

Read the short story and answer each question.

How a Rainbow Forms

Rainbows don't just appear by magic. They happen when sunlight passes through raindrops in just the right way. It's a mix of light, water, and angles.

Rainbows begin when **sunlight** shines through a raindrop. The light bends, or **refracts**, as it enters the droplet. Then it **reflects** off the inside of the drop and bends again as it exits.

This bending causes the light to **spread into colors**. We see the rainbow as red, orange, yellow, green, blue, indigo, and violet—always in the same order.

Rainbows only happen when the sun is behind you and rain is in front of you. That's why they're easiest to spot in the morning or late afternoon, when the sun is lower in the sky.

Understanding rainbows means understanding how light and water work together.





Name:

How a Rainbow Forms

1. How does the diagram help the reader understand the passage?			2. What does the diagram show coming from the raindrop?				
Α.	It shows how sunlight bends and reflects inside a raindrop.	A.	A spread of colors in rainbow order				
В.	It shows where to find gold at the end of a rainbow.	В.	Raindrops bouncing off the ground				
С.	It compares a rainbow to a		Lightning and thunder				
	thunderstorm.	D.	A bee flying through the rain				
D.	It lists every type of weather.						

3. Fill in the blank:

Rainbows happen when sunlight bends and reflects inside a _____.

4.	How	does	the	diagram	help	explain	the	steps	that	create	۵
rai	nbow	?		-	-	-		-			

5. Why do you think a rainbow always shows the same order of colors?





Guide Reading Level: N Lexile Level: 530L-680L Grade Level: 3rd Grade, Beginning of the Year Genre: Informational / Weather Science

Introducing the Text

"Today we're learning how rainbows form. We'll pay close attention to the diagram and the sequence of events that explain how light and water create something so colorful and amazing."

Vocabulary: refraction, reflection, raindrop, angle, sunlight

Before Reading Discussion Questions

- 1. Have you ever seen a rainbow in real life?
- 2. What do you think causes a rainbow to appear?
- 3. How do pictures or diagrams help us understand weather?

During Reading Discussion Questions

- 1. What happens when sunlight enters a raindrop?
- 2. What does it mean when the light "bends"?
- 3. How does the diagram match the steps in the text?

After Reading Discussion Questions

- 1. How did the diagram help you understand the process of forming a rainbow?
- 2. What part of the text and image helped you learn something new?
- 3. Can you explain the steps using both the diagram and what you read?

Activity Idea

Have students draw their own labeled rainbow diagram showing a raindrop, the light bending and reflecting, and the color order. Then, have them write a few sentences explaining how light changes to form a rainbow, using vocabulary from the passage.

