

### Moss Park Key Knowledge

- The Alps are a mountain range in Europe that spans across 8 countries (France, Monaco, Italy, Switzerland, Liechtenstein, Austria, Germany and Slovenia)
- The Alps were formed millions of years ago when two tectonic plates collided
- Fold mountains are formed as a result of tectonic plates meeting
- The climate in the Alps is cold and snowy in the winter and warmer in the summer
- Tourism is the main industry in the Alps. It has advantages and disadvantages
- An avalanche is a physical process when snow slides down a steep slope



The Alps are one of the great European mountain ranges, and are spread across eight countries: France, Switzerland, Liechtenstein, Germany, Austria, Italy, Slovenia and Monaco.

Mont Blanc spans the border of France and Italy, and is the highest mountain in the Alps at 4810 metres. The Alps were formed over tens of millions of years as the African and Eurasian tectonic plates collided. Extreme shortening caused by the event resulted in marine sedimentary rocks rising by thrusting and folding into high mountain peaks such as Mont Blanc and the Matterhorn.

Prevailing winds bring warm air from the temperate climate of lower areas to higher altitudes. The air is forced to rise, where it cools. This causes the water vapour in the air to condense to form clouds. The water vapour falls as rain or – if the temperature is below 0°C – as snow.

More than 120 million tourists visit the Alps each year – **tourism** provides essential income. Other chief industries include forestry, farming, cheese-making and baking, woodworking and carpentry.

An avalanche occurs when a slab of snow, lying on top of a weaker layer of snow, fractures and slides down a steep slope. Many steps are taken in the Alps to reduce the risk of avalanches, including: observation and forecasting; active interventions such as triggering smaller, less hazardous avalanches or snow grooming (using large tracked vehicles); and permanent interventions such as snow retention structures (including snow racks, nets and snow bridges), reforestation and avalanche barriers.

### 5 words to remember

**climate:** the average weather pattern of a place over many years, in the long term; climates can be predominantly hot, cold, wet or dry; hot and wet; hot and dry; and so on – the climate of a place affects the soil, flora and fauna of that place, and impacts on human activity in a variety of ways

**mountain:** landform that rises high above the surrounding terrain in a limited area, made from rocks and earth; generally described as higher and steeper than a hill

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

**tourism:** travelling for fun or holidays

**wind:** any horizontal movement of air, caused by pressure differences, which in turn are caused by temperature differences

Explain the steps humans take to protect themselves from avalanches. Then, explain the steps individuals can take to protect themselves.



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