

Year 5 Geography

A Study of the Alpine Region

Where should we go on holiday?

What I should already know:

What is a country, continent and city. Capital cities of European countries. Continents of the world.

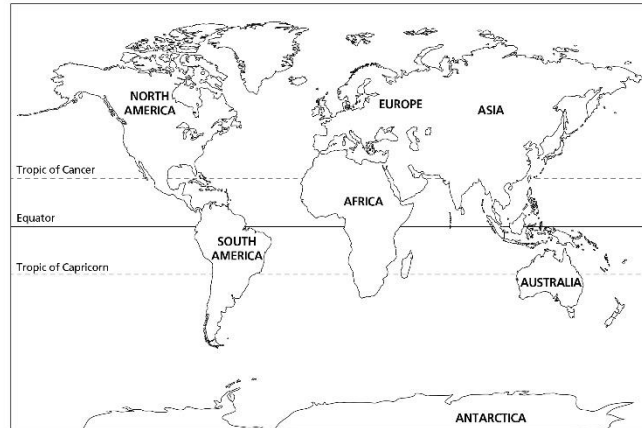
Lesson 1: Where are the Alps? (Activity: to label the Alpine countries and their capitals, as well as the United Kingdom.)

- The Alps are one of the great European mountain ranges and are spread across eight countries: Austria, Slovenia, Switzerland, Liechtenstein, Germany, France, Italy and Monaco.
- In the Alpine region, there are mountains and lakes; there is lots of snow; the houses have sloping roofs, are often built of wood and face away from the mountainside.

Types of maps:

- Political maps** show country and state borders
- Physical maps** include natural landforms such as mountains and rivers.

Political map of the world: 7 continents



Continent, country, ocean

an area that is defined by certain unifying characteristics, which may be physical, human, or cultural

man-made features

created by humans, for example: roads, houses, canals

Physical features: naturally occurring

River: a natural watercourse, flowing towards the sea, an ocean or a lake
Mountain - a landform that rises high above the surrounding terrain in a limited area, made from rocks and earth. A mountain is generally described as being higher and steeper than a hill
Lake - a large area of water surrounded by land, which are usually connected to the sea by river or stream

The physical map of Europe

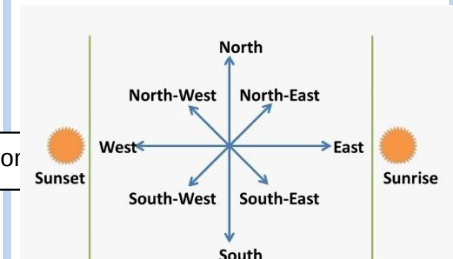


Poland

Locational vocabulary

Longitude (east or west), latitude (north or south of the equator), Tropic of Cancer, North, South, East, West

World directions



The Alps are located to the South-East of the UK. They are located very close, with some parts at the same level as the Tropic of Cancer; North of the equator. They are located to the East of the Atlantic Ocean and to the North of Italy.

Lesson 2: How were the Alps formed? (Activity: create a storyboard explaining each stage in the mountain-formation process on paper or book creator)

Location of the Alps
The Alps are higher than other areas of Europe. They are close to the **Mediterranean Sea**.

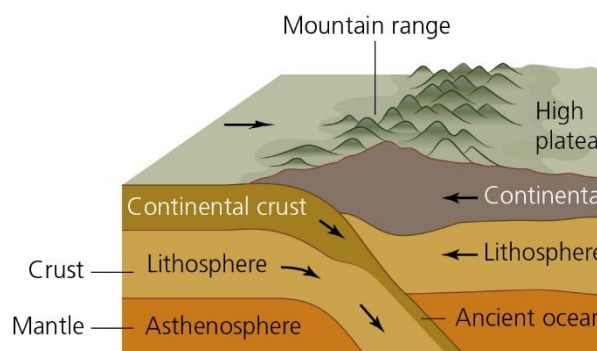
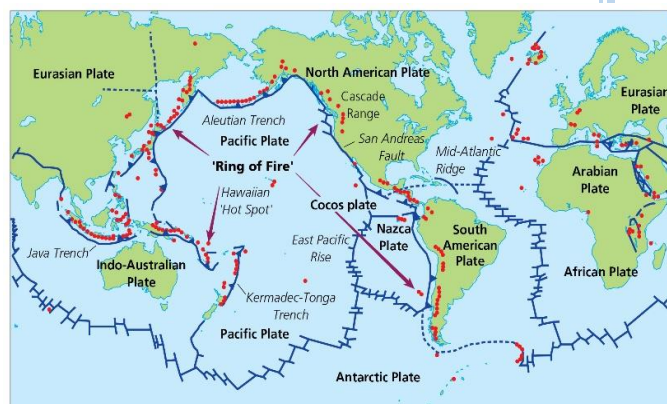
The Earth's surface is made up of **plates** that are moving very slowly. Eurasian and African plates meet under the **Mediterranean Sea**.

How were Alps formed

The mountains were formed over tens of millions of years as the **African** and **Eurasian** tectonic plates collided.

Marine sedimentary rocks were rising by thrusting and folding into high mountain peaks such as **Mont Blanc** and the **Matterhorn**.

Mont Blanc spans the French-Italian border, and at 4,810 m (15,781 ft) is the **highest mountain in the Alps**.



The Alps were formed some **30 million years ago** when the two plates (African and Eurasian) moved towards each other: the accumulated sediment buckled and was forced upwards to become a 'fold mountain range'.

sediment	<i>is solid material that settles at the bottom of a liquid</i>
ckle	
ulate	<i>to collect or gathered over a period of time</i>
nic plate	<i>is the study of the way that large pieces of the Earth's surface move slowly around</i>
sphere	<i>the rigid outer layer of the earth</i>

Asthenosphere
a thin semifluid (between solid and liquid) layer of the earth

Lesson 3: How are homes adapted to suit the Alpine climate? (Activity: Design a UK home and adapt it to the weather conditions in the Alpine Region. Label your sketch and explain your adaptations to suit the house to Alpine conditions.)

- In the Alps, the temperature can drop to -10°C (14°F) in winter and rise to 30°C (86°F) in summer.
- Homes must protect and insulate (keep warm) their inhabitants from extreme cold and heavy snowfall in winter.
- The rest of the year there are high levels of rain.



Stone base (wall thickness at least 50 cm).

The snow and rain will slide off the roof and not on the walls as the roof is slightly bigger than the **perimeter** of the house.

The roof always had a wooden structure resting directly on the stone.

Small windows with external shutters to keep the heat in.

Gently sloping roof and wide, well-supported eaves set at right angles to the front of the house.

insulate
to protect from harsh weather for example cold or extreme heat

inhabitant
a person who lives somewhere

adaptation
a change made to fit a situation, environment, weather conditions. For example: a lizard has a tough skin that has adapted to extreme heat.

terrain
is used to refer to an area of land

ed
something that it is set into the mountain, rocky wall that surrounds it

houses are built

Most typical house has a stone-ground floor, often partly recessed into the mountainside to offer some protection from the wind. In the past cows were stabled at the bottom of the house, which created some extra warmth for the human accommodation

above. Floors were supported by a framework of massive **joists**.



Joists have to carry the weight of the walls, people, furniture, appliances and other

stuff we place on them.

Lesson 4: What are the main industries in the Alps? (Activity: to write for and against arguments, covering the positive and negative effects of the tourist industry in the Alps.)

- The Alps are one of the more popular tourist destinations in the world.
- Over 120 million visitors a year go there
- Tourism is very important as it brings money to the Alpine region.
- **It creates jobs for people who live there.**

Negative effect of climate change on the Alpine Area

Tourism

- Too many tourists come in cars.
- Cars produce Co2. There is a lot of congestion.
- Tourists are loud and litter. They also walk over plants.
- Tourists coming to swim, sail in the lakes, disturb animals that live in the area.
- The water gets polluted by oil spills, plastic and sun cream.
- Ski resorts to irreversible damage to the Alpine landscape.

Industry

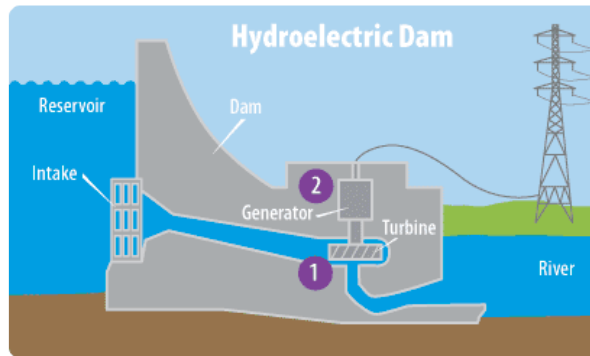
Forestry

Trees that are cut down are home to animals. The eco-system is affected as there is no shelter for the land animals. Animals need to move elsewhere to survive.

Vineyards

Grassland, meadows are destroyed in order to make place fo vineyards. These fields will be often fenced off and animals will not be able to pass through easily.

A picture of Hydro-Electric Power



A picture of a ski resort in the Alpine Region



economy

the wealth that it gets from business and industry

industry

consists of all the people and activities involved in making a particular product or providing a particular service.

agriculture

is farming and the methods that are used to raise and look after crops and animals.

contaminated

made harmful by adding dangerous substances

Lesson 5: How have avalanches changed the Alpine landscape? (Activity: Answer quiz style questions in books in full sentences)

An avalanche can destroy:

- trees on the hillside by making them flat/
- kill plants, animals, insects, and people

Effects of avalanches

- It can block anything in its path: roads and railways
- It can cut off power supplies
- It can destroy buildings, kill people.
- It can destroy ski resorts.
- It can leave people stranded in their homes.
- It can destroy animal habitats.
- The area won't be visited by tourists so money is lost.

A picture of an avalanche in the Alpine region



A picture showing the impact of an avalanche.



avalanche	<i>When the snow slides down the hill, mountain</i>
ecosystem	<i>it is the plants and animals that live in an area together</i>
landscape	<i>what you can see like hills, rivers, buildings, trees, and plants</i>
stranded	<i>trapped somewhere</i>

Lesson 6: BIG FINISH What should tourists know about the Alps? (Activity: create an information poster about everything you have learnt about The Alpine Region).

- Tourists should be aware that what they do on holiday can harm wildlife. For example, leaving your rubbish behind, animals may be looking for food and swallowing some plastic.
- **Winter ski** tourism is very bad for the wildlife as too much noise can disturb animals that hibernate (sleep) over winter months
- **Modern sports** like mountain-biking, canyoning are destroying places that were not visited by people before.

Tourists should know that they have a positive and negative impact on the Alpine environment. They contribute to increase in motor traffic.

Example of activities in the Alps



mountain biking



paragliding

mass tourism

Lots of tourists going to one place

sustainable tourism

Tourism that is not likely to damage the environment

Sustainable Tourism

A way of organising holidays to protect animals and plants from people.

Teaching people how to protect nature by not being too noisy or taking rubbish with you.

WWF is using tourism as a way protect environment. It teaches people about animal and plant life. People know which animals and plants are protected and how to look after them.