

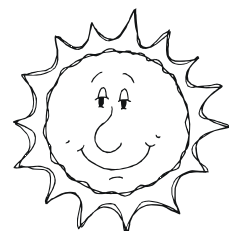
MORE TEMPERATURE IDEAS
From Shar Levine, The Science Lady!
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THE CORRECT WAY TO TELL TEMPERATURE :

(ALWAYS ASK AN ADULT FOR HELP BEFORE YOU USE A THERMOMETER)

1. Do not hold the thermometer by the "bulb" at the end or the sensor end. The heat from your fingers will change the temperature.
2. Always handle a glass thermometer very carefully as they break easily.
3. If you are using a glass thermometer - hold the top of the liquid level or even with your eyes. Keep the thermometer straight up and down and not at an angle. Rotate the thermometer to get the best view of the liquid inside.
4. If you are using a heat sensitive material such as a fever strip, leave the strip on the person's forehead and read the temperature without removing the strip.
5. When measuring the air temperature your thermometer should not be placed in direct sunlight.
6. Choose a place with a bit of shade

WHY DO SOME DAYS SEEM HOTTER THAN OTHERS, EVEN WHEN THE TEMPERATURE ON THE THERMOMETER IS THE SAME?



That was a long question, now wasn't it? If you live in certain places, you may have experienced some hot and humid summer days. Humid days make your shirt stick to your back, and they seem to drain all the energy from your body. But what is humidity?

TRY THIS:

Stretch your fingers out and feel the air. Does the air around you feel dry or wet? Unless you are in a shower, the air probably feels dry, but is it? A psychrometer is an instrument which measures the relative humidity in the air. Let's try building a simple psychrometer.

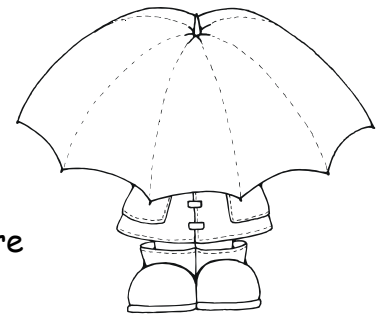
YOU WILL NEED:

- 2 thermometers
- rubber band
- glass
- room temperature water
- paper towel
- pen and paper
- adult helper

WHAT TO DO:

1. Have an adult help you read the thermometers. Make sure the temperature on the thermometers is the same.

2. Carefully wrap the paper towel around the bulb part of the thermometer. Be very gentle as thermometers are made of glass and are easily broken. Twist a rubber band around the towel to hold it in place.



3. Dip the end of the paper towel into the water and leave it on the table next to the unwrapped thermometer.

4. Have an adult help you check the temperature on the thermometers after 5 minutes, and 10 minutes.

5. Have the adult help you record the temperature on both thermometers. What is the temperature of the dry bulb? What is the temperature of the wet one? Subtract the smaller number from the bigger one. Now have an adult help you find the relative humidity by reading the table below. You need to find the column with the temperature difference. Go down this column until you come to the dry bulb temperature. The number in the box is the "relative humidity".

WHAT HAPPENED:

Even though air doesn't have any hands, it can hold water. There's even a word to describe the amount of water that's in the air- it's humidity. Relative humidity is the amount of water the air is holding compared to the very most water it can hold at a certain temperature. Any more water in the air and you would have rain or snow. When the humidity is high and it is warm outside it feels even warmer. When the humidity is high in cold weather it can feel even colder than usual.