

Year 8 Knowledge Organiser 5: Iceland

Key term	Definition
<i>Volcano</i>	An opening in the Earth's crust where lava, ash, and gases escape
<i>Tectonic Plates</i>	Large pieces of the Earth's crust that move slowly.
<i>Hotspot</i>	An area where magma rises from deep within the Earth.
<i>Geyser</i>	A hot spring that erupts periodically
<i>Glacier</i>	A large, slow-moving mass of ice.
<i>Fjord</i>	A deep, narrow sea inlet formed by glaciers
<i>Geothermal Energy</i>	Heat energy from inside the Earth
<i>Hydroelectric Power</i>	Energy produced from moving water.
<i>Renewable Energy</i>	Energy that will not run out (e.g. wind, water, geothermal).
<i>Erosion</i>	The wearing away of land by wind, water, or ice
<i>Climate Change</i>	Long-term changes in temperature and weather patterns
<i>Natural Hazard</i>	A natural event that can cause damage (e.g. earthquakes, volcanoes).
<i>Tourism</i>	People travelling for leisure.
<i>Infrastructure</i>	Basic systems like roads, transport, and energy supply.

Key questions for this topic:

1. How does volcanic activity affect day to day life for Icelandic people?
2. How have glacial processes affected the Icelandic landscape?
3. What are the main opportunities in terms of sustainable futures for Iceland?

Location & General Information

Location: Iceland is an island in the Atlantic Ocean, between Greenland and Europe.

Ocean: North Atlantic Ocean

Capital city: Reykjavík

Population: Around 390,000 people

Language: Icelandic

Currency: Icelandic króna

Environment & Ecosystems

Iceland uses renewable energy, especially geothermal energy and hydroelectric power. Geothermal energy is important because heat from underground is easily accessible.

Climate change is causing glaciers to melt, which can lead to rising sea levels.

Wildlife includes puffins, Arctic foxes, whales, and seals.

Soil erosion is a problem due to deforestation, volcanic ash, and strong winds

Development & Challenges

Advantages of living in Iceland: clean energy, low pollution, high standard of living.

Disadvantages: cold climate, isolation, expensive cost of living.

Volcanic eruptions can damage homes, release ash clouds, and disrupt travel.

Transport is difficult due to glaciers, volcanoes, and harsh weather.

Iceland prepares for hazards using monitoring systems, emergency planning, and evacuation

Physical Geography

Iceland is a volcanic island because it sits on the boundary between the North American Plate and the Eurasian Plate.

It is also located above a hotspot, where magma rises to the surface.

A geyser is a hot spring that erupts with steam and boiling water. A famous geyser is Strokkur.

The 2010 eruption of Eyjafjallajökull caused major disruption to air travel across Europe.

Iceland has a cold temperate climate, with cool summers and mild winters due to the North Atlantic Drift.

Around 10% of Iceland is covered by glaciers.

A major glacier is Vatnajökull, the largest in Europe.

A fjord is a long, narrow, steep-sided inlet formed by glaciers.

Iceland has many waterfalls because of melting glaciers and high rainfall.

Human Geography

Most people live near the coast because the interior is cold, mountainous, and difficult to access.

Main industries include fishing, tourism, energy production, and aluminium smelting.

Fishing is important because Iceland is surrounded by rich fishing waters.

Tourism brings money and jobs but can damage the environment if not managed carefully.