



Lesson Series

1. New Zealand and the South Pacific- location and physical geography
2. The history of New Zealand- The Maori
3. Earthquakes
4. Climate, biomes and animals
5. South Pacific Islands
6. Assessment

National Curriculum Coverage

Describe and understand key aspects of:

- physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle
- human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water

What you need to know

- New Zealand is located in the Southern Hemisphere and is surrounded by the Tasman Sea and the Pacific Ocean. New Zealand is made up of two islands; North Island and South Island. In 2017, geologists agreed that New Zealand is situated on an 'eighth continent' of which 95% is underwater, they named it Zealandia – or Te Riu-a-Māui.
- New Zealand's main biomes are grassland and mixed forest, including temperate broadleaf and deciduous. The temperate climate, with lots of precipitation and sunshine, means New Zealand is home to a wide range of exotic plants and animals.
- New Zealand is located on the edge of two tectonic plates and is the site of several volcanoes, some of which are still active. New Zealand experiences earthquakes, some of which can be very dangerous, especially for people living in cities.
- In 2011 an earthquake occurred on New Zealand's South Island near to the city of Christchurch. Much destruction was caused and 185 people were killed.
- The South Pacific Ocean is huge and contains many small islands. Melanesia, Micronesia and Polynesia are all names given to groups of small islands in the Pacific Ocean.
- The Maori are a race of people who have lived in New Zealand long before Europeans arrived.
- Studies of language, DNA and archaeology estimate that the Maori came from Asia or China over 5,200 years ago, moving through Indonesia to populate many islands in the region of Polynesia. From then, scientists believe Maori came on large canoes across the ocean to New Zealand around 700 years ago. From then, the Maori culture developed in relative isolation for many hundreds of years.
- Like the Aboriginal people in Australia, the Maori had not been exposed to European illnesses before, so when explorers from Europe came to New Zealand they brought with them influenza, smallpox and measles and these diseases had a devastating effect on the Maori population.
- The Maori have an oral tradition of storytelling and songs. The Haka is a traditional Maori dance, still performed today that is famous all around the world. Hongi is a traditional greeting where you press your nose and forehead against the person you are greeting. Ta Moko is a tattoo that shows how important and wise a person is.



Teacher Knowledge

New Zealand is located in the Southern Hemisphere and is surrounded by the Tasman Sea and the Pacific Ocean. New Zealand is made up of two islands; North Island and South Island. The capital city of New Zealand is Wellington. Christchurch, Auckland and Dunedin are other major cities. It is located on the edge of two tectonic plates and is the site of several volcanoes, some of which are still active. New Zealand experiences earthquakes, some of which can be very dangerous, especially for people living in cities. Near to some of New Zealand's volcanoes, there are hot springs and geysers. Due to New Zealand's remote location, it was one of the last places in the world where people came to live. Scientists think people from the Polynesian Islands came to New Zealand by canoe around 700 years ago. In 1642, Abel Tasman, a Dutch explorer saw the coastline of New Zealand. In 1645, Dutch cartographers named the land Nova Zeelandia after a Dutch province called Zeeland. Then in 1769 Captain James Cook began to map the outline of the country he called New Zealand. The South Pacific Ocean is huge and contains many small islands. Melanesia, Micronesia and Polynesia are all names given to groups of small islands in the Pacific Ocean. Easter Island is a Polynesian island famous for its statues with giant heads, there are over 800 of them and they represent the spirits of ancestors. In 2017 the newly discovered continent of Zealandia was officially awarded continent status, geologists began mapping the continent, 95% of which is underwater, to further understand New Zealand's plate boundaries and volcanic activity.

Knowledge Objective

New Zealand is located in the South Pacific Ocean.

Knowledge Goals

New Zealand is located in the South Pacific Ocean.

New Zealand has volcanoes, geysers and can experience earthquakes.

There are many small islands in the South Pacific.

Lesson Detail

Prior Learning: Introduce knowledge organiser. Locate New Zealand on a map. *Using what you know about the globe, what can you tell me about New Zealand?* (Looking for prior knowledge of hemispheres, oceans, equator, poles etc)

Vocabulary: Introduce 'tectonic plate'; explain that scientists think the earth's outer shell is divided into seven 'plates' that move over the mantle. Where the plates meet, there can be activity such as earthquakes, mountains and volcanoes. (Pupils will study this in more detail in lesson 3)

Teach: Locate the two islands of New Zealand on page 70 (world map) and 67 (regional map) of the Oxford Schools Atlas. Use a globe to show the location of the South Pacific Islands (world maps often divide the islands, whereas a globe will show the continuation of the ocean). Locate the Tasman Sea. Explain that due to New Zealand's remote location, it was one of the last places in the world where people came to live. Scientists think people from the Polynesian Islands came to New Zealand by canoe around 700 years ago. In 1642, Abel Tasman, a Dutch explorer saw the coastline of New Zealand. In 1645, Dutch cartographers named the land Nova Zeelandia after a Dutch province called Zeeland. Then in 1769 Captain James Cook began to map the outline of the country he called New Zealand. Show some images of the physical features of New Zealand including volcanoes and geysers. Show flag, explain the presence of the Union Jack, as New Zealand was a British Colony and remains member of the Commonwealth, Queen Elizabeth is the head of state. The stars on the flag represent the Southern Cross, a feature of the sky in the Southern Hemisphere. Explain that in 2017 a new continent was discovered under the sea surrounding New Zealand. Explain that geologists and scientists are still undertaking work to map the continent and using their knowledge to help understand volcanic and earthquake activity in New Zealand. Show a map of Zealandia – or *Te Riu-a-Māui*.

Talk task: *Describe New Zealand. Use your atlas to help you.*

Suggested Task: Label a map of New Zealand (and the South Pacific Islands if possible) including capital city, main airports, Southern Alps. Draw the flag showing the Union Jack and the Southern Cross.

Partner teach/Plenary: *What do we know about New Zealand?*

Step for depth: *Why might New Zealand have been one of the last places in the world to be inhabited by humans?*

Vocabulary

- Southern Hemisphere
- Tasman Sea
- Southern Cross
- Polynesia
- Commonwealth

Suggested Resources

Oxford School Atlas, <https://www.newzealand.com/uk/>



Teacher Knowledge

Studies of language, DNA and archaeology estimate that the Maori came from Asia or China over 5,200 years ago, moving through Indonesia to populate many islands in the region of Polynesia. From then, scientists believe Maori came on large canoes across the ocean to New Zealand around 700 years ago. From then, the Maori culture developed in relative isolation for many hundreds of years. Abel Tasman, a Dutch explorer saw the coastline of New Zealand in 1642, but the first contact was violent. It is believed the Maori were protecting an important agricultural area, but on this occasion four Dutch seaman were killed whilst going out in small boats from their ship to collect water. The Dutch seamen fired at the Maori and struck one man. Captain James Cook later mapped the coastline of New Zealand. Like the Aboriginal people in Australia, the Maori had not been exposed to European illnesses before, so influenza, smallpox and measles had a devastating effect on the Maori population. Conflicts also killed many, the introduction of the musket (a type of gun loaded from the muzzle) saw around 3,000 battles and raids between the Maori tribes, many of whom still used wooden or stone weapons. Like in Australia, contact with the Europeans was devastating for local populations in New Zealand. The Maori had an oral tradition of storytelling and songs. The Haka is a traditional Maori dance, still performed today that is famous all around the world. Hongi is a traditional greeting where you press your nose and forehead against the person you are greeting. This tradition comes from the Maori belief that the first woman was created from clay and a god breathed life into her through her nostrils. Ta Moko is a tattoo that shows how important and wise a person is. The Maori believe the head to be the most sacred part of the body, so face and head tattoos were common and would have been applied using sharp bone or sharks teeth dipped in ink.

Knowledge Objective

The Maori were the first people to live in New Zealand.

Knowledge Goals

Scientists think Maori people came from Polynesia to New Zealand around 700 years ago.

Maori people had their own language, traditions and beliefs.

The Haka is a traditional Maori dance that includes stamping, shouting and strong movements.

Lesson Detail

Prior Learning: Using the KO, identify key places in New Zealand. *What do we know about the physical geography of New Zealand?*

Vocabulary: Introduce the word 'Maori' and explain it means 'natural' or 'normal' and is the name given to the people who first lived in New Zealand over 700 years ago. The Maori are a now a minority population in New Zealand as 70% of the population descended from Europeans.

Teach: The Maori people have lived in New Zealand for approximately 700 years. Scientists can estimate this by looking at DNA and studying old trees to see where and when trees were first cut down. Scientists believe Maori travelled from Polynesia in large canoes before settling in New Zealand and living in isolation for many hundreds of years. Show picture of Maori from Cook's expedition. Explain the Maori had their own traditions, customs and language, give some examples using photos and videos where possible. Show a video of the Haka, a traditional Maori dance. When British explorers came to New Zealand, they brought with them illnesses such as influenza, smallpox and measles which killed many Maori. The conflict between the Europeans and the Maori devastated Maori populations as did disease. The Europeans had a weapon called a musket, a type of gun, and traded pigs and potatoes with the Maori tribes in exchange for muskets. The Maori tribes fought one another with muskets from 1818 to the 1830s in a series of conflicts known as the Musket Wars. Many Maori died during this time. In 1840 an agreement was signed called the Treaty of Waitangi, this was an agreement between the British and Maori Chiefs to create a nation state and build a government.

Talk task: *Describe and explain some Maori traditions.*

Independent Task: *Who are the Maori? Written answer, include a map if possible.*

Partner teach/Plenary: *How did European contact with New Zealand effect the Maori?*

Step for depth: *Compare the impact of contact with Europeans on the Maori and Aboriginal people.*

Vocabulary

- Maori
- Haka
- Hongi
- Ta Moko

Suggested Resources

A Kiwi Year by Tania McCartney, video clips of the Haka and Hongi.



Teacher Knowledge

Tectonic plate theory is a scientific theory that explains why we have volcanic activity and earthquakes in particular locations on earth. The theory says there are seven plates that move around the surface of the earth's mantle. The lines that run between the plates are sites of huge pressure and friction causing earthquakes and volcanic activity. New Zealand is located at the boundary of the Australian plate and the Pacific plate. Lines, called fault lines, are splits or weak points in the earth's crust, when the plates shift pressure is released along the fault lines, huge blocks of rock are shifted and people on the surface experience the ground shaking. The position of New Zealand on a plate boundary has given it spectacular landscape, mountains and volcanoes but it also has caused many earthquakes, some of which have been deadly. Scientists cannot predict when an earthquake will happen, but they can predict where they will happen, so buildings in those areas can be designed to withstand some shaking and water pipes can be protected to avoid them bursting. In 2011 an earthquake occurred on New Zealand's South Island near to the city of Christchurch. Much destruction was caused, and 185 people were killed. Many people died when Canterbury Television building collapsed and caught fire. More than 6,000 people had minor injuries. 120 miles away, the Tasman Glacier dropped 300 million tonnes of ice into Tasman Lake causing tsunami waves over 3m high to hit tour boats. New Zealand is known for its geothermal activity, there are bubbling mud pools, shooting geysers, hot spring, and sulphuric pools. This is mainly concentrated near Taupo and Rotorua on the North Island.

Knowledge Objective

New Zealand experiences earthquakes because it is located on a plate boundary.

Knowledge Goals

New Zealand experiences earthquakes because it is located on a plate boundary.

In 2011 there was an earthquake that caused buildings to collapse and many people died.

Changes can be made to buildings and water pipes to protect them from earthquakes.

Lesson Detail

Prior Learning: Look again at Knowledge Organiser- *what can you tell me about New Zealand?* Look at definition of earthquake on the KO.

Vocabulary: Introduce 'tectonic plate', show a map of the world with the plate boundaries highlighted. Explain that scientists and geographers believe that the rigid outer shell of earth moves around, this explains why we have mountains, earthquakes and why the shape of some continents look like pieces of the same jigsaw puzzle.

Teach: Scientists believe there are plates deep under the ground that move around. At the plate boundaries, we can often see mountains or trenches, volcanoes and earthquakes. New Zealand is located at a plate boundary. We know from science that when two objects rub together, friction occurs. On such a large scale, this friction can cause earthquakes, which it does in New Zealand. Watch [National Geographic video clip](#) explaining earthquakes. Introduce the 2011 earthquake in Christchurch. Discuss other geothermal activity present in New Zealand – geysers, hot springs, bubbling mud pools.

Talk task: *Look at page 78 and 79 of the Oxford Schools Atlas; locate New Zealand, what do you notice?*

Independent Task: *Why does New Zealand experience earthquakes? Describe the earthquake in 2011. How can people in New Zealand reduce the impact of earthquakes?* This task could be completed as an independent written task, or in pairs/small groups as a news bulletin.

Partner teach/Plenary: Have some earthquake related statements on the IWB and children answer true/false.

Step for depth: *Why do we rarely, if ever experience earthquakes in the UK?*

Vocabulary

- Tectonic plate
- Fault line
- Friction
- Plate boundary
- Christchurch

Suggested Resources

Video clips explaining how earthquakes occur (National Geographic link in lesson plan above), [tectonic plate map](#), Oxford Schools Atlas



Teacher Knowledge

New Zealand's main biomes are grassland and mixed forest, including temperate broadleaf and deciduous. The temperate climate, with lots of precipitation and sunshine, means New Zealand is home to a wide range of exotic plants and animals. The kiwi bird is a nocturnal, flightless bird, native to New Zealand. It is an icon of New Zealand, and people often refer to New Zealanders as 'kiwis.' Kiwi birds eat worms or bugs and lay their eggs on the ground. They have hair-like feathers, short legs and have nostrils at the end of their long beaks allowing them to smell prey before they see it. Stoats are not native to New Zealand and were introduced to control rabbit populations. They scavenge for meat, eating dead animals or birds' eggs and are now a danger to bird populations. Stoats use their long sharp incisors to break open eggs and then eat the contents, kiwi bird eggs are ideal for stoats to eat. New Zealand is also home to whales, seals, penguins, mountain goats and buffalo. Dolphins and whales can be seen off the coast of New Zealand, particularly during migration. Yellow eyed penguins are one of six species of penguins found in New Zealand. Before humans arrived, New Zealand had no native land-based mammals apart from bats.

Knowledge Objective

New Zealand's climate means it is home to a wide range of plants and animals.

Knowledge Goals

New Zealand has a temperate climate with lots of rainfall and sunshine.

The kiwi bird is native to New Zealand and is a national icon.

Stoats are a threat to bird populations.

Lesson Detail

Prior Learning: *What is a biome?* Recall climate and biome knowledge from the previous unit on Australia.

Vocabulary: Recap biome: A community of plants and animals that have shared characteristics due to the environment they live in.

Teach: Explain that New Zealand's location and size means it has a slightly different climate to Australia. The North Island can experience high temperatures in the summer, and the South Island can experience very low temperatures in the winter. Explain New Zealand has more rainfall than Australia and average temperatures are much cooler. This is due to the country being located further from the equator, closer to the Antarctic. The South Island is slightly cooler than the North Island (due to its location), in the winter, people go skiing in the mountains of the South Island. Show climate graphs for Auckland and Christchurch *How does the climate differ in Auckland and Christchurch?* Show images of biomes in NZ- grassland and mixed forest. Introduce Kiwi birds. Explain that Kiwi birds are a national icon in New Zealand and are a native species. Show an image. They have hair-like feathers, short legs and have nostrils at the end of their long beaks allowing them to smell prey before they see it. Explain people refer to New Zealander's as kiwis. Explain that Kiwi birds lay their eggs on the ground. Stoats are not a native species; they were introduced from Britain to control rabbit populations, they are an invasive species. They eat birds' eggs and are a threat to Kiwi populations. Stoats use their long sharp incisors to break open eggs and then eat the contents, kiwi bird eggs are ideal for stoats to eat. (Link to introduction of rabbits, an invasive species, in Australia)

Talk task: *How are stoats a threat to Kiwi birds in New Zealand?*

Task: *What is an invasive species?* Draw and label the Kiwi bird and explain the threat that stoats pose.

Partner teach/Plenary: *How does climate effect animals and plants? Discuss any examples you know from other countries too.*

Step for depth: *Stoats were introduced to New Zealand to kill rabbits. Rabbits were introduced for food and for sport (rabbit hunting) How have humans changed the ecosystem in New Zealand?*

Vocabulary

- Biome
- Climate
- Temperate
- Grassland
- Deciduous
- Kiwi Bird
- Stoat

Suggested Resources

Climate information on page 74 and 75, Biomes on page 76 and 77 of Oxford School Atlas, images of New Zealand animals.
Auckland climate graph: <https://en.climate-data.org/oceania/new-zealand/auckland/auckland-3605/#climate-graph>
Christchurch climate graph: <https://en.climate-data.org/oceania/new-zealand/canterbury/christchurch-4978/#climate-graph>



Teacher Knowledge

Knowledge Objective

To show understanding of place, space and environment in the context of New Zealand.

Knowledge Goals

New Zealand is located in the South Pacific Ocean.

New Zealand has volcanoes, geysers and can experience earthquakes.

Scientists think Maori people came from Polynesia to New Zealand around 700 years ago.

In 2011 there was an earthquake that caused buildings to collapse and many people died.

New Zealand has a temperate climate with lots of rainfall and sunshine.

Melanesia, Micronesia and Polynesia are groups of islands in the Pacific Ocean.

Lesson Detail

Knowledge Organiser: Blank out sections of the knowledge organiser for children to fill in. For example, leave a key word but blank out the definition and vice versa.

Multiple Choice Quiz: Children complete the MCQ and mark their own immediately afterwards to provide instant feedback.

Locational knowledge: Label a map of New Zealand and the South Pacific (include Australia as a recall task from previous unit)

Human and Physical Geography:

Option A: *Many tourists visit New Zealand and the South Pacific Islands every year. Explain why this region is a popular choice for tourists.*

Option B: *How does the location of New Zealand and the South Pacific Islands cause challenge for the region? (Include earthquakes and environmental factors in your answer)*

Vocabulary

Locational knowledge:

- New Zealand in the Southern Hemisphere
- Identify key places in New Zealand
- Locate the Pacific Islands

Recurring geographical concepts:

- Place
- Space
- Environment (Biodiversity)

Suggested Resources

Knowledge organiser, MCQ



| | | | |
|---|---|---|--|
| 1. New Zealand is located in: | A | The Southern Hemisphere | |
| | B | The Northern Hemisphere | |
| | C | Europe | |
| | D | Sydney | |
| 2. The Maori have lived in New Zealand for: | A | Over 100 years | |
| | B | Over 400 years | |
| | C | Around six months | |
| | D | Over 700 years | |
| 3. New Zealand experiences earthquakes because: | A | Earthquakes happen in the Southern Hemisphere | |
| | B | It is located in the middle of a tectonic plate | |
| | C | It is located on a boundary between two tectonic plates | |
| | D | Earthquakes happen where islands are located | |
| 4. The kiwi bird is under threat because: | A | Rabbits eat their eggs | |
| | B | Stoats catch the birds | |
| | C | It is cold in New Zealand | |
| | D | Stoats eat their eggs | |
| 5. Rising sea levels are a problem for the Pacific Islands because: | A | Many of the islands are low-lying, when sea levels rise, land becomes submerged | |
| | B | Many of the islands are far above sea level people can't reach the sea | |
| | C | Rising sea levels bring more fish to the islands | |
| | D | The water is cold | |