Conduction Activity:

1. What is the temperature of the water at room temperature?
2. What is the temperature after we add the ice?
3. When you add ice to warm water, does the warm water melt the ice or does the ice make the water colder?
4. Why are your hands cold when trying to melt the ice cube?
5. Does the ice make your hands cold or did the heat from their hands cause the ice to melt?
6. How does this experience relate back to the initial question about the ice and water?

Convection Activity:

1. Temperature of the:

Room Temperature Water Ice Water Hot Water

1. What happened when we added the 30 mL of ice water to the room temperature water?
2. What happened when we added the 30 mL of hot water to the room temperature water?
3. What differences did you see between how the cold water and hot water reacted when placed into the room temperature water?

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2. What happened when we added the 30 mL of hot water to the room temperature water?
3. What differences did you see between how the cold water and hot water reacted when placed into the room temperature water?

Convection Activity Procedure:

1. Fill one of your cups about halfway with room temperature (TAP) water.
2. Measure the temperature of the water using your thermometer and record the value (DON’T FORGET UNITS!!!) under #1 of your answer sheet.
3. Gather a small amount of HOT water from your teacher in your second. BE CAREFUL NOT TO SPILL AND BURN YOURSELF OR YOUR TEAMMATES!
4. Gather a small amount of COLD water from your teacher in your last cup.
5. Measure the temperature of each and record the value (DON’T FORGET UNITS!!!) under #1 of your answer sheet.
6. Using your pipet, slowly add in 30 mL of the COLD water to the bottom of your room temperature (FIRST) cup. YOU MUST DO THIS QUICKLY and PRECISELY. You will want to pipet directly into the BOTTOM of the cup.
7. Using your pipet, slowly add in 30 mL of the WARM water to the top of your room temperature (FIRST) cup. YOU MUST DO THIS QUICKLY and PRECISELY. You will want to pipet directly into the TOP of the cup.
8. Observe and record all data into #2 – 4 on your answer sheet.

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