

Multiple Choice: Matter and its interactions

Science · Grade 5

Name: _____ Date: _____

I am learning to: Describe the properties of solids, liquids, and gases and explain how matter can change state

Read each question carefully. Choose the best answer from the four options. You can use what you have learned about solids, liquids, and gases to help you. There are no tricks. If you are not sure, think about the properties of matter and how particles behave.

1. 1. Which statement best describes a solid? A) It takes the shape of its container. B) It holds its own shape and does not spread out. C) It has no definite shape or volume. D) It moves very quickly and fills any space.
2. 2. What do the particles in a liquid do? A) They are tightly packed and cannot move. B) They vibrate in one place only. C) They move around and slide past each other. D) They spread out to fill all available space.
3. 3. When ice melts into water, what happens to the particles? A) The particles get smaller. B) The particles move faster and spread out more. C) The particles stop moving completely. D) The particles all disappear.
4. 4. Which is an example of a gas? A) Clay B) Juice C) Steam D) Rock
5. 5. What is the main difference between the particles in a solid and the particles in a gas? A) Solids have heavier particles. B) Gas particles move much faster and are spread far apart. C) Solid particles are not made of matter. D) Gases have only one type of particle.
6. 6. A container holds a liquid. What shape is the liquid? A) It keeps its own shape no matter what. B) It takes the shape of the container. C) It is always round. D) It spreads out in all directions like a gas.
7. 7. When water boils and turns to steam, the particles A) move faster and spread out more. B) stick together more tightly. C) become smaller. D) stop moving.
8. 8. Which observation would best show that matter changes when it heats up? A) A rock stays hard in the sun. B) A thermometer reads a higher temperature. C) An ice block shrinks and becomes water as it sits in a warm room. D) A container of juice stays the same colour.