



Cause and effect

Reading Comprehension Worksheet

Practice

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**Cause and effect** are about how one thing can cause something else to happen.

The **cause** is *why* something happened.

The **effect** is *what* happened.

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Read about how light causes us to see a rainbow, and think about **cause** and **effect** as you read.

Light: What Causes a Rainbow

Light is a form of energy that we can see. Light moves in a wavy beam from a source to whatever object it meets. A light beam is wavy, but it only moves in one direction as it travels through the air. It cannot bend, turn corners, or go in a circle. It travels in one direction until it hits an object. Not even the strongest wind can cause a light beam to bend.

Light cannot pass through a solid object. However, light can pass through transparent objects, such as crystal and water. When a light beam hits a transparent object, it keeps going forward, but it slows down. If you look at the place where an object is partly in and partly out of water, it looks like the object bends at the place where it enters the water. This is called "refraction."

Sometimes a beam of light from the sun passes through a cloud made up of tiny droplets of water too small to fall as rain. Hitting the water droplets causes the light beam to slow down. If the light beam hits the droplets of just the right size at just the right angle, the light beam appears to split into layers. We see the color beams within the light beam one at a time, in layers. We see layers of red, orange, yellow, green, blue, and violet. We see a rainbow!

What is the **effect** of each **cause**?

1. A light beam travels toward the earth through a strong wind.
 - A. The light beam keeps bends as it is blown by the wind.
 - B. The light beam begins to move in a circle.
 - C. The light beam continues to move in the same direction.

2. A light beam hits a solid object.
 - A. Only part of the light beam passes through the object.
 - B. The light beam cannot pass through the object.
 - C. The light beam slows down as it passes through the object.

3. A light beam hits water.
 - A. Only part of the light beam passes through the water.
 - B. The light beam cannot pass through the water.
 - C. The light beam slows down as it passes through the water.

4. You see an object partly in and partly out of water.
 - A. You cannot see the part of the object that is in the water.
 - B. The object looks like it bends where it enters the water.
 - C. You see colored light all around the object.

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5. Here is a **cause**: A light beam hits water droplets in just the right way.  
What is the **effect**?

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6. Here is a **cause**: You see the color beams within a light beam one at a time,  
in layers.  
What is the **effect**?

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