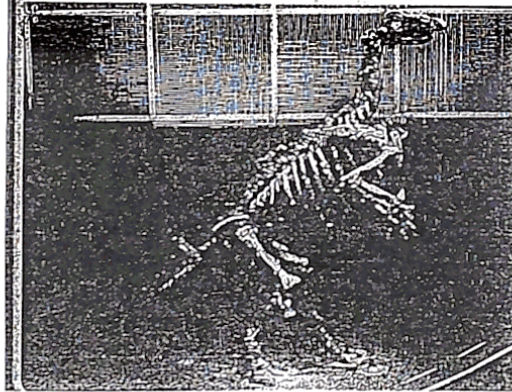
## familiar

This illustration is from a familiar, or well-known, story. It is from Cinderella.



## prove

Scientists are trying to **prove**, or show, that dinosaurs and birds are related.



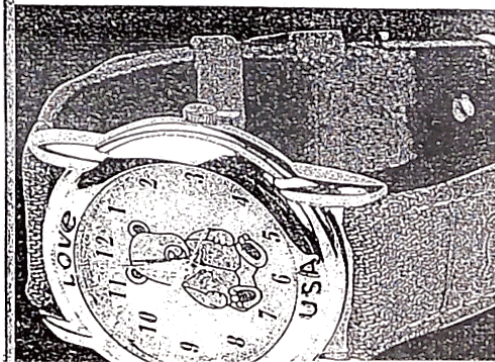
## power

This player uses all his **power**, or strength, to hit the ball out of the park.



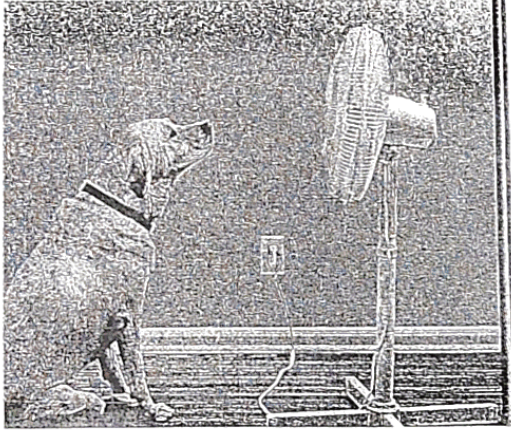
## gadget

A small **gadget** with many parts, such as a watch, can be hard to repair.



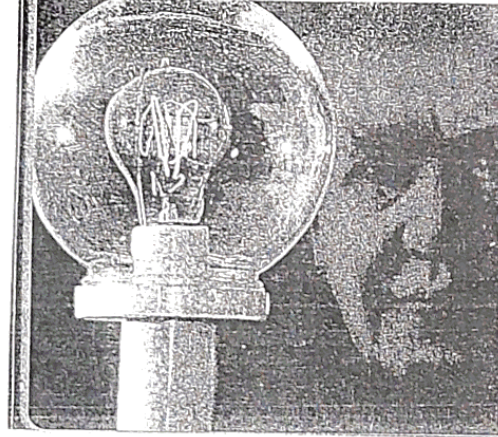
## electric

The invention of the electric fan helps us to stay cool in hot weather.



## invention

The light bulb was an invention that helped people do things at night.



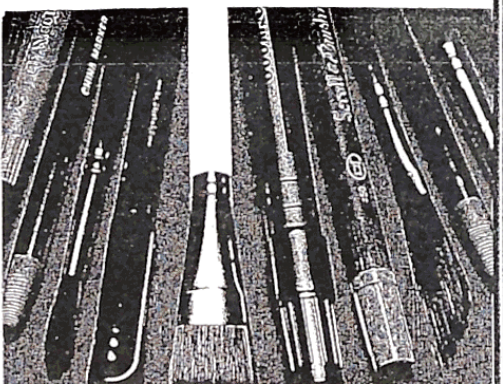
## improve

Coaching helps tennis players improve, or get better.



## tools

Artists use tools such as brushes, pencils, and markers to make art.



## experiment

First, an inventor must perform an experiment to test an idea.



Name \_\_\_\_\_ Date \_\_\_\_\_

# Double Consonants

**The Power  
of Magnets**  
Phonics: Double Consonants

Choose a syllable from the left box and a syllable from the right box to make a word that completes each sentence. Write the word on the line and read the completed sentence.

Hint: Each word you make will have a double consonant.

First Syllables					Second Syllables				
at	but	dol	fun	hap	den	der	lar	low	nel
lad	sud	tun	yel	zip	ny	pen	per	ter	tract

1. A magnet will \_\_\_\_\_ a needle.
2. What do you think will \_\_\_\_\_ next in that story?
3. Bonnie needs a \_\_\_\_\_ marker to color the sun.
4. I spread \_\_\_\_\_ on warm toast.
5. All of a \_\_\_\_\_, it started to rain.
6. I can't close my jacket because the \_\_\_\_\_ is broken.
7. Climb up the \_\_\_\_\_ carefully.
8. That joke was so \_\_\_\_\_ that I hurt myself laughing.
9. Jake has one \_\_\_\_\_ to buy a treat.
10. A mole will dig a \_\_\_\_\_ under the ground.



## The Power of Magnets Fill in the Blank

research	tools	familiar	gadget	invention
experiment	electric	power	prove	improve

1. I studied multiplication all weekend to \_\_\_\_\_ my grade.
2. The \_\_\_\_\_ lamp was plugged into the wall outlet.
3. I chose to \_\_\_\_\_ the continent of Africa for my project.
4. We conducted an \_\_\_\_\_ using the laboratory equipment.
5. Carpenters use many different \_\_\_\_\_ to complete a job.
6. The woman looked \_\_\_\_\_, but I could not remember her name.
7. The bull had so much \_\_\_\_\_ that he knocked a gate down.
8. We used a \_\_\_\_\_ to help us put together the bookshelf.
9. We needed evidence to \_\_\_\_\_ that she was innocent.
10. The man made an \_\_\_\_\_ that was unlike anything we had ever seen.



The Power of Magnets Vocabulary Strategy: Homographs and Homophones

Circle the word that best completes each sentence.

1. Which word best completes the sentence?

My mother wanted to \_\_\_\_\_ some milk at the grocery

- a. bye
- b. by
- c. buy

2. Which word best completes the sentence?

The teacher asked a question, and I gave her the \_\_\_\_\_ answer.

- a. right
- b. write
- c. rite

3. Which word best completes the sentence?

The waves were rolling on the \_\_\_\_\_

- a. see
- b. sea
- c. cee

4. Which word best completes the sentence?

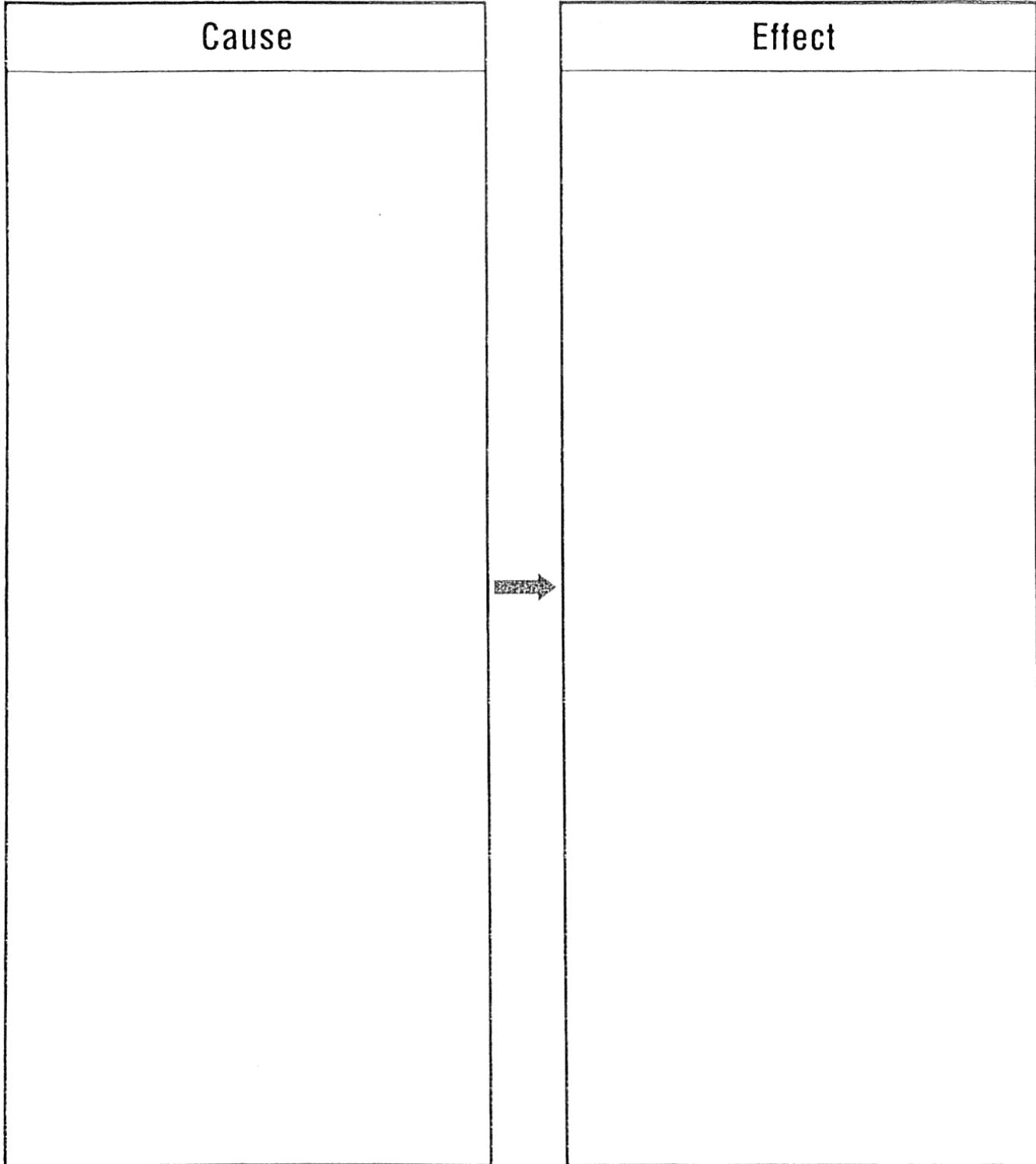
I needed to brush my \_\_\_\_\_ before I left the house.

- a. hair
- b. hare
- c. hear

Name \_\_\_\_\_ Date \_\_\_\_\_

**T-Map:** \_\_\_\_\_

Title or Topic \_\_\_\_\_



Name \_\_\_\_\_ Date \_\_\_\_\_

**T-Map:** \_\_\_\_\_

Title or Topic \_\_\_\_\_

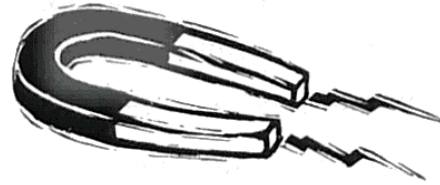
Cause



Effect



# The Power of Magnets



## Your Magnet Invention

Now is your chance to design a magnet to make your life easier! First, answer the questions below to make sure you understand how magnets work. Then, create your own design.

Read pages 20–21. What causes some objects to be attracted to a magnet?

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Read page 22. What happens if you sprinkle iron filings around a magnet?

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Read page 23. What is important about electromagnets?

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Read pages 24–25. How can you create a magnetic field in your own home?

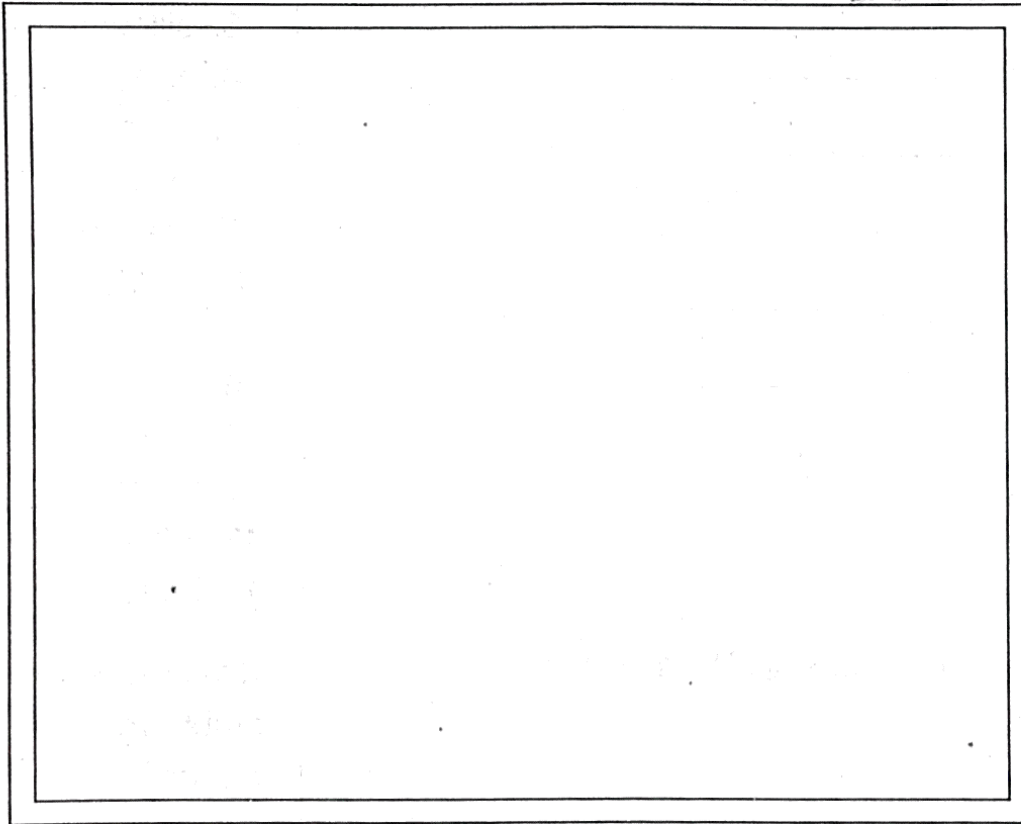
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Name \_\_\_\_\_ Date \_\_\_\_\_

**The Power of Magnets**  
Independent Reading

Now think of a way that you can use a magnet to improve your life. Will you use the magnet in your home or outside? Will you use it at school? Will you use a regular magnet or an electromagnet? Draw a picture of your magnet and write an explanation of how it works. Be sure that you include details from the text in your design.



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Name \_\_\_\_\_

Date \_\_\_\_\_

# Double Consonants

## The Power of Magnets

Phonics:  
Double Consonants

Read each word. Rewrite the word with a slash between the two syllables. Then say the word again. The first one has been done for you.

1. pillow                          pil/low    

2. college                     \_\_\_\_\_

3. attack                     \_\_\_\_\_

4. effort                     \_\_\_\_\_

5. pretty                     \_\_\_\_\_

6. tunnel                     \_\_\_\_\_

7. address                    \_\_\_\_\_

8. hidden                    \_\_\_\_\_

9. shallow                    \_\_\_\_\_

10. support                   \_\_\_\_\_

## VOCABULARY TEST FOR THE POWER OF MAGNETS

Name \_\_\_\_\_ Date \_\_\_\_\_

Write the vocabulary word that matches the definition



1. \_\_\_\_\_ Well known, as from repeated experience
2. \_\_\_\_\_ To show to be true by backing up with facts
3. \_\_\_\_\_ An original device, system, or process
4. \_\_\_\_\_ Careful study of a subject or problem
5. \_\_\_\_\_ The force, strength, or ability to do something
6. \_\_\_\_\_ To get better
7. \_\_\_\_\_ A test to find out or prove something
8. \_\_\_\_\_ Of, relating to, or produced by electricity
9. \_\_\_\_\_ A device that is specially made or shaped to help a person do work
10. \_\_\_\_\_ A small mechanical device

experiment    prove    power    gadget    electric

research    improve    familiar    tools    invention

# The Power of Magnets

Meaning

Picture

Sentence

research

tools

familiar

gadget

invention