**Hot and Cold Water Investigation**

**Part 1**

**Objectives**:

We compare the temperature of three cups of water, using our fingers as gauges. We realize that a standard is needed, as well as a more accurate device to measure temperature. We are introduced to the tool used for measuring temperature, the ***thermometer***.

**Question:**

What is the best way to measure temperature?

**Hypothesis**:

I think… (Read the Question, and then write what you think the best, more efficient way is to measure temperature.)

**Experiment**

To prove my hypothesis, I will work with my group to test how hot, warm, or cold different cups of water are using an index finger as a gauge.

**Materials**

|  |  |
| --- | --- |
| * 1 tray | * 1 roll of masking tape |
| * 3 plastic cups | * 1 basin |
| * 1 Permanent marker | * 1 shammy |
| * 1 pair of scissors | * 1 ruler (each person) |

**Procedure Pt 1 (Hot and Cold Water Pt 1)**

1. Get the investigation materials (see Materials list).
2. Use the masking tape to label the 3 plastic cubs with ***A***, ***B***, and ***C.***
3. Place the cups on the tray with the labels facing forward.
4. Create a data chart to document the investigation.
5. Fill each cup with warm, hot or cold water from the same labeled containers.
6. Each person (one at time) places their **right** index finger into each cup to gauge the water temperature.
7. Document the water temperature for each cup (for each person) on the data chart.
8. Each person (one at time) places their **left** index finger into each cup to gauge the water temperature.
9. Document the water temperature for each cup (for each person) on the data chart.
10. After the investigation is completed, pour the water into the basin.
11. Use the shammy cloth to absorb any spills.