

## ***Forces and Sounds***

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### **Summary**

A force is a push or a pull. Gravity is a force that pulls things down toward the ground. Force can change the way things moves. It can change how far or fast something moves. Speed is how fast an object moves. Objects can move in different ways. They can be in different places. Magnets attract some metal objects and repel other objects. Magnets have two poles, or ends. Opposite poles attract or move to each other. Like poles repel or push away. When a sound is made, something vibrates. Many things make sounds. Objects can make sounds. Things in nature can make sounds, too. Sounds can be loud or soft.

### **Before Reading**

#### **Take a Picture Walk**

Build background for the book by taking a picture walk with children. Discuss the pictures and preview the key vocabulary and concepts. Invite children to name ways in which things move (back and forth, up and down, around and around, and so on).

#### **Vocabulary**

attract, force, gravity, magnet, pole, repel, speed, vibrate

#### **Comprehension Skill: Cause and Effect**

*Say:* Sometimes one thing can cause another thing to happen. Pat your hands together softly. Now clap your hands. What happened? Why?

### **During Reading**

#### **Think Critically**

Have children answer the *What Did You Learn?* questions located on the inside back cover of their book.

**1. What force makes a ball fall toward the ground?** Gravity makes things fall to the ground.

**2. How can force change the speed of something?** You can change the speed of something by using more or less force.

### **After Reading**

#### **Writing in Science**

Magnets can repel and attract. Write to explain how magnets can do both. Use words from the book as you write.

#### **Organize Information**

*Graphic Organizer: Cause and Effect* Have children complete the Cause and Effect chart on the BLM for this Leveled Reader to tell what would happen if a piano key was pressed very hard and what would happen if it was pressed softly.

#### **Related Resources**

Vocabulary Cards  
Every Student Learns  
Quick Study  
Big Book of Science Songs and CD  
Graphic Organizer Transparencies  
Quick Activity Transparency  
www.pearsonsuccessnet.com

Equipment Kit  
Activity Flipchart  
LabZone

**Write your answers.**

1. What force pulls things down to Earth?  
**Gravity pulls things down to Earth.**
2. How can force change the way things move?  
**Force can change the speed or direction of an object.**
3. What causes sound?  
**A sound is caused when an object vibrates.**
4. What would happen if you pressed a piano key very hard? What would happen if you pressed a piano key softly? Use the graphic organizer to help you.

**Possible answer:**

## **Cause and Effect**

**Cause**

**Effect**

