

Sow, Grow and Farm**What should I already know?**

- Investigate a geographical hypothesis using a range of fieldwork techniques.
- Study and draw conclusions about places and geographical features using a range of geographical resources, including maps, atlases, globes and digital mapping.
- Describe and compare aspects of physical features.

**Vocabulary**

agriculture	A practice of farming.
allotment	A plot of land rented by someone to grow vegetables or plants.
apex predator	The top predator in a food chain.
climate change	A change in global or regional climate patterns
cultivate	Prepare and use the land for crops or gardening.
dispersal	The action or process of distributing or spreading things.
fair trade	A trade between companies in developed countries and producers in developing countries in which fair prices are paid to the producers.
Ordnance survey map	Ordnance Survey (OS) is Great Britain's national mapping agency .
pollution	The presence in or introduction into the environment of a substance which has harmful or <u>poisonous</u> effects
sow	A plant (seed) by <u>scattering</u> it on or in the earth.

Linked Science knowledge for the topic

- Some mixtures can be separated by filtering, sieving and evaporating. Sieving can be used to separate large solids from liquids and some solids from other solids. Filtering can be used to separate small solids from liquids. Evaporating can be used to separate dissolved solids from liquids.
- Reversible changes include heating, cooling, melting, dissolving and evaporating. Irreversible changes include burning, rusting, decaying and chemical reactions.
- Population changes in a habitat can have significant consequences for food chains and webs.

By the end of the topic we will be able to...

Describe the five main climate zones. Begin to use 6 figure grid references to describe a location.
 Identify why certain products are grown in different places across the world considering the effect of soil fertility, drainage and climate.
 Use what we have learnt to contribute to a debate about whether foods should be imported or not.

Climate zones

The world is divided into five main climate zones. These are areas of similar average temperature and average rainfall. Mountains have variable climates depending on altitude.



The **polar zone** is cold and dry with long, dark winters. Average temperatures are 10°C to -55°C.



The **temperate zone** has warm summers, cool winters and year-round rainfall. Average temperatures are 0°C to 20°C.



The **Mediterranean zone** has hot summers and mild, rainy winters. Average temperatures are 15°C to 30°C.



The **desert zone** is hot year-round and has very little rainfall. Average temperatures are 25°C to 40°C.



The **tropical zone** has a wet season and a dry season. It is hot and humid. The average temperature is around 31°C.



Mountains have changeable climates with colder temperatures and more rainfall as the elevation increases.

North and South America

The continents of North and South America can be divided into environmental regions based on their physical features, climate and soil types. The characteristics of these environmental regions determine which type of farming will thrive in that area.

Citrus farming in California

The climate in California, on the west coast of North America, is hot and sunny in the summer and mild in the winter. The soil is fertile and well drained. This suits the growing of citrus fruits, particularly oranges. Several different types of orange are grown and sold in the United States or transported around the world.



orange grove

Coffee growing in Peru

Peru, in South America, has a cool to warm, tropical climate with frequent rainfall and rich soil. This makes ideal growing conditions for coffee. Growing and processing coffee is a difficult and time-consuming task because most of the work is still done by hand. The Fairtrade Foundation offers training to farmers to improve how they process coffee, so they can earn a better living.



coffee plant

Farming in the UK

Farming is the business of growing crops and rearing livestock. Up to 70% of the land in the UK is used for farming. There are three main types of farming in the UK. These are arable, pastoral and mixed.



Arable farming is growing crops, such as cereals and vegetables.



Pastoral farming is rearing animals, such as cows and sheep.



Mixed farming is both growing crops and rearing animals.

The type of farming depends on the climate, the quality of the soil and the topography of the area. For example, the flat, nutrient-rich land in the east of England is perfect for arable farming, whereas the wet and windy hills of central Wales are most suited to pastoral sheep farming.