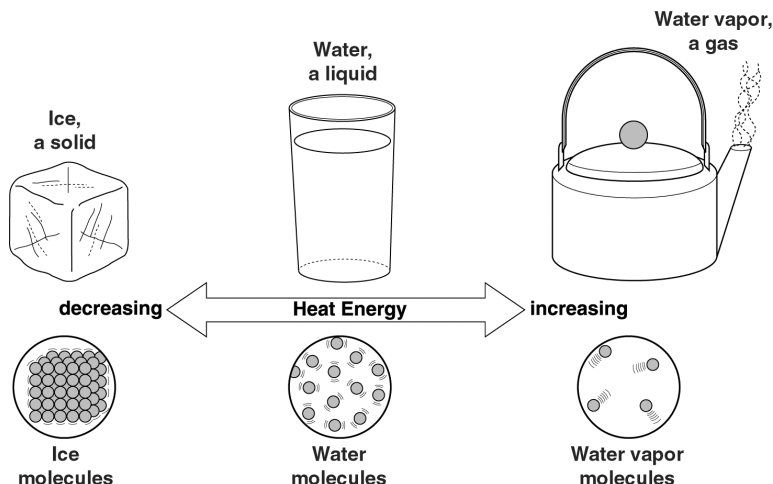


What are the states of matter?

Enrichment Activity

Skills: interpreting a diagram, comparing

The diagram below shows the states of matter and the state changes of water. Refer to the diagram as you answer the questions.



- How many states of matter are shown in the diagram? What are these states? _____

- How many different state changes are shown? Name these changes. _____

- According to the diagram, which state changes require an increase in heat energy? _____

- Which state changes require a decrease in heat energy? _____
- What does the diagram tell you about the particles of a solid? _____

- How do the particles of a liquid differ from those of a solid? _____

- Describe the particles of a gas. Compare them to the particles of a solid and of a liquid. _____

- Based on the diagram, what happens to the particles of a substance as heat energy increases? As heat energy decreases? _____

Answer Key

PROPERTIES OF MATTER

What are the states of matter?

Enrichment Activity

1. three; solid, liquid, gas 2. four; melting, freezing, boiling, condensing 3. melting, boiling 4. freezing, condensing 5. They are packed tightly together, and they do not move very much. 6. They are not as tightly packed, and they can move more freely. 7. They are very spread out, and they are free to move all around. They are farther apart than the particles of a liquid. They are much farther apart than the particles of a solid. 8. As heat energy increases, particles become more spread out and are freer to move. As heat energy decreases, the particles move less and are closer together.