Time - What is time?

Fact
- Time is the measurement of the duration in which things happen and can be measured in standard seconds, minutes, hours, days, months, years, decades, centuries and millennia.
- Before clocks and watches were invented people used to plan their day by the rising and setting of the sun. We always use sunrise and sunset as our most obvious reference points of the day.
- Sundials were invented over 2000 years ago and were the first instruments used to tell the time. They even had pocket sundials.
- Before calendars were invented they used the changing seasons, cycles of the moon and the growth of plants to plan by.

Do you know
- After the invention of the sundial came the hourglass – it couldn’t tell you the time of day but it could tell you when a period of time was up by the sand pouring out of the top glass into the bottom one.
- By the time you say “one hundred and one” one second of time has passed.

Experiments you can do
What do you need to time at home? Maybe how long it takes to cook an egg or instant noodles. Try making your own simple hourglass to tell the time.
What you need:
1 small drink bottle cut in half
1 small drink bottle cut just where the neck widens
some sand
What you do:
Turn the top half of the first bottle upside down and insert it in the base of the second drink bottle and pour some sand through it. How can you make the sand go slower? Once you have slowed the sand use a watch to time how long a handful of sand takes to pass through the inverted bottleneck into the bottle base. Test it repeatedly to make sure the same amount of sand takes about the same time to pass through your hourglass.
- Can you explain what happens to time when we start daylight saving in late spring?

Other Investigations
How old are you in hours?
Multiply how old you are by 365 for the number of days in the year. Multiply that answer by 24 for the number of hours in a day and you will get your answer. For example if you are 9 go:
9 x 365 = 3,285
3,285 x 24 = 78,840
So if you are 9 years old you are 78,840 hours old

You know how long a year is – 12 months, right? Find out how long a decade, a century and a millennium are.

Jokes
Why did the person throw a clock across the room? They wanted to make time fly.