



Fairfields
PRIMARY SCHOOL

My learning journey through:



Where did that potato come from?

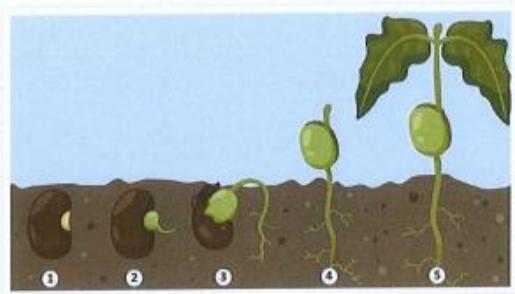
Year 5 - Summer Term 2

Key Vocabulary

disperse	To scatter.
cloche	A translucent cover for protecting plants.
fair trade	A way of buying and selling produce to ensure farmers have good working conditions and get a fair price.
fertilisation	The process of pollen joining with an ovule, causing an ovule to become a seed.
fertiliser	A natural or man-made substance used on soil to make plants grow well.
germination	The process by which a seed starts to grow.
harvest	To gather crops.
intensive farming	A method of farming that produces a large amount of produce.
pollen	Tiny particles made by the anthers of a flower that fertilise the ovules of a different flower.
produce	Food such as fruit and vegetables that are grown or farmed.
prune	To cut off branches to remove dead wood and encourage growth.
reproduction	The process that produces offspring.
seedling	A young plant that is grown from a seed.
shoot	The first part of a plant to appear above the ground.
sow	To plant seeds.
subsistence farming	A method of farming where farmers grow enough food to feed their family.

Stages of plant growth

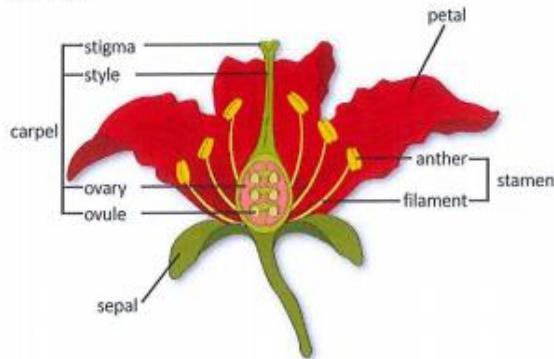
1. A seed remains inactive until the conditions are right for germination and growth.
2. If a seed has the space, water and warmth it requires, a root breaks out of the seed coat and grows downwards into the soil.
3. More roots develop and a green shoot appears. The shoot breaks open the seed coat and pushes upwards and out of the soil.
4. The shoot grows towards the light as the plant's roots absorb water and nutrients.
5. Over time, the plant develops and leaves appear.



Knowledge that will help me:

Parts of a flowering plant

Flowering plants come in different colours, shapes and sizes but they all have a similar structure. Most have a female part called a carpel and a male part called a stamen.



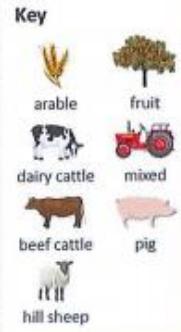
Plant reproduction

Plants reproduce to make new plants. All flowering plants go through the following cycle to produce a new plant:

1. Brightly coloured or fragrant flowers attract insects.
2. Pollinating insects, birds, animals or the wind move pollen grains from the anther of one flower to the stigma of another. This is called pollination.
3. A pollen grain travels down the style to reach the ovary.
4. The pollen fertilises an egg cell called an ovule inside the ovary.
5. The ovule develops into a seed inside a fruit.
6. The seeds are dispersed.
7. When the seed lands on the ground and the conditions are right, a new plant grows.

Farming in the UK

There are three main types of farming in the UK: arable, pastoral and mixed. Arable farms grow crops and cereals. Pastoral farms rear animals. Mixed farms grow crops and keep animals. The map below shows farming practices across the UK.



What I'd like to learn...



The end of our journey.....

Science Knowledge	Date
Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird	
Describe the life process of reproduction in some plants and animals.	
Compare the life cycles of animals, including a mammal, amphibian, insect and bird.	
Group and sort plants by how they reproduce.	
Label and draw the parts of a flower involved in reproduction in plants (stamen, filament, anther, pollen, carpel, stigma, style, ovary, ovule and sepal).	
Describe the life process of reproduction in some plants and animals.	
A life cycle is the series of changes in the life of a living thing and includes these basic stages: birth, growth, reproduction and death. Mammals' life cycles include the stages: embryo, baby, adolescent and adult. Amphibians' life cycles include the stages: egg, larva (tadpole), adolescent and adult. Some insects' (butterflies, beetles and bees) life cycles include the stages: egg, larva, pupa and adult. Birds' life cycles include the stages: egg, baby, adolescent and adult.	
Pollination is when the male part of a plant (pollen) is carried, by wind, insects or other animals, to the female part of the plant (carpel). The pollen travels to the ovary, where it fertilizes the ovules (eggs). Seeds are then produced, which disperse far away from the parent plant and grow new plants.	
Reproduction is the process of producing offspring and is essential for the continued survival of a species. There are two types of reproduction: sexual and asexual. Sexual reproduction involves two parents (one female and one male) and produces offspring that are different from the parents. Asexual reproduction involves one parent and produces offspring that is identical to the parent.	
Art and Design Knowledge	Date
Ways to review and revisit ideas include annotating sketches - sketches and painting of vegetables	
A tint is a colour mixed with white, which increases lightness, and a shade is a colour mixed with black, which increases darkness.	
Relief sculpture projects from a flat surface. High relief sculpture clearly projects out of the surface and can resemble a freestanding sculpture. Low relief, or bas-relief sculpture do not project far out of the surface and are visibly attached to the background.	
Sweet dishes are usually desserts, such as cakes, fruit pies and trifles. Savoury dishes usually have a salty or spicy flavour, rather than a sweet one. Seasonality is the time of year when the harvest or flavour of a type of food is at its best. Buying seasonal food is beneficial for many reasons. The food tastes better, it is fresher because it hasn't travelled as far, the nutritional value is higher, the carbon footprint is lower, it supports local growers and is usually cheaper.	
Geography Knowledge	Date
The Earth has five climate zones: desert, equatorial, polar, temperate and tropical. A biome is a large ecological area on the Earth's surface, such as desert, forest, grassland, tundra and aquatic. Biomes are often defined by a range of factors, such as temperature, climate, relief, geology, soils and vegetation.	
Agricultural land use in the UK can be divided into three main types, arable (growing crops), pastoral (livestock), mixed (arable and pastoral). An allotment is a small piece of land used to grow fruit, vegetables and flowers. A wide variety of crops are farmed in the UK, such as wheat,	

barley, oats, potatoes, other vegetables, fruits and oil seed rape. A wide variety of livestock are reared on farms in the UK, such as sheep, dairy cattle, beef cattle, poultry and pigs.	
Changes to the weather and climate (temperature, weather patterns and precipitation) can affect land use. Farmers living in different countries adapt their farming practices to suit their local climate and landscape.	
A geographical enquiry can help us to understand the physical geography (rivers, coasts, weather and rocks) or human geography (population changes, migration, land use, changes to inner city, urbanisation, developments and tourism) of an area and the impacts on the surrounding environment.	
Soil fertility, drainage and climate influence the placement and success of agricultural land.	
The geographical term 'relief' describes the difference between the highest and lowest elevations of an area. Relief maps show the contours of land based on shape and height. Contour lines show the elevation of the land, joining places of the same height above sea level. They are usually an orange or brown colour. Contour lines that are close together represent ground that is steep. Contour lines that are far apart show ground that is gently sloping or flat.	
Geographical data, such as demographics or economic statistics, can be used as evidence to support conclusions.	
Farming challenges for developing countries include poor soil, disease, drought and lack of markets. Education, fair trade and technology are ways in which these challenges can be reduced.	
The topography of an area intended for agricultural purposes is an important consideration. In particular, the topographical slope or gradient plays a large part in controlling hydrology (water) and potential soil erosion.	