Subject: Geography

Assessment Y3/4

YEAR 4 UNIT 3 – Earthquakes and volcanos

KS2 Programmes of Study

Pupils should extend their knowledge and understanding beyond the local area to include the United Kingdom and Europe, North and South America. This will include the location and characteristics of a range of the world's most significant human and physical features. They should develop their use of geographical knowledge, understanding and skills to enhance their locational and place knowledge Pupils should be taught to:

Locational knowledge

- locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities
- name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time
- identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night)
- Place knowledge
- understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America

Human and physical geography

- 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

Geographical skills and fieldwork

- use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied

KS2 Purpose of Study

- A high-quality geography education should inspire in pupils a curiosity and fascination about the world and its people that will remain with them for the rest of their lives. Teaching should equip pupils with knowledge about diverse places, people, resources and natural and human environments, together with a deep understanding of the Earth's key physical and human processes. As pupils progress, their growing knowledge about the world should help them to deepen their understanding of the interaction between physical and human processes, and of the formation and use of landscapes and environments. Geographical knowledge, understanding and skills provide the frameworks and approaches that explain how the Earth's features at different scales are shaped, interconnected and change over time

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Schools are not required by law to teach the example content in [square brackets].

Aims

The national curriculum for geography aims to ensure that all pupils:

- develop contextual knowledge of the location of globally significant places – both terrestrial and marine – including their defining physical and human characteristics and how these provide a geographical context for understanding the actions of processes
- understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time
- are competent in the geographical skills needed to:
  - collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes
  - interpret a range of sources of geographical information, including maps, diagrams, globes, aerial photographs and Geographical Information Systems (GIS)
  - communicate geographical information in a variety of ways, including through maps, numerical and quantitative skills and writing at length.

• use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world • use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.	
Knowledge, skills and concepts In this unit, the children will: • Describe and understand the key aspects of volcanoes and earthquakes • Understand that the distribution of earthquakes and volcanoes follows a pattern • Be introduced to plate tectonics. • Learn about the 'pacific ring of fire'.	**Key Questions** • **What is happening when the Earth shakes?** • **What is happening when the Earth rattles and rolls?** • **Does the Earth shake, rattle and roll all over?** • **How and why do people live where the Earth shakes, rattles and rolls?** • **How disastrous have recent earthquakes and/or volcanic eruptions been?** • **Can we make a model volcano that erupts?**
Key Vocabulary **Earthquake, rock strata, Earth, core, mantle, crust, tectonic plate, plate boundary, tectonics Volcano, crater, cone, vent, eruption, lava, molten, ash plume, caldera, pressure, converge, diverge, Java and Sumatra (both Indonesia), Philippines, Mid-Atlantic Ridge, Iceland Active, dormant, extinct, Popocatépetl, Iztaccíhuatl, Mexico, 'Ring of Fire' Hazard, risk, danger, tsunami, Cotopaxi, Ecuador, advantages, disadvantages, social, environmental, economic, Tigua, Quechuan Richter Scale, magnitude, Japan, Pompeii, Vesuvius, Italy**	**Assessment overview** • The assessment opportunities included in Rising Stars Geography are planned to have maximum impact on pupils while adding the minimum burden to teacher workload. Each unit has a key assessment opportunity which links with the Rising Stars Geography progression framework that is cross-referenced to the National Curriculum. It also links to the information contained in the Curriculum Coverage and Progression Charts. These assessment opportunities will enable the teacher to monitor progress made by individual pupils and review areas where the class or groups excels, or where areas of learning need to be revisited, developed and consolidated in a different context. • Formative assessment opportunities are integrated throughout the units. Some are informal and depend on the use of talk, eavesdropping on pupil-pupil discussion, or teacher-pupil conversation, checking that geographical vocabulary has been acquired, is understood and can be used correctly (associated with visual images where relevant). These opportunities check understanding, identify misconceptions, enable direct feedback and allow for adaptation without unnecessary elaboration or differentiation • Finally, an online end-of-unit quiz is also included in each unit. By their nature, these usually test retention of what has been taught, rather than geographical knowledge and understanding, although they could be used by the pupils as research exercises and challenges beyond the direct scope of the unit. They can also provide the teacher with a quick check on where an aspect of learning needs revisiting and reinforcing
Cultural Capital	**Opportunities** Virtual field trips - explore the world without leaving the classroom www.virtualfieldtrips.org Volcano in Hawaii – video 22 mins but also includes Alaska – so you need to fast forward - https://virtualfieldtrips.org/national-parks-west-alaska-hawaii/

	Use BBC live Volcano watch webcams https://www.bbc.co.uk/programmes/articles/14zZfpg3vmb9r4FB9mCHjy/live-volcano-webcams Kilauea - Hawaii – volcano webcam links https://www.usgs.gov/volcanoes/kilauea/webcams https://www.usgs.gov/media/videos/continued-eruption-halema-uma-u-crater-k-lauea Augustine – Alaska https://avo.alaska.edu/webcam/Augustine_-_Lagoon.php Yellowstone – USA https://www.usgs.gov/volcanoes/yellowstone/multimedia Also google map of erupting volcanos

Key Assessment Opportunity

Key areas assessed in the Rising Stars Progression Framework

- Geographical knowledge: Locate the world's countries, focusing on Europe and North and South America.
- Geographical understanding: Describe and understand key aspects of physical geography including: earthquakes and volcanoes.
- Geographical skills and enquiry: Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.

	Working towards expectations Y3 **Progression Framework statement**: 1. When guided by an adult, can begin to locate Europe and South America on a map or atlas (e.g. Italy, Ecuador). 2. Can begin to use the correct geographical language when supported with an adult to describe natural features. With a supporting adult, can Use a map to identify countries in Europe and/or North and South America.	

	Working at Expectations Y3 **Progression Framework statement:** 3. Locate countries in Europe and South America on a map or atlas (e.g. Italy, Ecuador). 4. Recognise different natural features such as a volcano and earthquake and describe them using a range of key vocabulary (e.g. with support, make a working model of a volcano and label it with the features of a volcano and describe an eruption). Use a map to identify countries in Europe and/or North and South America.	
	Working at greater depth Y4 **Progression Framework statement:** 1. Locate some countries in Europe and South America on a map or atlas (e.g. Italy, Ecuador). 2. Use simple geographical vocabulary to describe significant physical features and talk about how they change. Describe a volcano, volcanic eruption and an earthquake (e.g. make a working model of a volcano, label it with the features of a volcano and explain what happens when it erupts). 3. Use a map or atlas to locate some countries and cities in Europe or North and South America. 4. Use a map to locate some states of the USA (e.g. California). Use an atlas to locate volcanoes and locations of earthquakes.	

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<td rowspan="2">Assessment - Task in week 6

Children will answer the question:
Can we make a model volcano that erupts?

One recipe for an erupting volcano is given but you will find others online.

You may choose for all children to use the same recipe or you may prefer to give the children different recipes, making the activity competitive by setting up a fair test to discover which is the ‘best’ – how will the children define ‘best’? What are the characteristics of a ‘good’ model volcano?</td>
<td>Working towards expectations Y4
Progression Framework statement:
5. Locate countries in Europe and South America on a map or atlas (e.g. Italy, Ecuador).
6. Recognise different natural features such as a volcano and earthquake and describe them using a range of key vocabulary (e.g. with support, make a working model of a volcano and label it with the features of a volcano and describe an eruption).
7. Use a map to identify countries in Europe and/or North and South America.</td>
<td>NOTES on children</td>
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<td>Working at Expectations Y4
Progression Framework statement:
5. Locate some countries in Europe and South America on a map or atlas (e.g. Italy, Ecuador).
6. Use simple geographical vocabulary to describe significant physical features and talk about how they change. Describe a volcano, volcanic eruption and an earthquake (e.g. make a working model of a volcano, label it with the features of a volcano and explain what happens when it erupts).
7. Use a map or atlas to locate some countries and cities in Europe or North and South America.
8. Use a map to locate some states of the USA (e.g. California). Use an atlas to locate volcanoes and locations of earthquakes.</td>
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	Working at greater depth Y4 **Progression Framework statement:** **1.** Locate some countries in Europe and North and South America on a map or atlas (e.g. Ecuador, Mexico, Italy including Sicily, Japan). **2.** Describe several physical features and describe how they change. **3.** Describe volcanoes, volcanic eruptions, the Pacific Ring of Fire and earthquakes (e.g. independently make a working model of a volcano, label it with the features of a volcano and describe how, and offer reasons why, it erupts; relate this to one or more examples of volcanoes around the world). **4.** Use an atlas to locate many countries, cities and key features in Europe or North and South America. **5.** Use a map to locate the states of the USA. (e.g. California and the San Andreas Fault). Use an atlas with confidence to locate volcanoes, earthquakes and the Pacific Ring of Fire.	
Assessment notes / evaluation – include SEN / PP next step learning and areas that need more focus		

Year 3	Working below expectations	Working within Expected Standard	Working above expected
Target	**14 – 20%** **(no more than 2 children)**	**80 %- 86%**	**20%**
Term 1			
Term 2			
Term 3			

Year 4	Working below expectations	Working within Expected Standard	Working above expected
Target	**14 – 20%** **(no more than 2 children)**	**80 %- 86%**	**20%**
Term 1			
Term 2			
Term 3			