

Comparing Solids

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Solids are a kind of matter. They are things that have their own shape. They do not flow like liquids do. You can see and touch solids. You can describe a solid by its properties. Some of those properties are color, shape, size, and texture.

Bowling balls and tennis balls are both solids. Each has its own shape. You can see and touch both of them. Are they different? Let's compare.

Most tennis balls are yellow or green, but they also come in many other colors. Most bowling balls are black, but they come in many colors, too.

Both kinds of balls are round. They do, however, have very different sizes. Tennis balls are small. You can hold a tennis ball in one hand. A bowling ball is much bigger. It is also much heavier than a tennis ball.

Bowling balls and tennis balls have different textures. A bowling ball is smooth. A tennis ball has a soft and fuzzy texture.

What can a tennis ball do that a bowling ball cannot? Bounce! Tennis balls are made to bounce. Bowling balls do not bounce.

Both bowling balls and tennis balls are solids. But they are also very different from each other!

Name: _____ Date: _____

1. What are solids?

- A) things that have their own shape
- B) things that flow like liquids do
- C) things that you can see, but can't touch

2. What two examples of solids does the author compare and contrast?

- A) a yellow ball and a green ball
- B) a tennis ball and a bowling ball
- C) a baseball and a basketball

3. Read these sentences from the text.

"Solids are a kind of matter. They are things that have their own shape. They do not flow like liquids do. You can see and touch solids. You can describe a solid by its properties. Some of those properties are color, shape, size, and texture.

"Bowling balls and tennis balls are both solids."

Based on this evidence, what conclusion can you draw about bowling balls and tennis balls?

- A) They have the same color, shape, and size.
- B) They cannot be described by their properties.
- C) They do not flow like liquids do.

4. Which property of bowling balls and tennis balls would help you most in telling them apart?

- A) kind of matter
- B) size
- C) shape

5. What is the main idea of this article?

- A) Bowling balls and tennis balls are both solids, but they are different in many ways.
- B) Solids are different from liquids because they have their own shape.
- C) Bowling balls and tennis balls are both round, but have different sizes.

6. Read these sentences from the text.

"You can describe a solid by its properties. Some of those properties are color, shape, size, and texture."

Based on these sentences, what are "properties?"

- A) important characteristics of a thing
- B) the ways in which something is used
- C) the places where something can be found

7. Choose the answer that best completes this sentence.

Tennis balls and bowling balls are both round, ____ bowling balls are much bigger.

- A) so
- B) because
- C) but

8. What are four properties you can use to describe a solid?

9. How does the article describe the texture of a tennis ball?

10. The article contrasts a tennis ball and a bowling ball by looking at properties like their color, shape, size, and texture. Choose another solid and contrast it with a tennis ball by looking at two of these properties.

Teacher Guide & Answers

Passage Reading Level: Lexile 510

1. **A** *things that have their own shape*
2. **B** *a tennis ball and a bowling ball*
3. **C** *They do not flow like liquids do.*
4. **B** *size*
5. **A** *Bowling balls and tennis balls are both solids, but they are different in many ways.*
6. **A** *important characteristics of a thing*
7. **C** *but*
8. **Suggested answer:** *Four properties you can use to describe a solid are color, shape, size, and texture.*
9. **Suggested answer:** *A tennis ball has a soft and fuzzy texture.*
10. **Suggested answer:** *Answers may vary, but all students should correctly identify a solid and contrast it with a tennis ball using two physical properties. For instance, students may contrast a basketball with a tennis ball by describing their different colors and sizes.*