

States of Matter

Lesson 2 Changes in States of Matter

Grade 8 Science Content Standards—5.d: Students know physical processes include freezing and boiling, in which a material changes form with no chemical reaction. Also covers 3.d, 3.e

Skim Lesson 2 of your text. Write three questions that come to mind.

1. _____
2. _____
3. _____

Review Vocabulary

thermal energy

Define thermal energy using your book or a dictionary.

New Vocabulary

Read the definitions below. Write the correct vocabulary term on the blank to the left of each definition.

temperature at which a liquid changes to a solid

measure of the average kinetic energy of all the particles in an object

change of a gas to a liquid

temperature at which a solid changes to a liquid

change of a liquid to a gas

change of a solid to a gas without first going through the liquid state

vaporization that occurs throughout a liquid

vaporization at the surface of a liquid

change of a gas to a solid without first going through the liquid state

temperature at which a liquid changes to a gas

Academic Vocabulary

correspond

Use a dictionary to define correspond.

Lesson 2 Changes in States of Matter (continued)

Main Idea

Temperature, Thermal Energy, and Heat

I found this information on page _____.

I found this information on page _____.

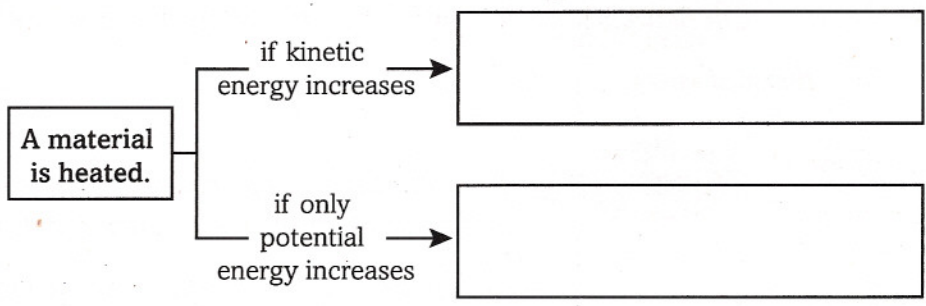
Changes Between the Solid and Liquid States

I found this information on page _____.

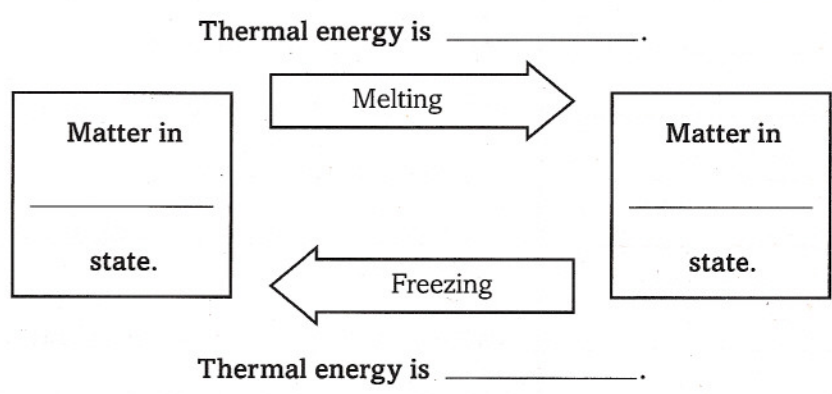
Details

Summarize *how kinetic energy is related to temperature.*

Distinguish *two ways a material can change when its thermal energy increases.*



Compare *melting and freezing by labeling the diagram.*



SUMMARIZE IT

Summarize the main ideas of the above sections.

Lesson 2 Changes in States of Matter (continued)

Main Idea

Changes Between Liquids and Gases

I found this information on page _____.

Changing the State of Water

I found this information on page _____.

Changes Between Solids and Gases

I found this information on page _____.

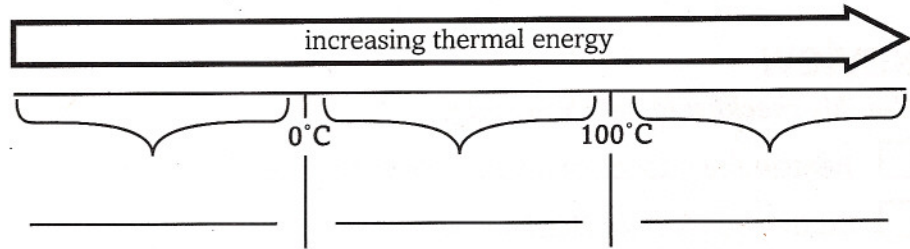
Details

Compare and contrast vaporization, and condensation.

	What Happens	Location	Temperature
Vaporization: Boiling			
Vaporization: Evaporation			
Condensation			

Label the diagram below to show how a piece of ice changes as thermal energy is added to it. Use the terms provided.

melting point boiling point solid gas liquid



Contrast sublimation and deposition.

Sublimation: _____

Deposition: _____

SUMMARIZE IT

Summarize the main ideas of the above sections.
