

Thermal Energy and Heat

Thermometers





Thermometers



There are many different types of , and they all have a specific use or function:



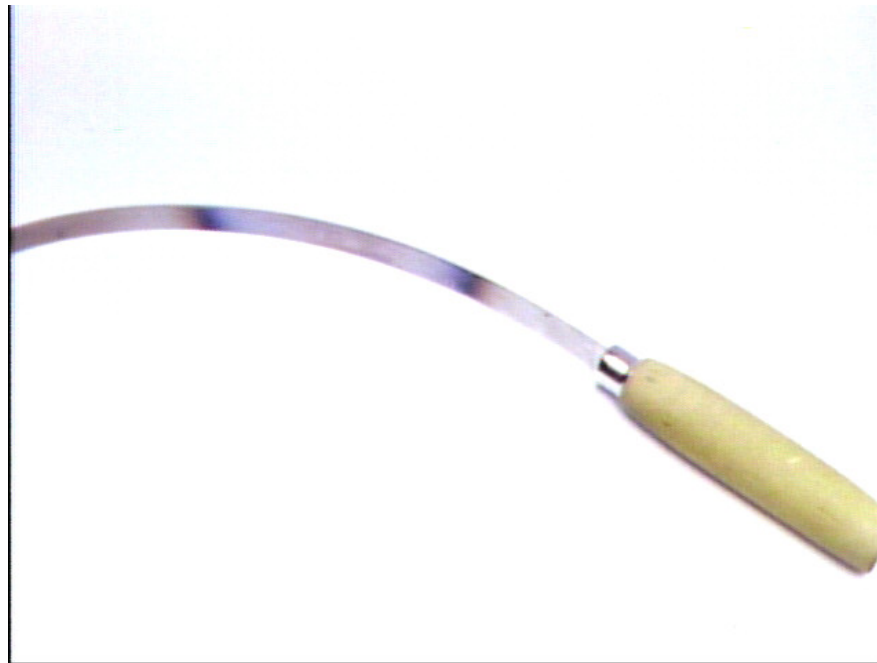


Thermocouple – a thermometer that uses electricity to measure temperature. It is used to measure very high temperatures





Bimetallic Strip – two different metals bonded together that expand and contract in different amounts.



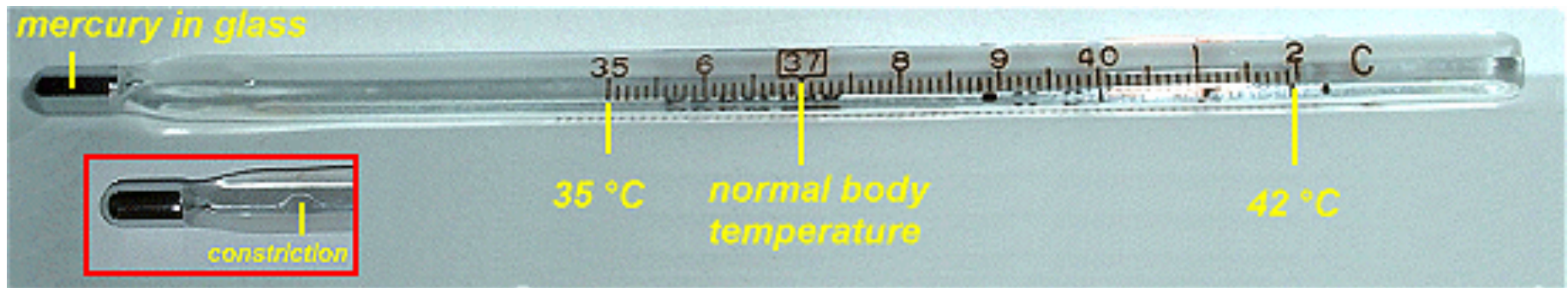


Bimetallic Strip – two different metals bonded together that expand and contract in different amounts. They are used in thermostats to control room temperature





Clinical thermometer – used to measure human body temperatures – they have limited scales so they are more accurate and you can tell your exact temperature.



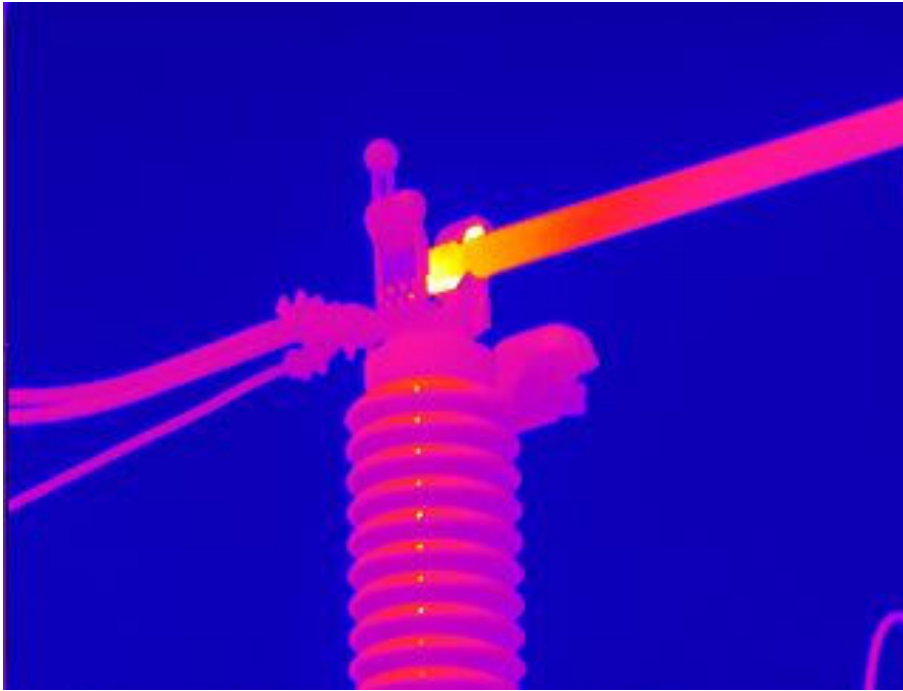
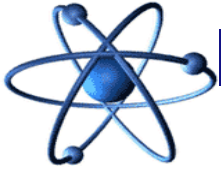


They also have new, computerized thermometers and chemical/heat thermometers that work in seconds.

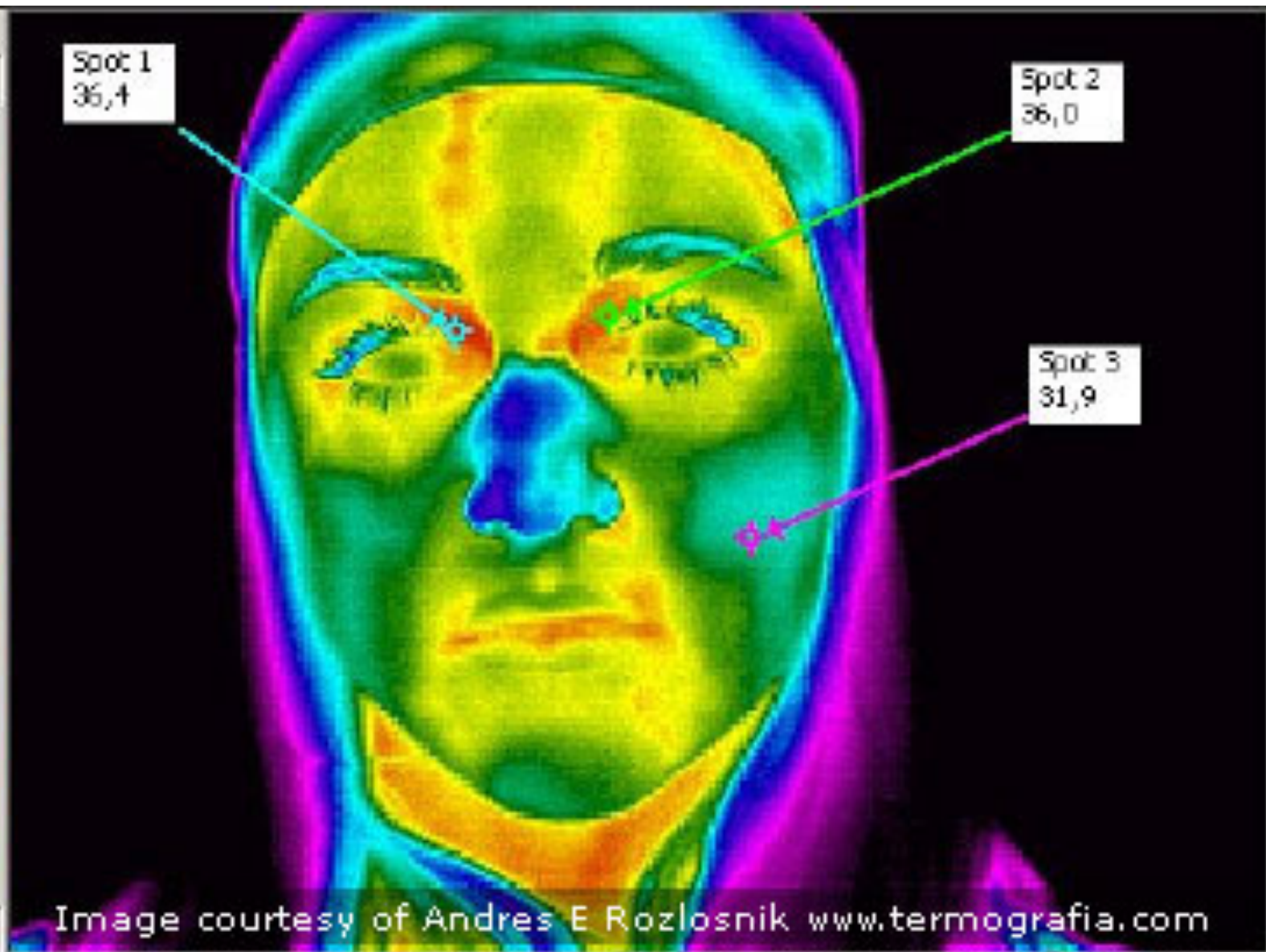
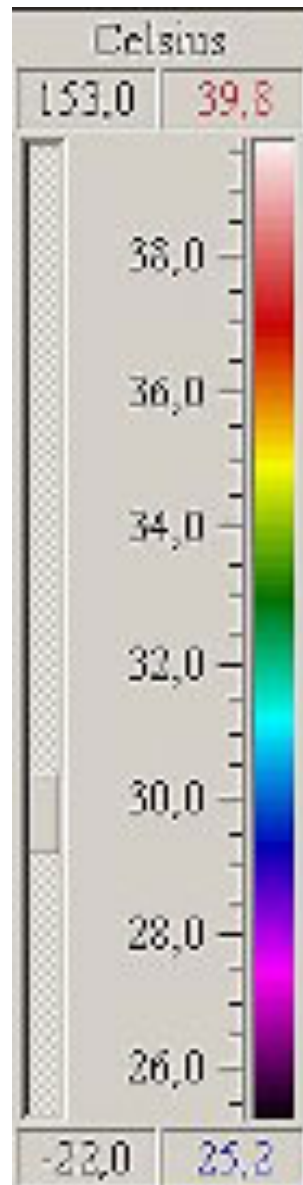




Infrared thermogram
is a special camera
that records different
temperatures as
different colours.



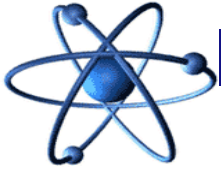
They record how much radiation is given off by an object. They “see” energy as different colours





Laboratory Thermometer – A thermometer that ranges from minus 20 to 110 degrees Celsius which is a useful range for many different experiments. They are usually mercury or alcohol filled.





■ Choose the appropriate thermometer to measure the temperature of the following things:

- your pet dog**
- melted steel**
- heat loss from a house**
- your room temperature**
- boiling water**