



*Dear Family,*

**In my class today** we experimented with hot and cold using a thermometer.

**Did You Know?**

- Thermometers measure temperature by using a liquid material, either mercury or ethyl alcohol, that is sensitive to changes in temperature. Most thermometers for domestic use contain ethyl alcohol that is colored with red dye. The part of the thermometer containing the red liquid is in a narrow tube with a bulb at the bottom. The red line on the thermometer changes when it is heated or cooled. When a thermometer is heated, the red liquid inside the narrow tube expands, causing the liquid to rise, or go up, in the tube. When the thermometer is cooled, the red liquid inside the tube contracts, causing the liquid to go down inside the tube.
- Temperature is typically measured by degrees Fahrenheit or degrees Celsius. A Fahrenheit temperature is based on the temperature of water freezing being at 32 degrees. Temperatures measured in degrees Celsius are based on the water freezing mark being 0 degrees. We feel temperature through our sense of touch. Most people feel comfortable around 70 degrees Fahrenheit.

**Ask Your Child:**

- Tell me what a thermometer is used for.
- What makes the red thermometer line move?
- Where else did you test the thermometers?

**Activities To Do With Your Child:**

- If you have a thermometer outside your home, help your child read the temperature and then go outside to feel how cool or how warm it feels. Maybe you have a thermometer in your refrigerator; help your child read it, and ask him or her if the refrigerator is cooler or warmer than your home. Feel a spot where the Sun is shining and compare it to a spot where there is no Sun. How do the two spots compare?

**Vocabulary To Use With Your Child:** temperature, thermometer, ethyl alcohol, cool, warm, prediction