

# Station 1

**Materials:** Pressure Cooker, metal, plastic, wood spoon, oven mitt

Step 1: Write a claim on your lab sheet for the type of energy transfer, and which spoon you think will have the largest increase in thermal energy when put in warm water.

Step 2: Set a two-minute timer on a stopwatch.

Step 3: Place the metal, plastic, and wooden spoon into the pressure cooker with warm water.

Step 4: After the two minutes is up, use the oven mitt to remove the spoons and place on the paper towel at the station.

Step 5: Hold the end of each spoon, and observe which spoon has the warmest temperature.

Step 6: Write your results on your lab sheet. Provide your evidence and reasoning for your claim based upon your observations and information you've gathered about thermal energy transfer.

# Station 2

**Materials: Pot of water, pepper seasoning, and hot plate**

Step 1: Write a claim on your lab sheet for how thermal energy transfers when you sprinkle pepper seasoning into heated water.

Step 2: Sprinkle the pepper into the heated water.

Step 3: Take 30 seconds to observe the movement of the pepper.

Step 4: Write your results on your lab sheet. Provide your evidence and reasoning for your claim about the pepper based upon your observations and information you've gathered about thermal energy transfer.

# Station 3

**Materials: Space heater, painters' tape**

Step 1: Write a claim on how thermal energy is transferred from a space heater to the room environment.

Step 2: Stand 3 feet away from the space heater.

Step 3: Take 30 seconds to observe what you feel from the space heater.

Step 4: Write your results on your lab sheet. Provide your evidence and reasoning for your claim about thermal energy transfer with the space heater based upon your observations and information you've gathered about thermal energy transfer.

# Station 4

**Materials: Hot plate, pot of water, ice, paper towels**

Step 1: Write a claim on how thermal energy is transferred from a pot of warm water to ice in the water.

Step 2: Place the ice in the water.

Step 3: Set a 60 second timer and place the ice in the water.

Step 4: Make your observations.

Step 5: Write your results on your lab sheet. Provide your evidence and reasoning for your claim about thermal energy transfer with the pot of warm water and ice based upon your observations and information you've gathered about thermal energy transfer.

# Station 5

**Materials: Iron, bottle of water, shirt**

Step 1: Write a claim on how thermal energy is transferred from water in the iron, and the iron ironing the shirt.

Step 2: Plug the iron up and turn the setting onto high. Pour the water into the iron. Give it 30 seconds to heat up.

Step 3: Iron the shirt and observe what happens to the shirt.

Step 4: Write your results on your lab sheet. Provide your evidence and reasoning for your claim about thermal energy transfer with the water in the iron and ironing the shirt based upon your observations and information you've gathered about thermal energy transfer.

# Station 6

## **Materials: Charger chord**

Step 1: Write a claim on how thermal energy is transferred from a charger chord to an electronic device.

Step 2: Plug the charger up and make your observations.

Step 3: Write your results on your lab sheet. Provide your evidence and reasoning for your claim about thermal energy transfer through the charging chord based upon your observations and information you've gathered about thermal energy transfer.