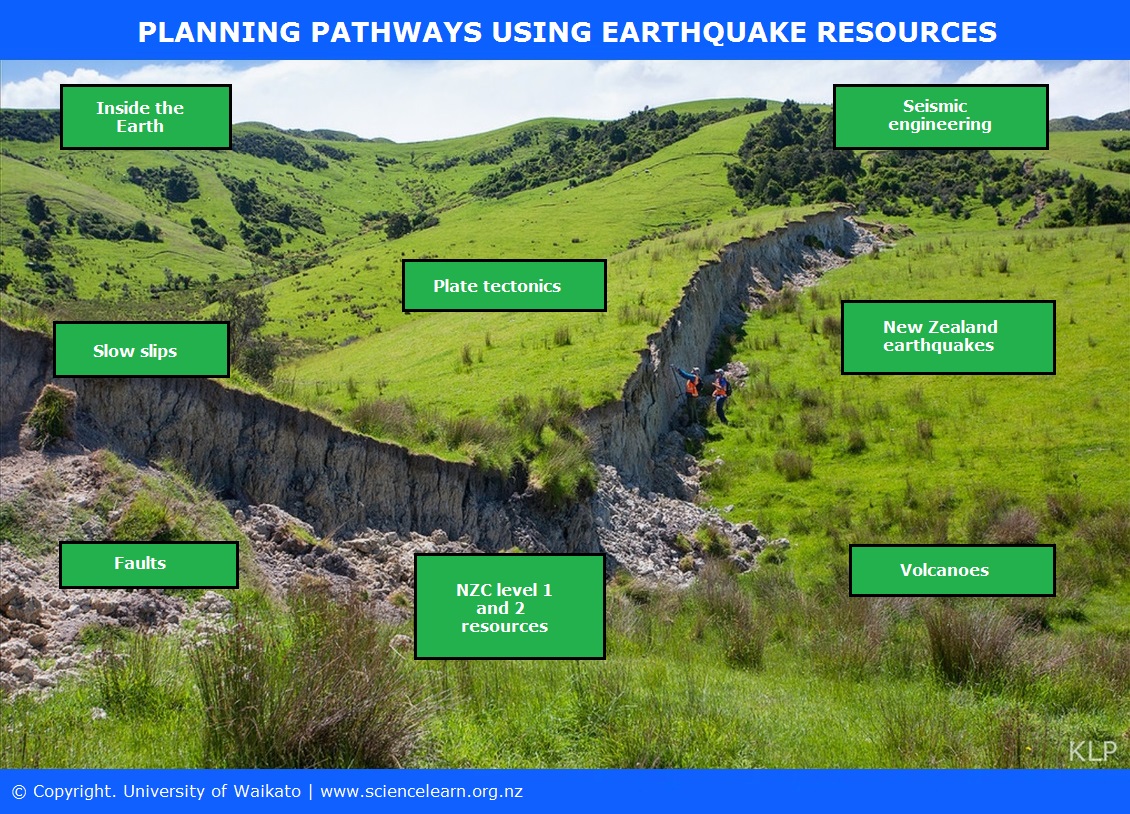
**Planning pathways using earthquake resources**

This interactive groups Hub resources into key science and teaching concepts. The article [Earthquake resources – planning pathways](https://www.sciencelearn.org.nz/resources/2530-earthquakes-resources-planning-pathways) provides pedagogical advice and links to the New Zealand Curriculum.



This [interactive diagram](https://www.sciencelearn.org.nz/image_maps/52-planning-pathways-using-earthquake-resources) provides a selection of pathways that allow for differing approaches and starting points using our [earthquakes resources](https://www.sciencelearn.org.nz/topics/earthquakes). The aim is to assist educators with their planning of lessons and units of work by providing options that cover multiple science concepts. If using the [online version](https://www.sciencelearn.org.nz/image_maps/52-planning-pathways-using-earthquake-resources), click on the labels for links to supporting articles, media, data and student materials.

Background image: Dr Katherine Pedley

**Transcript index**

* [**Inside the Earth**](#_Inside_the_Earth)
* [**Seismic engineering**](#_Seismic_engineering)
* [**Plate tectonics**](#_Plate_tectonics)
* [**Slow slips**](#_Slow_slips)
* [**New Zealand earthquakes**](#_Plate_tectonics_1)
* [**Faults**](#_Faults)
* [**NZC level 1 and 2 earthquake resources**](#_NZC_level_1)
* [**Volcanoes**](#_Volcanoes)

## **Transcript**

## **Inside the Earth**

The Earth is divided into layers.

Related articles

* [Inside the Earth](https://www.sciencelearn.org.nz/resources/337-inside-the-earth)
* [Moulding the Earth](https://www.sciencelearn.org.nz/resources/338-moulding-the-earth)
* [Magma on the move](https://www.sciencelearn.org.nz/resources/651-magma-on-the-move)
* [Magma formation](https://www.sciencelearn.org.nz/resources/645-exploring-magma-formation)

Related activities

* [World of quakes](https://www.sciencelearn.org.nz/resources/348-world-of-quakes)
* [Plates and quakes](https://www.sciencelearn.org.nz/resources/349-plates-and-quakes)
* [New Zealand plate boundary models](https://www.sciencelearn.org.nz/resources/351-new-zealand-plate-boundary-models)

University of Waikato

## 

## **Seismic engineering**

[](https://www.sciencelearn.org.nz/images/3274-seismic-engineering)Seismic engineers develop new techniques and new materials to help buildings withstand earthquakes.

Related articles

* [Seismic engineering](https://www.sciencelearn.org.nz/resources/331-seismic-engineering)
* [Strengthening Parliament House](https://www.sciencelearn.org.nz/resources/332-strengthening-parliament-house)
* [Base isolation and seismic dampers](https://www.sciencelearn.org.nz/resources/1022-how-do-base-isolators-work)
* [Seismic engineering at Canterbury University](https://www.sciencelearn.org.nz/resources/2836-seismic-engineering-at-canterbury-university)
* [Dr Bill Robinson](https://www.sciencelearn.org.nz/resources/345-dr-bill-robinson)

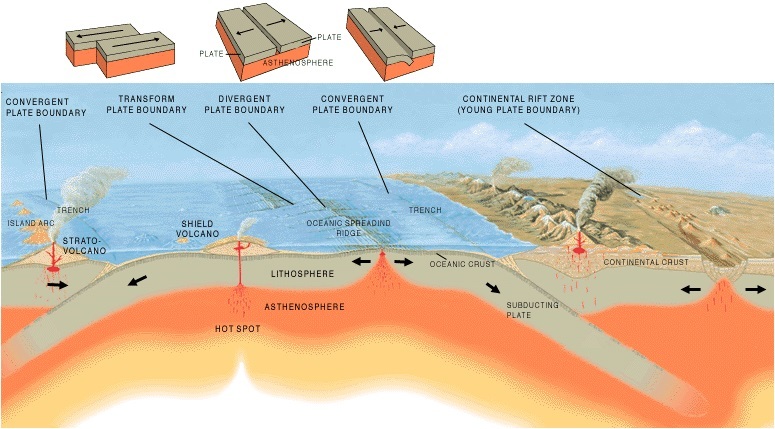
Related activity

* [Best base isolator](https://www.sciencelearn.org.nz/resources/355-best-base-isolator)

Robinson Seismic Limited

## 

## **Plate tectonics**

The Earth’s crust is made up of many plates that slide past each other causing friction and heat.

Related articles

* [Plate tectonics](https://www.sciencelearn.org.nz/resources/339-plate-tectonics)
* [Plate tectonics, volcanoes and earthquakes](https://www.sciencelearn.org.nz/resources/654-plate-tectonics-volcanoes-and-earthquakes)

Related activity

US Geological Survey (USGS)

* [Tectonic jigsaw puzzles](https://www.sciencelearn.org.nz/resources/933-tectonic-jigsaw-puzzles)

## [https://static.sciencelearn.org.nz/images/images/000/003/278/embed/EQS_IPP_ITV__EarthquakesIPP_Slow_slip_Laura_Wallace_Geonet.jpg?1522314906](https://www.sciencelearn.org.nz/images/3278-slow-slips)**Slow slips**

Large areas of New Zealand are silently and slowly moving due to slow slip events.

Related articles:

* [What are slow slips?](https://www.sciencelearn.org.nz/resources/341-what-are-slow-slips)
* [Dr Laura Wallace](https://www.sciencelearn.org.nz/resources/346-dr-laura-wallace)

Related activity:

* [Something creepy is happening](https://www.sciencelearn.org.nz/resources/356-something-creepy-is-happening)

Laura Wallace, Geonet

## **New Zealand earthquakes**

Scientists record around 15,000 earthquakes in New Zealand every year. There are some big quakes that have become part of our history.

[](https://www.sciencelearn.org.nz/images/3275-new-zealand-earthquakes)Related articles

* [Canterbury earthquakes](https://www.sciencelearn.org.nz/resources/342-canterbury-earthquakes)
* [Liquefaction](https://www.sciencelearn.org.nz/resources/343-liquefaction)
* [Kaikōura earthquake](https://www.sciencelearn.org.nz/resources/2312-kaikoura-earthquake)
* [Investigating earthquakes – introduction](https://www.sciencelearn.org.nz/resources/329-investigating-earthquakes-introduction)

Related activities

* [Shaky New Zealand](https://www.sciencelearn.org.nz/resources/350-shaky-new-zealand)
* [Earthquakes past and future](https://www.sciencelearn.org.nz/resources/354-earthquakes-past-and-future)
* [Earthquake location](https://www.sciencelearn.org.nz/resources/352-earthquake-location)

Dr Katherine Pedley

## 

## **Faults**

[](https://www.sciencelearn.org.nz/images/3273-faults)A fault is a fracture in the Earth’s crust where the rock mass on either side has been displaced. Earthquakes occur on active fault lines.

Related articles

* [Faults](https://www.sciencelearn.org.nz/resources/336-faults)
* [The Alpine Fault](https://www.sciencelearn.org.nz/resources/330-the-alpine-fault)
* [Squishy rocks and earthquakes](https://www.sciencelearn.org.nz/resources/492-squishy-rocks-and-earthquakes)

Related media

* [Why study the Alpine Fault?](https://www.sciencelearn.org.nz/videos/1130-1-why-study-the-alpine-fault)
* [From mountains to microscopes](https://www.sciencelearn.org.nz/image_maps/8-from-mountains-to-microscopes)

Dave Prior

Related activities

* [New Zealand plate boundary models](https://www.sciencelearn.org.nz/resources/351-new-zealand-plate-boundary-models)
* [Earthquakes past and future](https://www.sciencelearn.org.nz/resources/354-earthquakes-past-and-future)

## 

## **NZC level 1 and 2 earthquake resources**

These resources offer an introduction to the science behind earthquakes.

[](https://www.sciencelearn.org.nz/images/3279-nzc-level-1-and-2-earthquake-resources)Related articles

* [Earthquakes and volcanoes](https://www.sciencelearn.org.nz/resources/930-earthquakes-and-volcanoes)
* [Under the Earth’s surface](https://www.sciencelearn.org.nz/resources/931-under-the-earth-s-surface)
* [The moving Earth](https://www.sciencelearn.org.nz/resources/1426-the-moving-earth)
* [Shaky scientists and engineers](https://www.sciencelearn.org.nz/resources/929-shaky-scientists-and-engineers)

Related media

* [Tectonic plates, volcanoes and earthquakes](https://www.sciencelearn.org.nz/videos/497-tectonic-plates-volcanoes-and-earthquakes)

Related activities

* [Models of the Earth](https://www.sciencelearn.org.nz/resources/932-models-of-the-earth)
* [Tectonic jigsaw puzzles](https://www.sciencelearn.org.nz/resources/933-tectonic-jigsaw-puzzles)
* [Tectonic sandwiches](https://www.sciencelearn.org.nz/resources/934-tectonic-sandwiches)
* [Earthquakes – unit plan](https://www.sciencelearn.org.nz/resources/357-earthquakes-unit-plan)

## [https://www.sciencelearn.org.nz/system/image_maps/images/000/000/051/original/ITV_Image_map_VolcanoesResources_BG-Plate_v3_final.jpg?1522282567&1533712381240](https://www.sciencelearn.org.nz/image_maps/51-planning-pathways-using-volcanoes-resources)

## **Volcanoes**

The interactive [Planning pathways using volcanoes resources](https://www.sciencelearn.org.nz/image_maps/51-planning-pathways-using-volcanoes-resources) groups Hub volcanoes resources into key science concepts and topics.