Temperature and Thermometers.



We can feel how hot or cold something is. However, sometimes things are just too hot or cold for us to feel safely. At other times we need to know **exactly** how hot or cold something is.

When we need to measure temperature correctly we need to use an instrument called a thermometer. This measures temperature in degrees Celsius [sometimes called centigrade] or degrees Fahrenheit.

There are different types of thermometers for different situations. A medical thermometer, for example, needs to be very accurate. It measures in fractions of degrees. When we are ill, even tiny changes in temperature are important.

Some thermometers use a liquid that moves up a very fine glass tube. Most room thermometers, and outdoor thermometers are like this. The liquid is either mercury [which is poisonous] or coloured alcohol. As liquids get warmer they expand [get bigger], and move up the tube. Water expands too, but not as much as alcohol and mercury.

Thermometers that might be used by small children are not made of glass. They use a digital display which lights up the temperature. Inside the displays are chemicals that change colour according to the temperature.

Read the information above, then answer these questions in full sentences in your books.

- 1. What do we use to measure temperature?
- 2. What units do thermometers measure in?
- 3. Why are there so many different kinds of thermometer?
- 4. How do digital thermometers work?
- 5. Why do medical thermometers only measure between 30 40 degrees Celsius?
- 6. What happens to liquids as they get warmer? How is this useful in thermometers?
- 7. Where do you think the warmest place in school is?
- 8. Where do you think it will be coolest in school?
- 9. How would you find out if you are right?
- 10. What is the temperature : a] when ice forms? b] when water boils?

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warmer they expand [get bigger], and move up the tube. Water expands too, but not as much as alcohol and mercury.

Thermometers that might be used by small children are not made of glass. They use a digital display which lights up the temperature. Inside the displays are chemicals that change colour according to the temperature.

Read the information above, then write these sentences, putting in the missing endings:

1.	We use thermometers to measure				
2.	Thermometers measure in degrees or				
3.	There are different types of thermometers because				
4.	Digital thermometers work because they contain				
5.	Medical thermometers measure fractions of degrees because				
6.	. When liquids get warmer they				
7.	. I think the warmest place is school would be				
8.	I think the coolest place in school is				
9.	I would test my ideas by				
10.	Ice forms at Water boils when the temperature is				

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Read the information above, then copy these sentences into your books. Fill in the missing words.						
We use thermometers to temperature.						
is measured in degrees Celsius or Fahrenheit.						
Some thermometers have tubes.						
thermometers have digital displays.						
Digital thermometers are to use with small children.						
The warmest place in school would be						
The coolest place in school would be						
Some	safest	measure	Temperature	olass		