



## National Curriculum links

Pupils should:

- Compare durations of events [for example to calculate the time taken by particular events or tasks]
- Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours

## Resources/equipment

- Accurate timers
- 'Just a second' by Steve Jenkins or similar
- Long strips of paper

## Key Vocabulary

- second, minute, hour, day, week, year
- time interval
- duration
- units of measurement
- timeline



## Video link



## Teacher knowledge

- The second doesn't relate to any cycle in nature - it is a human invention, which the Babylonians came up with about 4,000 years ago (although they had no way to measure it). The second is the shortest interval of time we regularly use in our everyday lives. In one second...a black mamba can slither 7 metres, a humpback whale's song travels 1,550 metres through the water and light travels 186,000 miles from the sun through space
- The 60 seconds in a minute, 60 minutes in an hour are based on the Babylonian counting system. In one minute - the moon travels 61 km in its orbit around the Earth, a very chilly crocodile's heart will beat just once and around the world, 59,000 barrels of oil are used (almost 15,000 in the USA alone)
- The hour was also created by humans. The hour we use today comes from the Egyptians. They began dividing the day and night into 12 parts about 4,000 years ago. In one hour...an adult takes about 900 breaths, 3,402 kg of space dust falls to Earth and a mole can dig a tunnel 6 metres long

## Suggested practical tasks

- Drawing on their maths knowledge, review which units of measurement for time the children are aware of. Can they sequence them from the shortest to longest duration?
- Ask the children to think about duration. It can be tricky to estimate how much time has gone by. Ask the children to count a minute in their heads with their eyes closed, and stand up when they think this time has elapsed. Were they right? Did they all think the same?
- Discuss why we need the ability to time things so accurately today. What sort of jobs need this technology?
- Ask children to time how long it takes to do some simple tasks such as write their name or do 10 star jumps. They should estimate the time they think it will take first. Were they right?
- Explore some interesting facts relating to different durations of time. We used some from the book 'Just a second' by Steve Jenkins but you could collect your own facts through internet research. You could create a time display in different sections which show some of the class favourites
- Create a timeline exploring a year. Link to the seasons. Discuss leap years and link to learning about Earth and space. Alternatively, create or add to an existing class timeline showing the different periods of history over time. Reinforce with the children how little time humans have inhabited the Earth compared to when the big bang happened

## Talk time

- What is the shortest amount of time you know? What is the longest? Which units of measurement do we use in our everyday lives? How do we measure them?
- How many seconds are there in a minute? Minutes in an hour? Hours in a day? Days in a week? Weeks in a month? Months in a year? Does this ever change?
- Has how we measure time changed as we look back through history?