



# Temperature in numbers

**Temperature is a measure of the warmth or coldness of an object as expressed against a comparative scale. Lots of different objects have different temperatures.**

On Earth there are plenty of examples of the variety of temperatures that can be found. However, the core body temperature remains at thirty seven degrees Celsius.

When all heat is removed that is the coldest possible temperature and is called absolute zero. This is recorded as minus two hundred and seventy-three degrees Celsius. But even before this temperature is reached life ceases to exist. The lowest recorded temperature where bacteria has been found is at minus two hundred and sixty degrees Celsius.

Interestingly the temperature on the surface of Pluto - now a dwarf planet - is minus two hundred and forty. This means that theoretically life can exist there although we humans couldn't survive in such conditions.

The highest recorded temperature on Earth was in Libya (outside temperature) and was fifty-eight degrees Celsius. The average summer day in Ireland sees temperatures in and around the early twenty degrees Celsius, imagine trying to go about your day at fifty-eight degrees Celsius.

The most important compound, water, boils at one hundred degrees Celsius and freezes at zero degrees Celsius. Other compounds and mixtures behave differently i.e. not everything boils at one hundred degrees Celsius or freezes at zero.

## Questions

- ① State the temperature for absolute zero in numbers
- ② List the key temperatures mentioned in the article from lowest to highest as numbers. Say what they correspond to.
- ③ Explain why it is possible for life to exist on Pluto.
- ④ How is temperature measured?
- ⑤ Explain the importance of including a unit when stating measurement such as temperature.