

Science 7  
Unit 3 Topic 6 Page 226  
Research questions

Name;

Date:

1.) Define the following terms: 1 mark each

a.) Radition:

b.) electromagnetic radition (EMR):

c.) Thermal Conduction:

d.) heat insulator:

e.) Fluids:

f.) Convection:

g.) Convection current:

2.) What are three characteristics that all radiant energy share:  
3 marks page 226

3.) (Think) You leave a metal hotdog roasting stick in the fire. Later you go to pick up the stick and the end out of the fire is very hot. How did heat transfer from the fire to the end of the roasting stick? (radiation, convection, or conduction) Explain using diagrams and the particle theory of matter Page 229. 3 marks

4.) Convection currents occur in fluids (gases and liquids). Complete the steps that explain why warm air rises

1.) particle of air \_\_\_\_\_ energy

2.) Space between the particles of air \_\_\_\_\_.

3.) The heated air becomes less \_\_\_\_\_ than the surrounding air

4.) The less dense air rises and the denser \_\_\_\_\_ air sinks down to take the rising warmer air's place.

5.) This is an example of a \_\_\_\_\_.

5.) Define the term "energy source". 1 mark

6.) **List and define** four common types of energy sources. Give an example of each type. ( 8 marks) page 232-233

a.) Mechanical:

b.)

c.)

d.)

7.) List five features of all energy transfer systems: Page 232 - 233