

Y4 Thermometers Data Loggers

KS2 Y4 Science · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

The liquid stops 2 small marks above 20. Each small mark is 1 °C. What is the temperature?

Step 1 · Find the nearest number below the liquid

20 °C

Step 2 · Count the small marks above it

2 marks = 2 °C

Step 3 · Add them

20 + 2 = 22

Answer: 22 °C

Check: Always work out what one small mark is worth first.

2. Now try one with the steps

On a different thermometer, the numbers go 0, 10, 20, with 5 small spaces between each. What is one small mark worth?

Step 1 · How far from 0 to 10?

Step 2 · How many spaces?

Step 3 · Share it out

Answer:

3. Practice

Have a go at each one. There is space underneath to work it out.

1. What does a thermometer measure?

2. What does °C stand for?

3. At what temperature does water freeze?

4. At what temperature does water boil?

5. Which is colder: 5°C or -5°C ?

6. A healthy person's body temperature is about how many $^{\circ}\text{C}$?

7. Name a machine that can record temperature automatically every 10 minutes.

8. Where should your eyes be when you read a thermometer?

9. The liquid is 4 small marks above 10. Each small mark is 1°C . What is the reading in $^{\circ}\text{C}$?

10. The numbers on a scale are 0, 10, 20 and there are 5 spaces between each. What is each small mark worth in $^{\circ}\text{C}$?

11. Using the scale in question 10, the liquid is 3 small marks above 20. What is the reading in $^{\circ}\text{C}$?

12. The playground was 14°C at 8 am and 23°C at 1 pm. How many degrees warmer was it at 1 pm?

13. It was 2°C at night and fell by 5 degrees. What was the new temperature in $^{\circ}\text{C}$?

14. Give TWO reasons why a data logger is useful.

4. Before you hand it in

Assuming every small mark is worth 1 °C.

Find two numbers, count the spaces between, and work out what one space is worth.

Reading the thermometer from above or at an angle.

Get your eyes level with the top of the liquid.

Thinking -8 °C is warmer than -2 °C because 8 is bigger.

Picture a number line: -8 is further left (colder) than -2.

Holding the thermometer bulb in your hand while measuring water.

Hold it by the top, keep the bulb in what you are measuring, and wait for the liquid to stop moving.