

# Master Measuring and Comparing Temperatures

## Rationale

In this step, pupils are introduced to measuring temperature in degrees Celsius. They may have looked at simple thermometers and temperatures in Science in Year 1 and will build on this knowledge to read different thermometer scales and record temperatures using '°C'.

Pupils will understand that the temperature is 'higher' when it is warmer and 'lower' when it is colder. They will develop their learning by comparing two given temperatures.



## Key Stem Sentences

- The temperature is \_\_\_\_°C.
- When the thermometer reading is higher / lower, the temperature is warmer / colder.
- \_\_\_\_ is warmer / colder than \_\_\_\_



## Key Vocabulary

- measure
- temperature / °C
- higher / warmer
- lower / colder



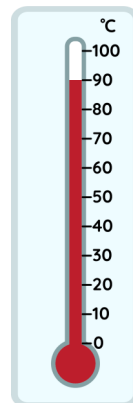
## Common Errors or Misconceptions

- Pupils may misread the scale.
- Pupils may have difficulty understanding the concept of a higher temperature being warmer and vice-versa.



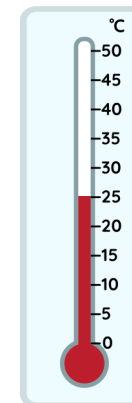
## Key Representations

### Thermometers



The temperature is 90°C.

90°C is warmer than 25°C.



The temperature is 25°C.

25°C is colder than 90°C.

When the thermometer reading is higher, the temperature is warmer.



## Pupils will FLOURISH if they can...

- accurately measure temperature to the nearest °C.
- understand that temperature is higher when it is warmer and lower when it is colder.
- compare temperatures to identify whether one is warmer than, colder than or equal to another.
- explain their understanding using written sentences and mathematical proof.

