

Spring Knowledge Organisers

Year 2

2025-26

Science (Plants) Knowledge Organiser



Year 2: Plants Knowledge Organiser

Careers connected to this unit: botanist, farmer, florist, gardener



Lesson Sequence



1. Design an experiment to find out what a plant needs to grow



2. Know the difference between seeds and bulbs



3. Describe the life cycle of a plant



4. Describe what plants need to grow to stay healthy



5. Understand that different plants survive in different environments



6. Observe and record the growth of plants over time

What a plant needs to grow

Plants need **water** to survive. Plants get water through their roots.

Plants need the right **temperature** to grow.

Plants need **sunlight** to help them grow and make their own food.

Plants need **soil** to grow.

Plants take time to grow. It can take days, months or even years for them to grow.



What is a bulb and what is a seed?

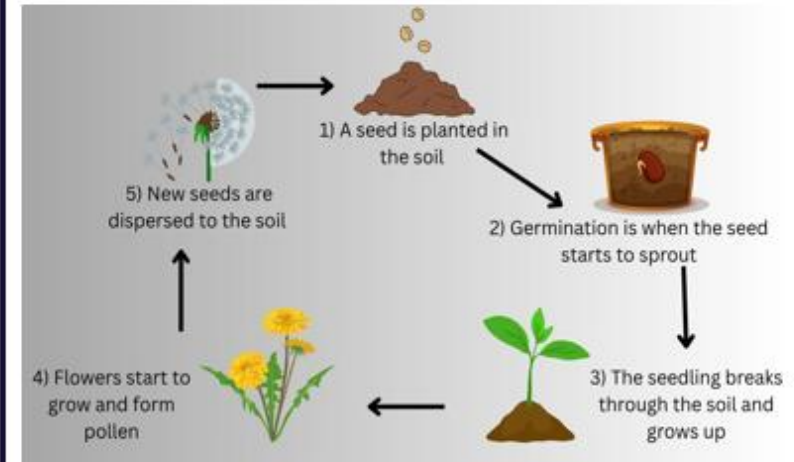


A bulb grows underground and already contains its own stem and leaves. Bulbs can store lots of food inside.



A seed is part of a plant which a new plant can grow. The seed coat only stores food until the plant can produce its own.

Life cycle of a plant



Science (Plants) Key Vocabulary



Rocket Words

seed	a part of a plant from which a new plant can grow
bulb	a plant bud that begins to grow underground
seedling	a young plant grown from a seed
germination	the process by which a plant grows from a seed
life cycle	a series of stages a living thing goes through during its life
conditions	what a place is like- hot or cold, wet or dry etc
energy	something which makes things move, grow or change
healthy	good for a living thing's health

Science (Animals) Knowledge Organiser



Knowledge Organiser: Animals, including humans
2 - Life cycles

Careers connected to human's life cycle:
midwife, medical receptionist, radiologist



Lesson Sequence



1. Learn how to order the stages of the human life cycle



2. Describe the stages of life from adulthood to old age



3. Learn how to match offspring to their parent



4. Explore the life cycle of a chicken



5. Describe the life cycle of a butterfly

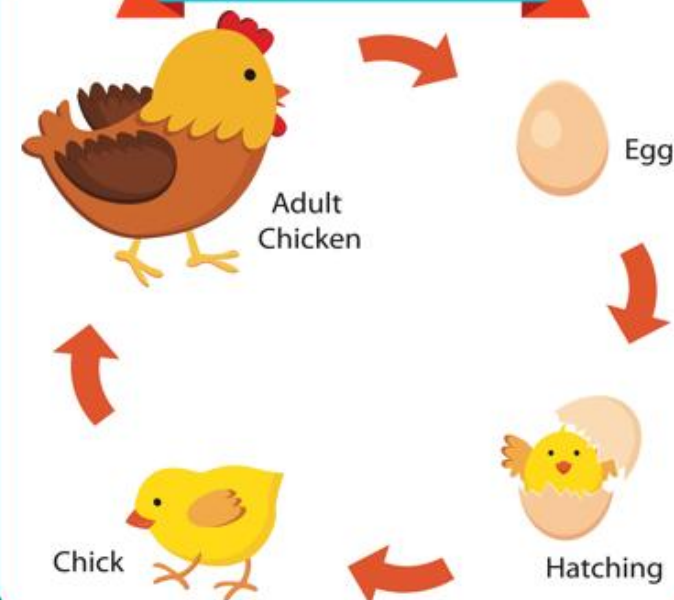


6. Explore the life cycle of a frog

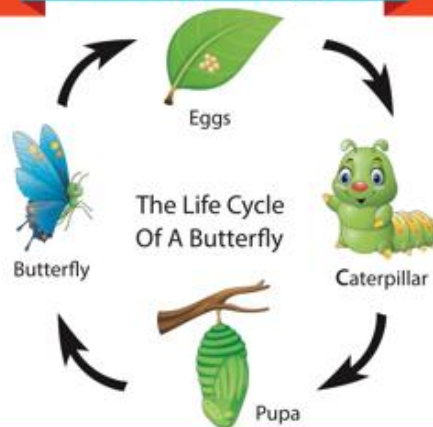
Human Life Cycle



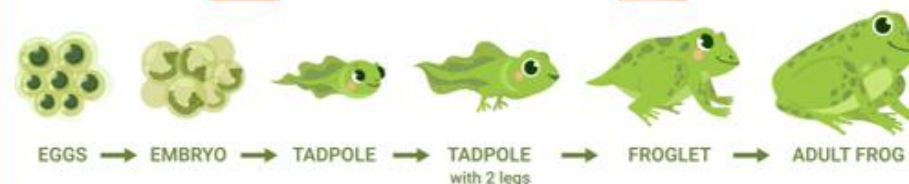
Chicken Life Cycle



Butterfly Life Cycle



Frog Life Cycle



1. Eggs – Female lays eggs which are fertilised by the male.
2. Tadpole – After 2-25 days the tadpole hatches from egg.
3. Jumps – Grows front legs. Uses nutrients in tail as food.
4. Grows fins and hind legs.
5. Adult Frog – Eats insects instead of plants. After 2-4 years it becomes an adult frog and can lay eggs.

Science (Animals) Key Vocabulary



Rocket Words

life cycle	a diagram showing the changes in the life of a living thing
foetus	a baby growing inside its mother's womb
womb	area of the mother's body where the foetus grows
offspring	the child, or young, of an animal or plant
reproduction	the process of producing offspring
transformation	a change in appearance or form
metamorphosis	the processes of insects, and some animals, developing into adult forms through a cycle of change
froglet	a young frog that has recently changed from being a tadpole

Geography Knowledge Organiser



Lesson Sequence



1. What are the seven continents and five oceans?



2. Where are the hot and cold areas of the world?



3. What is the climate like in Europe?



4. What is extreme weather?



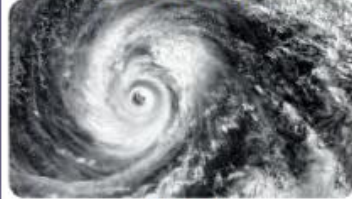
5. How does extreme weather cause problems in Florida?



6. Assessment: How is climate different around the world?

Extreme Weather

hurricane



drought



flood



tornado



Climate

Hot climate: a place that is very warm most of the time.



Warm climate: a place that feels not too hot; perfect for wearing a t-shirt and shorts.



Mild climate: a place where the temperature is comfortable; not too hot and not too cold.



Cool climate: a place that feels a little chilly.



Cold climate: a place that is very chilly and a coat, gloves and hat are needed.

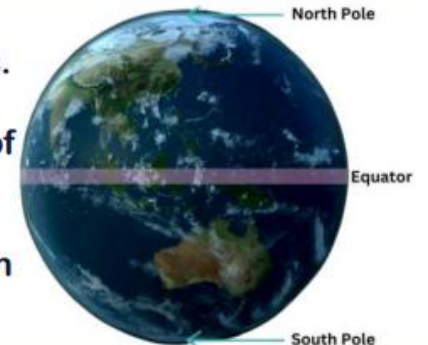


Our planet

The **North Pole** is located at the very top of the planet in the **Arctic**.

The **Equator** is a line drawn on maps to indicate the warmest part of the world across three continents.

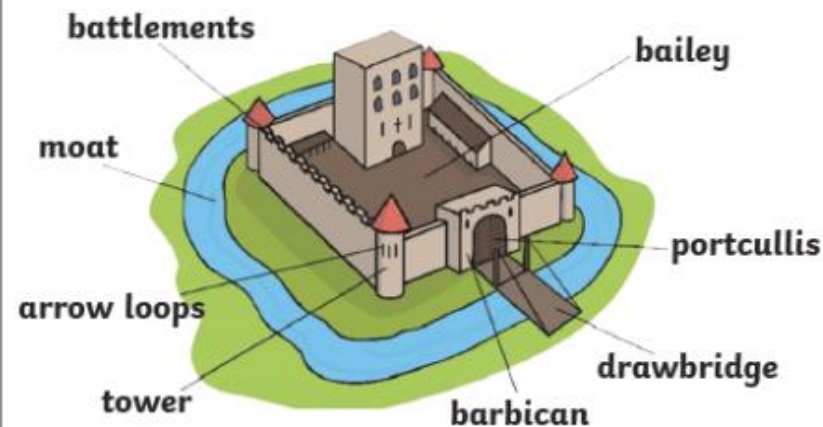
The **South Pole** is located in the Southern most part of the planet in **Antarctica**.



Castle Features - Key Vocabulary

castle	A large strong building, or group of buildings, designed to protect the people inside from attack.
arrow loop	A narrow vertical slit in a castle wall from which arrows could be fired.
barbican	Part of the outer defence of a castle. Used to help defend a gateway into a castle.
battlements	Found at the top of a castle's walls, with openings to shoot through and raised sections for protection.
drawbridge	A bridge, which can be raised and lowered, often found over a castle's moat.
moat	A deep, wide ditch surrounding a castle, often filled with water.
tower	A tall narrow building forming part of a castle.
portcullis	A strong, heavy spiked barrier that can be lowered to block an entrance.

Parts of a Castle



Why Were Castles Built?

Castles were built to:

- control the surrounding area
- defend against enemy attack
- launch weapons to attack enemies

Examples of Castles in the UK



Windsor Castle, England



Warwick Castle, England



Enniskillen Castle, Northern Ireland



Craigievar Castle, Scotland



Edinburgh Castle, Scotland



Caernarfon Castle, Wales