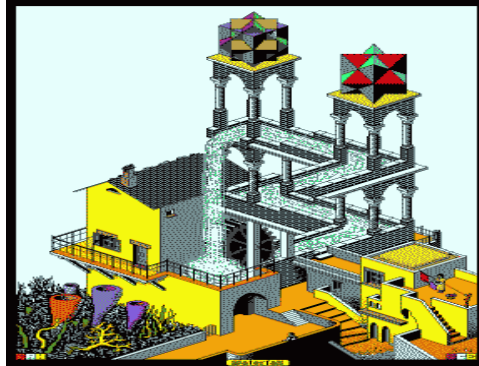


Unit 3 topic 3

Science 7

Name:

Date:



The Particle Model, temperature, and Thermal Energy

1.) Define the following terms:

a.) Particle model of Matter (Particle theory of Matter) use glossary and text information to get the complete definition

b.) Energy:

c.) thermal energy:

d.) Heat:

e.) Temperature:

2.) Do Activity Page 202 q 1abc,2abcd

1a.)

1b.)

1c.)

2a.)

2b.)

2c.)

2d.)

3.) What happen to the particles of a substance as it's temperature increases and decreases? 1 mark

4.) In which direction does energy transfer? 1 mark 205

5.) What unit is energy measured in ? According to James Joule's research, what should happen to the temperature as water it is stirred? 2 mark

6.) Why would a electric heater heat your room to a comfortable temperture in 30 minutes, but the same heater ran for 30 minutes would hardly increase the temperature of the gym? 1 mark

7.) What is the Law of Conservation of energy state? 1 mark

8.) Thermal energy verse temperature

Thermal energy is the total energy of the particles of a substance. It is measured in joules (j). Temperature is the average measure of the energy of the particles of a substance. Only thermometers can determine temperature because the particles are too small.

Determine the thermal energy and the temperature of this make believe object.

