

Reading Passage: The Amazing Rainbows (Science 1)

Have you ever seen a rainbow in the sky after it rains? Rainbows are beautiful bands of colors that appear in the sky when sunlight shines through raindrops.

Rainbows form when sunlight passes through raindrops in the air. The sunlight is made up of many colors that we cannot see separately. These colors include red, orange, yellow, green, blue, indigo, and violet. When sunlight enters a raindrop, it bends, or refracts, and separates into different colors.

The raindrop acts like a tiny prism that splits the sunlight into its colors. These colors then bounce off the inside surface of the raindrop and come out the other side. When this happens, we see a rainbow!

Rainbows usually appear in the sky opposite the sun after a rain shower. They are often shaped like a semi-circle and are most visible when the sun is low in the sky. Sometimes, you might even see a double rainbow, which is when a second, fainter rainbow appears above the first one.

Rainbows are not only beautiful but also teach us about how light and water interact. They remind us of the many colors that make up sunlight and brighten our day after a rainy spell.



Multiple Choice Questions

1. What appears in the sky after it rains?
 - A. Clouds
 - B. Raindrops
 - C. Snow
 - D. Rainbows
2. How do rainbows form?
 - A. When clouds cover the sun
 - B. When sunlight passes through raindrops
 - C. When it snows heavily
 - D. When it is windy
3. What are rainbows made of?
 - A. Only one color
 - B. Many colors we cannot see separately
 - C. Black and white
 - D. Shades of gray
4. What happens to sunlight when it enters a raindrop?
 - A. It disappears
 - B. It refracts and separates into different colors
 - C. It becomes brighter
 - D. It turns into heat
5. What does a raindrop act like when sunlight passes through it?
 - A. A mirror
 - B. A prism
 - C. A flashlight
 - D. A cloud

6. When do rainbows usually appear in the sky?
 - A. During the night
 - B. After a snowstorm
 - C. After a rain shower
 - D. During a sunny day
7. Where is the sun usually located when you see a rainbow?
 - A. Above the rainbow
 - B. Below the rainbow
 - C. Beside the rainbow
 - D. Inside the rainbow
8. What shape are rainbows usually?
 - A. Circle
 - B. Square
 - C. Triangle
 - D. Semi-circle
9. What is a double rainbow?
 - A. Two raindrops
 - B. Two rain showers
 - C. Two semi-circles of colors
 - D. Two clouds
10. What do rainbows teach us about?
 - A. Animals
 - B. Plants
 - C. Light and water interaction
 - D. Earthquakes

Answers and Explanations

1. **D. Rainbows** Explanation: Rainbows appear in the sky after it rains.
2. **B. When sunlight passes through raindrops** Explanation: Rainbows form when sunlight passes through raindrops.
3. **B. Many colors we cannot see separately** Explanation: Rainbows are made of many colors that we cannot see separately.
4. **B. It refracts and separates into different colors** Explanation: Sunlight refracts and separates into different colors when it enters a raindrop.
5. **B. A prism** Explanation: A raindrop acts like a prism when sunlight passes through it.
6. **C. After a rain shower** Explanation: Rainbows usually appear in the sky after a rain shower.
7. **B. Below the rainbow** Explanation: The sun is usually located below the rainbow when you see it.
8. **D. Semi-circle** Explanation: Rainbows are usually shaped like a semi-circle.
9. **C. Two semi-circles of colors** Explanation: A double rainbow consists of two semi-circles of colors.
10. **C. Light and water interaction** Explanation: Rainbows teach us about how light and water interact.