



Christchurch 🔴













an opening in the earth's surface, usually in a mountain, where gas, magma and ash can escape (Mount Ruapehu)

volcano

New Zealand and the South Pacific



a place where two tectonic plates meet: New Zealand is located on a plate boundary (a plate boundary runs through the South Island)

plate boundary





people living in New Zealand from the earliest times, before the arrival of

earthquake under the sea can cause huge waves called Tsunamis: the word

a community of plants and animals that have shared characteristics due to

a group of countries that voluntarily work together on issues such as human



mountain





New Zealand and the South Pacific Islands

Year 5

Building on knowledge from the previous unit studying Australia, children will study New Zealand and the South Pacific Islands, looking at both physical and human geographical features of the region. They will learn that New Zealand's position on a tectonic plate boundary results in geological activity such as earthquakes and features such as hot springs and geysers. The Christchurch Earthquake will be studied as an example of the human impact that a physical process can have. Children will learn that the Maori are people related to the very first humans to live in New Zealand and that their culture reflects rich traditions that are central to their identity. Drawing parallels with their understanding of the British colonisation of Australia, children will reflect upon the arrival of Europeans to New Zealand and the impact this had.

Children will look at climate graphs to compare the climate of the North Island with the South Island. They will identify biomes in New Zealand using maps. They will study the Kiwi bird, the national icon of New Zealand and will learn how the non-native animal, the stoat, has become a threat to the bird. The unit finishes by looking at the South Pacific Islands, particularly the Solomon Islands and the Cook Islands. Children will find out about the challenges facing these islands in modern times, including climate change causing sea-level rise and overfishing due to demand for tuna in Asia.

To assess children's understanding of the region, there are two suggested assessment questions to choose from. The first focuses upon reasons why people visit the region, requiring children to consider the unique people, places and environments in New Zealand and the South Pacific Islands. The second question requires children to consider the location of the region and the challenges that brings, for example, earthquakes and sea-level rise. Vitally these questions require children to reflect on their geographical understanding of the region.



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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.



Suggested Resources

New Zealand and the South Pacific

Lesson 1: New Zealand and the South Pacific



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 volcances, 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 volcances, 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. 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 <u>Zealandia</u> 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	Lesson Detail	Vocabulary
New Zealand is located in the South Pacific Ocean.	 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) 	 Southern Hemisphere Tasman Sea Southern Cross Polynesia Commonwealth
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.	 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 cance 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 volcances and geysers. Show flag, explain the presence of the Union Jack, as New Zealand was a British Colony and remains member of 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 <i>Zealandia</i> – or <i>Te Riu-a-Māu</i>. Talk task: <i>Describe New Zealand. Use your atlas to help you</i>. Suggested Task: Label a map of New Zealand (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? 	
	Oxford School Atlas, https://www.newzealand.com/uk/	



Suggested Resources

New Zealand and the South Pacific

Lesson 2: The History of New Zealand – The Maori



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 cances 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 dance, still performed tody 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.

Vocabulary
• Maori • Haka • Hongi • Ta Moko

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



Suggested Resources

Lesson 3: Earthquakes



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 volcances 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	Lesson Detail	Vocabulary
New Zealand experiences earthquakes because it is located on a plate boundary.	Prior Learning: Look again at Knowledge Organiser- <i>what can you tell me about New Zealand</i> ? Look at definition of earthquake on the KO.	 Tectonic plate Fault line Friction Plate boundary
	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.	Christchurch
Knowledge Goals	and why the shape of some continents look like pieces of the same jigsdw pazzle.	
New Zealand experiences earthquakes because it is located on a plate boundary.	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 <u>National Geographic video clip</u> explaining earthquakes. Introduce the 2011 earthquake in Christchurch. Discuss other geothermal activity present in New Zealand – geysers, hot springs, bubbling mud pools.	
In 2011 there was an earthquake that caused buildings to collapse and many people died.	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.	
Changes can be made to buildings and water		
pipes to protect them from earthquakes.	Partner teach/Plenary: Have some earthquake related statements on the IWB and children answer true/faise.	
	Step for depth. Why do we rarely, if ever experience cartinguaxes in the ork:	
	Video clips explaining how earthquakes occur (National Geographic link in lesson plan above) tectonic plate map Oxford Schools Atl	as



New Zealand and the South Pacific Lesson 4: Climate, Biomes and Animals



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	Lesson Detail	Vocabulary
New Zealand's climate means it is home to a wide range of plants and animals.	 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. 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) 	 Biome Climate Temperate Grassland Deciduous Kiwi Bird Stoat
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 thread to bird populations.	 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? 	
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: <u>https://en.climate-data.org/oceania/new-zealand/auckland/auckland-3605/#climate-graph</u> Christchurch climate graph: <u>https://en.climate-data.org/oceania/new-zealand/canterbury/christchurch-4978/#climate-graph</u>	



New Zealand and the South Pacific

Lesson 5: The Pacific Islands



Teacher Knowledge

The 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. Polynesia means 'many islands' and includes Hawaii and New Zealand. Easter Island is a Polynesian island famous for its statues with giant heads called Moai, there are over 800 of them and they represent the spirits of ancestors. They are very heavy, each weighing up to 80 tonnes. We don't know how the islanders moved them around. Melanesia, which means 'black islands' in Greek, is a group of islands including New Guinea, Fiji, the Solomon Islands and many smaller islands. The Cook Islands, named after Captain James Cook, are a group of islands in the South Pacific, associated with New Zealand. The people that live there hold New Zealand citizenship. In 2019, islanders began considering changing the name of the islands to reflect their Polynesian heritage and to drop the colonial name given to the islands by Cook. Many of the Pacific Islands are idyllic 'desert islands' with beautiful sandy beaches and blue seas, however the islands are vulnerable to a number of environmental issues including climate change, sea level rise, whaling, overfishing, deforestation and waste management.

Knowledge Objective	Lesson Detail	Vocabulary
Many small islands are located in the Pacific Ocean.	Prior Learning: Locate New Zealand on a map of the world. Name the world's oceans. Vocabulary: Melanesia, Micronesia and Polynesia are the names given to groups of islands in the Pacific Ocean. Melanesia means black islands, Micronesia means small islands and Polynesia means many islands.	 Melanesia, Micronesia Polynesia
Knowledge Goals Melanesia, Micronesia and Polynesia are groups of islands in the Pacific Ocean. Easter Island is famous for its large stone statues of leaders who lived there long ago. Environmental issues can cause problems for the Pacific islands.	 Teach: Locate the three regions of the Pacific Islands and show children that these regions contain many islands. Look again at tectonic plate map on page 78. Explain that some of the South Pacific Islands were formed as chains of volcanic islands, some are coral reefs formed on top of sunken volcanoes that have developed into islands, such as the Cook Islands, some islands have been formed by one tectonic plate moving under another and pushing the plate on top upwards. Show some images of the Pacific Islands and The Solomon Islands. Tourism is important to the Pacific Islands, people come for the beautiful beaches and to dive in the blue seas. Show Easter Island statues, explain they were carved from stone many years ago. Explain some environmental issues that are important in the region such as rising sea levels (more detail in link below) and overfishing (specifically bluefin tuna for sushi in Asia). Because the islands are small, fresh water is an essential resource, the islands are surrounded by sea water but drinking water is scarce. Talk task: Why is sea level rise more important to people living in the Solomon Islands than the UK? Suggested Task: Label a map of the Pacific Islands. Explain why rising sea levels and overfishing are a challenge for the Pacific Islands. Partner teach/Plenary: How can the Pacific Islands be protected? 	
	Step for depth: If environmental issues are not considered carefully, now could the Pacific Islands change in the future?	
Suggested Resources	<u>Teacher knowledge</u> on environmental issues in the Pacific Rising sea levels: <u>https://www.newscientist.com/article/2146594-eight-low-lying-pacific-islands-swallowed-whole-by-rising-seas/</u> Overfishing: <u>https://chinadialogueocean.net/9225-pacific-islanders-climate-change-overfishing/</u> The Cook Islands consider a name change: <u>https://www.theguardian.com/world/2019/mar/05/cook-islands-considers-name-change-to-reflect-true-polynesian-nature</u>	



Lesson 6: Assessment lesson

Teacher Knowledge



Knowledge Objective	Lesson Detail	Vocabulary
To show understanding of place, space and environment in the context of New Zealand.	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.	Locational knowledge: • New Zealand in the Southern Hemisphere
Knowledge Goals New Zealand is located in the South Pacific Ocean.	Multiple Choice Quiz: Children complete the MCQ and mark their own immediately afterwards to provide instant feedback.	 Identify key places in New Zealand
New Zealand has volcanoes, geysers and can experience earthquakes.	Locational knowledge: Label a map of New Zealand and the South Pacific (include Australia as a recall task from previous unit)	 Locate the Pacific Islands
Scientists think Maori people came from Polynesia to New Zealand around 700 years ago.	Human and Physical Geography:	Recurring geographical concepts:
In 2011 there was an earthquake that caused buildings to collapse and many people died.	Option A: Many tourists visit New Zealand and the South Pacific Islands every year. Explain why this region is a popular choice for tourists.	 Place Space Environmen (Biodiversity)
New Zealand has a temperate climate with lots of rainfall and sunshine. Melanesia, Micronesia and Polynesia are groups of islands in the Pacific Ocean.	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)	



New Zealand

Multiple Choice Quiz (Assessment Tool)



	Α	The Southern Hemisphere	
1. New Zealand is located in:		The Northern Hemisphere	
	С	Europe	
	D	Sydney	
	А	Over 100 years	
2. The Maori have lived in New	В	Over 400 years	
Zealand for:	С	Around six months	
		Over 700 years	
3 New Zealand experiences	A	Earthquakes happen in the Southern Hemisphere	
earthquakes because:	В	It is located in the middle of a tectonic	
		plate	
	С	It is located on a boundary between two	
		tectonic plates	
	D	Earthquakes happen where islands are	
		located	
	•	Dabbita aat thair area	
1. The kiwi bird is under threat	A	Rabbits eat their eggs	<u> </u>
hecause	В	Stoats catch the birds	<u> </u>
Decause.		It is cold in New Zealand	<u> </u>
	U	Stoats eat then eggs	
	Δ	Many of the jolando are low lying when	
5. Rising sea levels are a	A	sea levels rise land becomes submerged	
problem for the Pacific Islands because:		Many of the islands are far above sea	<u> </u>
		level people can't reach the sea	
	C	Rising sea levels bring more fish to the islands	
	D	The water is cold	