

# **CERT Educational Series**

## 3<sup>rd</sup> Grade Heat Transfer

# **Student Lab Answer Sheet**

Name	Date:

### **Vocabulary Words**

<u>Thermometer</u> –Measures temperature

Temperature -A measure of how warm or cold something is.

Temperature is measured in degrees and is written as °C (Celsius) or °F (Fahrenheit).

Conductor – a material that DOES transfer heat.

<u>Insulator</u> – a material that DOES NOT transfer heat.

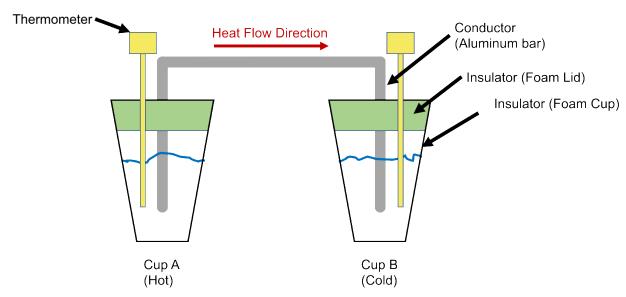
Heat Flow – the direction that heat is flowing.

### **Experiment Data Collection**

READING	Cup A Hot °F	Cup B Cold °F
1		
2		
3		
4		
5		
6		

Use your vocabulary words to fill in the blanks in the picture below. Draw an arrow showing the direction of heat flow.

<u>Word Bank:</u> metal bar(Conductor), cup(insulator), thermometer, foam lid(insulator), heat flow (Direction)



#### Questions

1. How did the metal bar feel before the experiment?

Answer: The metal bar felt the same temperature on both ends

2. How did the metal bar feel <u>during</u> the experiment?

Answer: The metal bar felt hot near the A Cup (Hot Water) at the start of the experiment.

The metal bar got warmer in the middle between the cups during the experiment.

At the end of the experiment, the metal bar next to the B Cup (Cold Water) felt warmer.

3. What happened to the temperatures of the water?

The hot water temperature went **Down** 

The cold water temperature went *Up* 

4. In which direction did the heat flow?

From HOT to COLD