time measurement S second



All nations on Earth have agreed to measure things using the International System of Units (SI). **The second** in this system is used to measure how long something lasts. There are 60 seconds in a minute. An international time signal can be used to set clocks to the right time.



Other time units

1 000 microseconds = 1 millisecond 1 000 milliseconds = 1 second

60 seconds = 1 minute

60 minutes = 1 hour

24 hours = 1 day 7 days = 1 week

How do we measure time?

Clocks, watches and timers are used to measure time.

A clock is made of two parts – something which ticks – called an 'oscillator' – and something which counts the ticks.

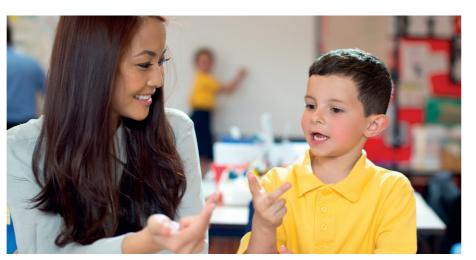
In old-fashioned clocks, a pendulum created the ticks, and moved hands around a clock face to show the time.

Challenge 1:

Put these clocks in order of accuracy, most to least.



Sand timer



Counting seconds out loud



Your school clock



The time on a mobile phone

Challenge 2:

How long do you think the following activities will take? First guess, then measure.

Say 10 times table

Write your name 20 times

Do 5 star jumps

Eat an apple

Challenge 3:

Find which of your friends is closest to guessing a minute.

You could do this in pairs – one person times 1 minute. The other person says "Stop" when they think a minute is up without seeing the timer.

Did you know?

NPL is building clocks that will be accurate to 1 second in the lifetime of the universe (14 billion years).



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