



Objectives and Sticky Knowledge



Prior Knowledge Recap:

- The main stages in a life cycle for animals, (including humans), are birth, growth, reproduction and death
- Animals can be amphibian, reptile, mammal, fish or a bird
- Animals can be carnivore, herbivore or an omnivore
- A plant has petals, a stem, leaves and roots
- Seeds and bulbs grow into plants and they need water, light and suitable temperature to grow and stay healthy

Land Objectives and Sticky Knowledge:

Know the life cycle of different living things e.g. mammal, amphibian, insect and bird and know the differences between these life cycles.	Know the process of reproduction in plants	Know the process of reproduction in animals
<p>1. Mammals develop inside their mothers and are dependent on their parents until they are old enough to look after themselves.</p> <p>2. Amphibians such as frogs are laid in eggs then, once hatched, go through many changes until they become an adult.</p> <p>3. Birds are hatched from eggs and are looked after by their parents until they are able to live independently.</p>	<p>1. Most plants contain both the male sex stamen ovule cell (pollen) and female sex cell style (ovules), but most plants can't fertilise themselves. Wind and insects help to transfer pollen to a different plant.</p> <p>2. The pollen from the stamen of one plant is transferred to the stigma of another.</p> <p>3. The pollen then travels down a tube through the style and fuses with an ovule.</p> <p>4. Some plants, such as strawberry plants, potatoes, spider plants and daffodils use asexual reproduction to create a new plant. They are identical to the parent plant.</p>	<p>1. Mammals use sexual reproduction to produce their offspring.</p> <p>2. The male sex cell, called the sperm, fertilises the female sex cells.</p> <p>3. The fertilised cell divides into different cells and will form a baby with a beating heart.</p> <p>4. The baby will grow inside the female until the end of the gestation period when the baby is born.</p>

Links with 'Sustainability' Golden Thread:

Links with CST and CKA Values Crown:

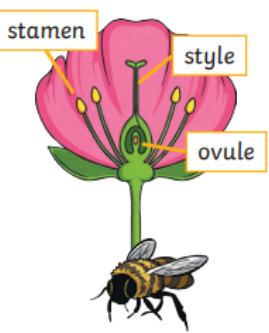
Year 5 Living things and their habitat Knowledge Organiser

Key Vocabulary

asexual reproduction	One parent is needed to create an offspring, which is an exact copy of the parent.
fertilise	The action of fusing the male and female sex cells in order to develop an egg.
gestation	The length of a pregnancy.
life cycle	The journey of changes that take place throughout the life of a living thing including birth, growing up and reproduction.
metamorphosis	An abrupt and obvious change in the structure of an animal's body and their behaviour.
pollination	The transfer of pollen to a stigma to allow fertilisation.
reproduction	The process of new living things being made.
sexual reproduction	Two parents are needed to make offspring which are similar but not identical to either parent.

Plants

Most plants contain both the male sex cell (pollen) and female sex cell (ovules), but most plants can't fertilise themselves. Wind and insects help to transfer pollen to a different plant. The pollen from the stamen of one plant is transferred to the stigma of another. The pollen then travels down a tube through the style and fuses with an ovule.



Some plants, such as strawberry plants, potatoes, spider plants and daffodils use asexual reproduction to create a new plant. They are identical to the parent plant.

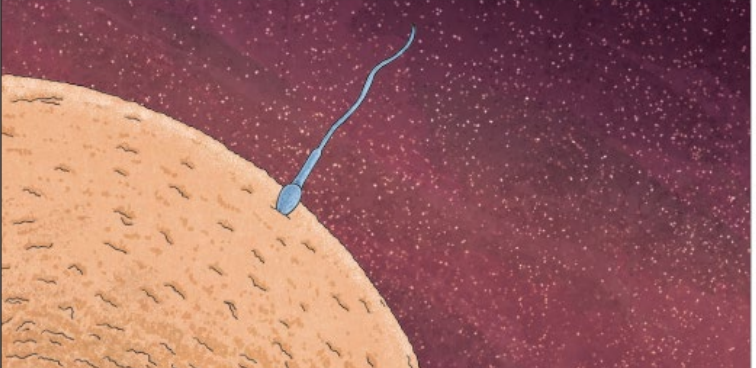


Some living things, such as plants, contain both the male and female sex cells. In others, such as humans, they contain either the male or female sex cell.

Reproduction in mammals

Mammals use sexual reproduction to produce their offspring.

- The male sex cell, called the sperm, fertilises the female sex cells.
- The fertilised cell divides into different cells and will form a baby with a beating heart.
- The baby will grow inside the female until the end of the gestation period when the baby is born.



Echidnas and platypus are mammals but they lay eggs rather than giving birth to live young.

Sky Objectives:

- Use a range of enquiries to answer a broad range of scientific-based questions.
- Carefully observe and accurately measure variables during an investigation.
- Use a combination of observations and data to draw conclusions that either support or refute the grounds of an investigation.