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).

NPL

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Challenge 1 answers: (Probably most to least accurate) mobile phone, school clock, sand timer, counting.

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