

Webquest: Thermal Energy and Heat!

Name _____

Instructions: Use the links to answer the questions below...

LINK 1: Class Zone – Kinetic Energy and Temperature

http://www.classzone.com/books/ml_science_share/vis_sim/mem05_pg101_kintheory/mem05_pg101_kintheory.html

1. Which two factors affect the kinetic energy of the particles?
2. What happens to the speed of the particles if the temperature is increased?
3. Click Next in the purple box. What happens to the speed of the particles if the mass is increased?

LINK 2: Conduction, Convection, and Radiation

<http://www.srh.weather.gov/srh/jetstream/atmos/heat.htm> 4. What is Conduction? What is an example of conduction?

5. What is Convection? What is an example of convection?
6. What is Radiation? What is an example of radiation?

LINK 3: Thermal Energy Transfer and Blacksmithing

http://www.harcourtschool.com/activity/science_up_close/615/deploy/interface.html

7. Fill in the blanks: The real secret to blacksmithing is understanding the transfer of _____.
8. Click the right arrow. What are insulators?
9. Select the right word to complete the sentence: A blacksmith relies on (radiation, convection, or conduction) to transfer the right amount of heat to the metal.
10. Click the right arrow. When a blacksmith is working with hot metal, what places does the thermal energy go?
11. Click the right arrow to “try” twisting metal!

LINK 4: Conduction, Convection, and Radiation – Try it!

http://www.classzone.com/books/ml_science_share/vis_sim/mem05_pg119_heat/mem05_pg119_heat.html

12. Click and drag the pictures into the correct category. Copy the chart on the back of this paper and either draw or describe the pictures that belong in each box.