

Physical Science SPS7 Assessment Prep

Define the following terms:

Law of Conservation of Energy - _____

Light energy - _____

Chemical energy - _____

Mechanical energy - _____

Electrical energy - _____

Electromagnetic energy - _____

Sound energy - _____

Thermal energy - _____

Magnetic energy - _____

Conduction - _____

Convection - _____

Radiation - _____

Specific heat - _____

Joules - _____

Heating curve - _____

Cooling curve - _____

Temperature - _____

Kinetic energy - _____

Concepts Review

Answer the following conceptual questions to prepare for your SPS7 Thermal energy assessment over learning targets 55 – 66.

1. Explain the different types of energy transformations that go into Jason eating a hamburger and then working out from beginning to end starting with the sun.

2. Draw and explain a picture of conduction

Draw and explain a picture of convection

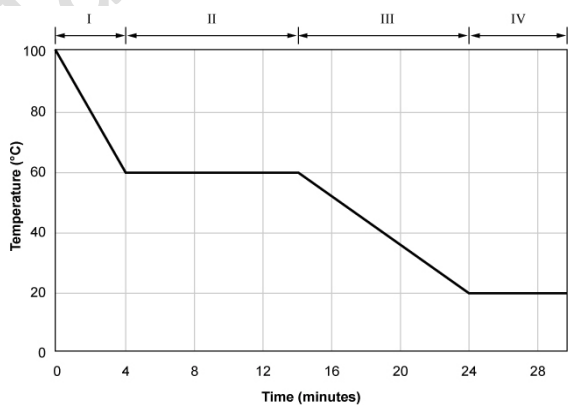
Draw and explain a picture of radiation

3. How much heat is absorbed by 20g granite boulder as energy from the sun causes its temperature to change from 10°C to 29°C? (Specific heat capacity of granite is 0.1 cal/g°C)

4. If the same amount of heat is added to 50.0 g samples of each of the metals in the chart, which metal will experience the largest temperature change? _____ Smallest temperature change? _____ Explain why below.

Metal	Specific Heat (J/g.K)
Al	0.902
Cu	0.385
Fe	0.451
Au	0.128

5.



In which area(s) does the substance undergo a phase change? _____
Explain what is occurring at these areas.