

Review and Assessment

Organizing Information

Comparing and Contrasting Copy the graphic organizer about solids, liquids, and gases onto a separate piece of paper. Complete the table and add a title. (For more on Comparing and Contrasting, see the Skills Handbook.)

State of Matter	Shape	Volume	Example (at room temperature)
a. _____?	Definite	b. _____?	Diamond
Liquid	c. _____?	Definite	d. _____?
Gas	e. _____?	Not definite	f. _____?

Reviewing Key Terms

Choose the letter of the best answer.

- A substance with a definite volume but no definite shape is a(n)
 - crystalline solid.
 - liquid.
 - gas.
 - amorphous solid.
- Unlike solids and liquids, a gas will
 - keep its volume in different containers.
 - keep its shape in different containers.
 - expand to fill the space available to it.
 - have its volume decrease when the temperature rises.
- The process in which a gas cools and becomes a liquid is called
 - evaporation.
 - sublimation.
 - boiling.
 - condensation.
- According to Boyle's law, the volume of a gas increases when its
 - pressure increases.
 - pressure decreases.
 - temperature falls.
 - temperature rises.
- The vertical axis of a graph shows the
 - responding variable.
 - manipulated variable.
 - constant factors.
 - same variable as the x-axis.

If the statement is true, write *true*. If it is false, change the underlined word or words to make the statement true.

- Rubber and glass, which become softer as they are heated, are examples of crystalline solids.
- When you see steam, fog, or clouds, you are seeing water in the liquid state.
- A substance changes from a solid to a liquid at its boiling point.
- The volume of a gas is the force of its outward push divided by the area of the walls of the container.
- According to Boyle's law, the volume of a gas varies inversely with its pressure.

Writing in Science

Explanation Write an introduction to a safety manual for deep-sea divers who use compressed air (scuba) tanks. Explain what air pressure is and what happens to gas molecules when air is compressed.



Solids, Liquids, and Gases

Video Preview

Video Field Trip

▶ Video Assessment