

# Lesson 1: What happens when things change position?

## Before You Read Lesson 1


Read each statement below. Place a check mark in the circle to indicate whether you agree or disagree with the statement.

- |  | Agree                            | Disagree                         |
|--|----------------------------------|----------------------------------|
| 1. Motion is change of position.                         | <input checked="" type="radio"/> | <input type="radio"/>            |
| 2. An object with variable speed moves at the same rate. | <input type="radio"/>            | <input checked="" type="radio"/> |
| 3. A constant speed is always fast.                      | <input type="radio"/>            | <input checked="" type="radio"/> |

## After You Read Lesson 1

Reread each statement above. If the lesson supports your choice, place a check mark in the *Correct* circle. Then explain how the text supports your choice. If the lesson does not support your choice, place a check mark in the *Incorrect* circle. Then explain why your choice is wrong.

- |          | Correct               | Incorrect             |
|----------|-----------------------|-----------------------|
| 1. _____ | <input type="radio"/> | <input type="radio"/> |
| 2. _____ | <input type="radio"/> | <input type="radio"/> |
| 3. _____ | <input type="radio"/> | <input type="radio"/> |

 **Notes for Home:** Your child has completed a pre/post inventory of key concepts in the lesson.  
**Home Activity:** Have your child use toy cars or other movable objects to demonstrate slow, fast, constant, and variable speed.

## Reviewing Terms: Sentence Completion

Complete each sentence with the correct word or phrase.

- relative position 1. An object's \_\_\_\_\_ compares its position to the position of other objects. (relative position, speed)
- motion 2. An object that is in \_\_\_\_\_ keeps changing position. (relative position, motion)
- position 3. An object's location is its \_\_\_\_\_. (position, speed)
- speed 4. \_\_\_\_\_ is how fast an object changes position. (Motion, Speed)

## Reviewing Concepts: True or False

Write T (True) or F (False) on the line before each statement.

- T 5. A map is a drawing of a place that shows the position of objects.
- T 6. Words like *forward*, *left*, and *right* can describe the position of an object.
- F 7. All objects move at the same speed.
- F 8. A constant speed is a speed that is always changing.

# Lesson 2: How does force affect motion?

## Before You Read Lesson 2

Read each statement below. Place a check mark in the circle to indicate whether you agree or disagree with the statement.

- |   | Agree                               | Disagree                            |
|---|-------------------------------------|-------------------------------------|
| 1. Gravity causes you to have weight.         | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2. Friction always helps objects move faster. | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 3. Motion is often the result of many forces. | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

## After You Read Lesson 2

Reread each statement above. If the lesson supports your choice, place a check mark in the *Correct* circle. Then explain how the text supports your choice. If the lesson does not support your choice, place a check mark in the *Incorrect* circle. Then explain why your choice is wrong.

	Correct	Incorrect
1. _____	<input type="checkbox"/>	<input type="checkbox"/>
2. _____	<input type="checkbox"/>	<input type="checkbox"/>
3. _____	<input type="checkbox"/>	<input type="checkbox"/>



**Notes for Home:** Your child has completed a pre/post inventory of key concepts in the lesson.

**Home Activity:** Have your child push a toy car or other wheeled object over a wood or tiled floor, then a carpeted floor. Talk about which surface produced more friction.

## Reviewing Terms: Matching

Match each description with the correct word. Write the letter on the line next to each description.

- b 1. any push or pull  
d 2. a contact force that goes against motion  
c 3. a non-contact force that pulls all objects together and all objects toward the center of Earth  
a 4. a non-contact force that pulls on metals with iron in them

- a. magnetism  
b. force  
c. gravity  
d. friction

## Reviewing Concepts: True or False

Write T (True) or F (False) on the line before each statement:

- True 5. Forces can change an object's motion.  
True 6. Friction can cause a moving object to slow down or to stop.  
False 7. Equal forces in opposite directions change an object's motion.  
True 8. Weight is the amount of gravity that pulls on an object.

# Lesson 3: How do simple machines affect work?

## Before You Read Lesson 3

Read each statement below. Place a check mark in the circle to indicate whether you agree or disagree with the statement.

- |                                     |                                  |                                  |
|-------------------------------------|----------------------------------|----------------------------------|
|                                     | Agree                            | Disagree                         |
| 1. Pushing on a mountain is work.   | <input type="radio"/>            | <input checked="" type="radio"/> |
| 2. A wedge is used to split or cut. | <input checked="" type="radio"/> | <input type="radio"/>            |
| 3. A lever rests on a support.      | <input checked="" type="radio"/> | <input type="radio"/>            |

## After You Read Lesson 3

Reread each statement above. If the lesson supports your choice, place a check mark in the *Correct* circle. Then explain how the text supports your choice. If the lesson does not support your choice, place a check mark in the *Incorrect* circle. Then explain why your choice is wrong.

- |                   | Correct               | Incorrect             |
|-------------------|-----------------------|-----------------------|
| 1. _____<br>_____ | <input type="radio"/> | <input type="radio"/> |
| 2. _____<br>_____ | <input type="radio"/> | <input type="radio"/> |
| 3. _____<br>_____ | <input type="radio"/> | <input type="radio"/> |



**Notes for Home:** Your child has completed a pre/post inventory of key concepts in the lesson.

**Home Activity:** Help your child identify an example of each simple machine among his or her toys or among household objects.

## Reviewing Terms: Sentence Completion

Complete the sentence with the correct word.

- Work 1. \_\_\_\_\_ is done when a force moves an object. (Work, Distance)

## Reviewing Concepts: Sentence Completion

Complete each sentence with the correct word or phrase.

- do not 2. Machines \_\_\_\_\_ change the amount of work needed to do a task. (do, do not)
- inclined plane 3. A ramp is an example of a(n) \_\_\_\_\_. (pulley, inclined plane)
- Wedge 4. One example of a \_\_\_\_\_ is a knife. (wedge, screw)
- screw 5. An inclined plane wrapped around a center post is a \_\_\_\_\_. (screw, wedge)
- lever 6. A seesaw is one kind of \_\_\_\_\_. (pulley, lever)
- wheel and axle 7. A doorknob is a(n) \_\_\_\_\_ that makes opening a door easier. (wheel and axle, inclined plane)
- Pulley 8. You can use a \_\_\_\_\_ to change the direction of your force. (pulley, wedge)