

## Science Knowledge organiser: Why does it get dark earlier in winter? (Autumn 2)

### Scientific enquiry:

#### Working Scientifically

- Ask simple questions and recognise that they can be answered in different ways.
- Use simple equipment to observe closely.
- Perform simple test.
- Identify and classify.
- Use his/her observations and ideas to suggest answers to questions.
- Gather and record data to help in answering questions.

#### Knowledge

- Observe changes across the four seasons.
- Observe and describe weather associated with the seasons and how day length varies.

### Vocabulary

dark	When there is no light source
shadow	When a light source is blocked
Sun	star at the centre of the solar system
Earth	Our planet!
Moon	Natural rock that orbit the earth, no natural light source
Star	Glowing ball of hot gas
orbit	Circles around
nocturnal	Sleep in the day time, awake at night
hibernate	To sleep all winter

### Facts

- It is dark when there is no light source
- Shadows are created when a light source is blocked. e.g. from the sun or a torch
- The sun moves across the sky throughout the day
- The position of the sun in the sky changes throughout the year depending on the season
- The earth rotates around the sun.
- The moon rotates around the earth.
- The earth rotating creates days and nights.
- The length of the day changes depending on the position of the earth to the sun.
- Some animals are nocturnal – bats, owls, hedgehogs, badgers
- Some animals hibernate in winter – bears, hedgehogs, bees, snails
- The moon doesn't have its own light source
- A star is a glowing ball of hot gas
- The sun is a star, it is at the centre of our solar system.

### Images



moon



sun



Earth



shadow



hibernating bear



nocturnal animal