

New Zealand

Shake Out



DROP, COVER HOLD • National earthquake drill • 9:15am, 15 October 2015 • www.shakeout.govt.nz

Multi-Level Health and Safety, Science and Cross Curricula Classroom Activities supporting New Zealand ShakeOut: 9.15 am, 15 October 2015

www.shakeout.govt.nz

TEACHER INTRODUCTION

20,000 earthquakes are recorded each year in and around New Zealand but only about 200 are felt. All of New Zealand is susceptible to earthquakes with some areas deemed more at risk than others. The tragic events in Christchurch have shown just what can happen, even in an area considered a lower risk than others and graphically illustrated why all New Zealanders should know what to do before, during and after an earthquake.

New Zealand ShakeOut is part of an international world-wide earthquake drill. Schools are urged to [register](#) for New Zealand ShakeOut, Drop, Cover Hold to be held at 9.15am on 15 October. NZ ShakeOut is designed to learn about and show others the actions to take before, during and after an earthquake. Once [registered](#) your school will get the latest news and tips on the New Zealand ShakeOut and how to prepare for earthquakes. Use this introductory unit in conjunction with the dozens of other resources at www.shakeout.govt.nz/resources

TUNING IN TO EARTHQUAKES AND THEIR CAUSES

- How many students in the class have felt (experienced) an earthquake? Share personal experiences including:
 - where they were and what they were doing at the time
 - how big (severe) it was and how long it lasted
 - what they did during and after the earthquake.
- Through group discussion, challenge students to describe (define) exactly what an earthquake is and what do they think are the causes of earthquakes. Groups report back.
- Play the following videos to the class and using shared reading have students discover and discuss the following:
www.sciencekids.co.nz/videos/earth/whatisanearthquake.html
<http://video.nationalgeographic.com/video/inside-earthquake>
 - the names given to the plates, the ways they move past each other and how quickly they move
 - what happens when they get stuck and can't move past each other (what happens and what does this cause)
 - the amount the earth can move in small and large quakes
 - the reasons why some locations (places) have more and larger earthquakes
 - the predictability or unpredictability of earthquakes
 - probable reasons why people are very scared of earthquakes
 - the name given to the energy released by earthquakes

Key Ideas and Indicative Curriculum Links

Science: Planet Earth.

- Students will gain an understanding of the causes of earthquakes, where they are most likely to occur, the amount of earth movement they cause and what earthquakes have created on the surface of the earth.

Social Sciences: Place and Environment, Continuity and Change.

- Students will investigate the effects that major earthquakes have had on New Zealand's environment in an historical context and the consequences for affected communities.

Health : Health & Safety Management, Healthy Communities/Environments

- Students will learn and practise actions to take during an earthquake, understand the dangers they face both inside and outside and how drop, cover hold will help protect them from injury.
- Students will gain an understanding that there are prior actions communities and families can take and plans they can make to help them prepare for and minimise effects of an earthquake and get these messages out.
- Students will visit their local CDEM website and discover the actions to take, before, during and after a disaster and the role CDEM will play.

Links to English, Technology. Multi Level

- what our world would be like today without earthquakes and what earthquakes create on the surface of the earth.

EARTHQUAKES IN NEW ZEALAND

- View: www.youtube.com/watch?v=SotnDZ36wBQ
 - focus on the comparison pre and post quake as to how the damage to the city has impacted on peoples lives
- View: www.youtube.com/watch?v=F6-knLM7MZA
 - identify the consequences to everyday life of damage to infrastructure such as roads, sewerage, water . . .
- Have students view discuss and answer the following at: www.shakeout.govt.nz/whyparticipate
 - the number of earthquakes in New Zealand every year and about how many are large enough to feel
 - find out how at risk your region is to earthquakes
 - what have we learnt from the Christchurch earthquake.
- Divide into groups and have each group conduct research into the examples of severe earthquakes in New Zealand at: www.shakeout.govt.nz/whyparticipate 'Fly' to each location using Google Maps. Have students report back on the following:
 - the date and the magnitude of the earthquake
 - the physical and infrastructure damage caused
 - casualties and causes
 - where else it was felt and the aftershocks.



Register your school for ShakeOut today and make New Zealand the biggest (per capita) ShakeOut drill in the world?

WHY DROP, COVER HOLD?

- Discover why we have so many earthquakes in New Zealand: <https://www.youtube.com/watch?v=aQTfFCMYE14>
Discuss what Kelvin Berryman tells us we must all do if we live in an earthquake prone country like New Zealand. What advice does he give us to do immediately when ever we feel the earth start to shake?
- Print out or project the 'Drop, Cover Hold is still the right action to take' pdf from the Why Drop, Cover Hold section of: www.shakeout.govt.nz/whyparticipate for research:
 - what actions do you immediately take if you are inside a building and what does this help protect us from?
 - what actions do we take if we can't drop?
 - what should we try to do now by looking around?
 - what actions do we take if we are outside or driving?
 - what causes most earthquake-related injuries and deaths?
 - what actions also cause many injuries?
 - why is it not safe to run outside during an earthquake?
- Play the (delightful) Drop, Cover Hold video of young kids at: www.youtube.com/watch?v=RrUpc9qFvWA&feature=youtu.be to reinforce the message. Practise this drill in your classroom.

BEFORE, DURING AND AFTER AN EARTHQUAKE

- Do the students think there is anything they or their families can do now to help them prepare for an earthquake? List.
- Visit: www.getthru.govt.nz/disasters/earthquake for student research on actions to take before, during and after an earthquake (or other disaster). Have students summarize these actions to share and discuss with families at home. Invite the school principal to talk to the class about the emergency plan that will be followed at school.

GETTING THE MESSAGE OUT ON SHAKEOUT DAY

- Do students know that every region in New Zealand has a Civil Defence Emergency Group (CDEM)? Tell students that it is very important to visit their website to help people know what to do in an emergency. Visit your local website.
- Enthuse and involve all students in planning and running a 'Get Ready Day' in conjunction with New Zealand ShakeOut Day where students and families view and learn about emergency planning and actions to take.

Contact your local council to see how they can support your New Zealand ShakeOut drill.

Civil Defence Emergency Management (CDEM) Groups

Northland

www.nrc.govt.nz/civildefence

Auckland

www.aucklandcivildefence.org.nz

Waikato

www.waikatoregioncdemg.govt.nz

Taranaki

www.trc.govt.nz/Taranaki-Civil-Defence

Bay of Plenty

www.bopcivildefence.govt.nz

Gisborne

www.gdc.govt.nz/civil-defence

Hawkes Bay

www.hbemergency.govt.nz

Manawatu-Wanganui

www.horizons.govt.nz/keeping-people-safe/emergency-management

Wellington Region

www.getprepared.org.nz

Nelson Tasman

www.nelsontasmancivildefence.co.nz

Marlborough

www.marlborough.govt.nz/Services/Emergency-Management

Canterbury

www.cdemcanterbury.govt.nz

West Coast

www.wcrc.govt.nz (Select > our services, select > civil defence)

Otago

www.otagocdem.govt.nz

Southland

www.civildefencesouthland.govt.nz

Chatham Islands

www.cic.govt.nz/what-we-do/emergency-management

www.shakeout.govt.nz/resources

Use the extensive resources at this website to help plan your New Zealand ShakeOut drill including factsheets, guides, videos, web links, posters, web banners and custom flyers for schools.

Get ready for the big
New Zealand
ShakeOut

9.15am 15 October 2015

GET READY GET THRU SIGN UP

Sign up your school today at:
www.shakeout.govt.nz/schools