

Lesson 1 Thermal Energy, Temperature, and Heat

Predict three facts that will be discussed in Lesson 1 after reading the headings. Record your predictions in your Science Journal.

Main Idea

Kinetic and Potential Energy

I found this on page _____.

What is Thermal Energy?

I found this on page _____.

What is temperature?

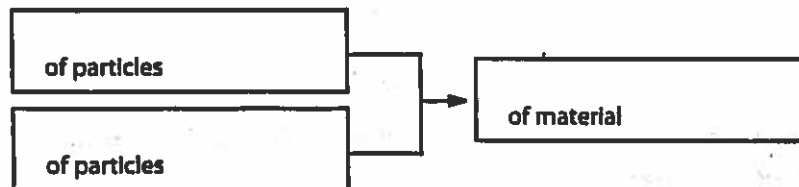
I found this on page _____.

Details

Relate descriptions of energy.

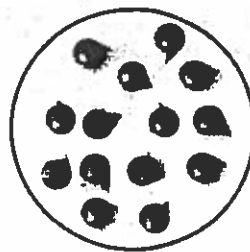
	Kinetic Energy	Potential Energy
Mechanical energy		

Characterize thermal energy, and explain why matter has it.

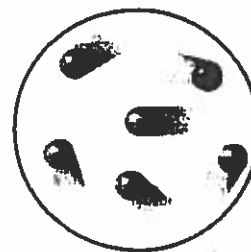


Explanation: _____

Explain how kinetic energy of the particles relates to differences in temperature represented by the pictures.



A



B

Lesson 1 | Thermal Energy, Temperature, and Heat (continued)

Main Idea

I found this on page _____.


I found this on page _____.

What is heat?

I found this on page _____.

I found this on page _____.


Details

 **Assess** the difference between thermal energy and temperature.

Contrast common temperature scales.

Scale	Water Freezes	Water Boils
Celsius		
Kelvin		
Fahrenheit		

 **Evaluate** the difference between heat and thermal energy.

 **Relate** temperature of objects to rate of heat transfer.

Temperature Difference Between Objects	Rate Heating Occurs
greater	

 **Analyze It** Describe a hot summer day using the vocabulary terms and Key Concepts from this lesson.
