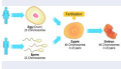
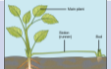




Key Vocabulary

1		Reproduction: The process by which a living thing creates new versions of itself (offspring)
2		Sexual Reproduction: Offspring get genes from both parents, inheriting a mix of features from both
3		Asexual Reproduction: Offspring get genes from one parents so are clones of their parents
4		Stamen: The part of the flower that produces pollen. There are two main parts of the stamen: the filament and anther.
5		Stigma: The area where pollen is received.
6		Anther: The part of a stamen that contains the pollen.
7		Filament: The part of a flower's Stamen which supports the anther and often holds it up in order to make Pollination easier.
8		Style: The tube-like structure that supports the stigma
9		Sepal: Green, leaf-like structures which enclose a flower bud before it opens
10		Carpel: The female part of the flower which contains eggs.
11		Eggs: A cell in a female animal or in some kinds of plants that can develop into a new individual after it is fertilised. (Also known as the Ovum.)
12		Ovary: The organ in a female organism that produces eggs and certain hormones in animals.
13		Gestation: The time between the fertilisation of the egg cell and the birth of the offspring
14		Plantlets: a small or young plant
15		Runners- Some plants, like strawberry plants, grow runners which have new plants on the end. These plants are an exact copy of the parent plant from which they have grown.
16		Chromosomes: Made up of protein and DNA, which is the substance that determines an organism's inherited traits

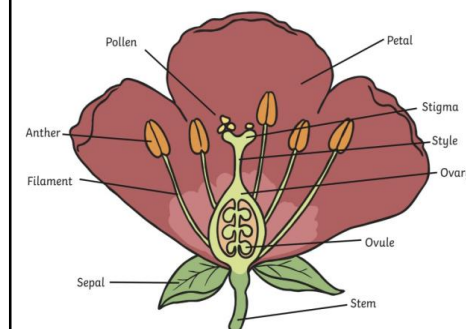
Sticky Knowledge

1	Reproduction is the process of producing offspring and is essential for the continued survival of a species.
2	There are two types of reproduction: sexual and asexual.
3	Know that mammals give birth to live young, birds lay eggs, amphibians lay eggs and young go through a metamorphism to become adults, insects lay eggs which turn to pupa and grow into adults.
4	Offspring of animals and plants are produced through sexual reproduction (fertilisation).
5	As part of their life cycle, plants and animals reproduce.
6	Most animals reproduce sexually. This involves two parents where the sperm from the male fertilises the female egg.
7	Animals, including humans, have offspring which grow into adults.
8	In humans and some animals, these offspring will be born live, such as babies or kittens, and then grow into adults.
9	In other animals, such as chickens or snakes, there may be eggs laid that hatch to young which then grow to adults.
10	Some young undergo a further change before becoming adults e.g. caterpillars to butterflies. This is called a metamorphosis
11	Plants reproduce both sexually and asexually.
12	Bulbs, tubers, runners and plantlets are examples of asexual plant reproduction which involves only one parent.
13	Gardeners may force plants to reproduce asexually by taking cuttings.
14	Sexual reproduction occurs through pollination, usually involving wind or insects.

Key Questions

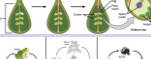
Can you classify living things using their distinguishable features?
Can you describe the life cycle of a bird?
Can you describe the life cycle of an amphibian and insect?
Can you describe the life cycle of a mammal?
Do you know the differences between different life cycles?
Do you know the process of reproduction in plants?
Do you know the process of reproduction in animals?

Parts of a Flower





Prior Vocabulary

1		Classification: Grouping similar species together.
2		Environment: The physical surroundings
3		Insects: A small animal that has six legs and generally one or two pairs of wings
4		Reptiles: A cold-blooded animal that breathes air and usually has skin covered with scales or bony plates.
5		Amphibians: An animal that is born with gills then develops lungs, lays eggs in water, damp skin, body temperature changes
6		Mammals: A warm-blooded vertebrate animals that has hair or fur, and gives birth to live young.
8		Vertebrates: An animal with backbone
9		Invertebrates: An animal without a backbone
10		Offspring: a mammal's young or children.
11		Organism: An individual animal, plant, or single-celled life form.
12		Population: The whole number of a species living in a country, city or area
15		Germination: The development of a plant from a seed or spore after a period of dormancy
16		Pollination: The transference of pollen to a flower, or plant to allow fertilisation. Happens in sexual reproduction
17		Fertilisation: When two sex cells fuse together to reproduce
18		Life Cycle: The series of changes in the life of an organism
19		Seed Dispersal: The spread when seeds get from the parent plant to a new place.
20		Pollen: A fine powdery substance produced by flowering plants, which contains the male sex cell.

Prior Knowledge

- 1 Notice that animals, including humans, have offspring which grow into adults. (Y2 - Animals, including humans)
- 2 Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. (Y3 - Plants)

Future Learning

Reproduction in humans (as an example of a mammal), including the structure and function of the male and female reproductive systems, menstrual cycle (without details of hormones), gametes, fertilisation, gestation and birth, to include the effect of maternal lifestyle on the foetus through the placenta. (KS3)

Reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms. (KS3)