

Name: \_\_\_\_\_ Class: \_\_\_\_\_

### Heat Transfer Web Quest

**Directions:** Click on the corresponding website link and read the page to answer each set of questions.

**PART ONE:** HEAT TRANSFER – Go to the website below.

<http://www.wisc-online.com/Objects/ViewObject.aspx?ID=SCE304> Scroll down and click on the begin button.

1. Conduction is the transfer of heat between \_\_\_\_\_.

2. Why does the hand need an oven mitt in order to pick up the pot from the stove?

\_\_\_\_\_

3. List four good conductors and four poor conductors:

Good

Poor

1. \_\_\_\_\_ 1. \_\_\_\_\_

2. \_\_\_\_\_ 2. \_\_\_\_\_

3. \_\_\_\_\_ 3. \_\_\_\_\_

4. \_\_\_\_\_ 4. \_\_\_\_\_

4. Convection is the up and down movement of \_\_\_\_\_ and \_\_\_\_\_ caused by heat transfer.

5. What happens to the air as the stove heats it?

\_\_\_\_\_

6. What happens to the air as it gets farther from the heat source?

\_\_\_\_\_

7. List four examples of convection:

A. \_\_\_\_\_

B. \_\_\_\_\_

C. \_\_\_\_\_

D. \_\_\_\_\_

8. When \_\_\_\_\_ travel through space it is called radiation.

9. What happens to the temperature of the house as the sun's radiant energy touches it?

\_\_\_\_\_

10. List three examples of radiation:

A. \_\_\_\_\_

B. \_\_\_\_\_

C. \_\_\_\_\_

**PART TWO:**

11. Which picture is showing conduction, radiation, and convection?



A. \_\_\_\_\_ B. \_\_\_\_\_ C. \_\_\_\_\_

**PART THREE:**

Look at the website page below for ideas on how heat transfer is seen in our everyday lives.

[http://www.lowes.com/cd\\_Understand+Heat+Transfer+and+Insulation\\_974680410](http://www.lowes.com/cd_Understand+Heat+Transfer+and+Insulation_974680410)

12. After you read this web page, list 5 ways in which you can protect your home from escaping heat or from too much heat coming in during the summer.

A. \_\_\_\_\_

B. \_\_\_\_\_

C. \_\_\_\_\_

D. \_\_\_\_\_

E. \_\_\_\_\_

**PART FOUR:** Go to this website:

<http://www.cpsenergysavers.com/start-saving/quick-tips/heating-and-cooling-efficiency>

List at least 10 ways in which you can save heat energy in different rooms in your home. Explain how each way can actually save heat energy.

<b>WAYS TO SAVE HEAT ENERGY</b>	<b>HOW CAN THIS METHOD SAVE HEAT ENERGY?</b>
A. _____	_____
B. _____	_____
C. _____	_____
D. _____	_____
E. _____	_____
F. _____	_____
G. _____	_____
H. _____	_____
I. _____	_____
J. _____	_____