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| **TOPIC OVERVIEW:** This project teaches children about the features and characteristics of Earth's layers, including a detailed exploration of volcanic, tectonic and seismic activity. | | | | |
| **Introduction to topic:** | | | | |
| **GEOGRAPHY** | | | | |
| **LEARNING OBJECTIVES:**  **Locational knowledge:**   * Locate worlds countries, use maps to focus on Europe   **Place Knowledge:**   * Understand similarities and differences between the UK and a region of Europe | | | **Human geography:**   * Use maps, atlases and globes to locate countries and described features   **Physical geography:**   * Describe and understand key aspects of volcanoes and earthquakes | |
| **Lesson objectives:** | **WALT and Activity** | | | **Possible resource** |
| **GEOGRAPHY Session 1:**   * Objective: Name and describe the types, appearance and properties of rocks. | **WALT: name and describe the types, appearance and properties of rocks.** | | | * Selection of rocks * Camera * Geologist * Photos |
| **ACTIVITY:**  Invite a geologist into school to run a rocks workshop. Provide opportunities for the children to explore, sort and classify different types of rock and investigate their properties. Encourage them to take on the role of assistant geologists, taking photographs of rocks and writing captions and labels to make an informative rocks display. | | |
| **GEOGRAPHY Session 2:**  Objective:   * The Earth is made of four different layers: inner core, outer core, mantle and crust | **WALT:** Name and describe properties of the Earth’s four layers. | | | * [Layers of the Earth poster](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8239) * [Layers of the Earth information sheet](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8239) * [Layers of the Earth question sheet](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8239) * [Layers of the Earth answer sheet](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8239). |
| **ACTIVITY:**  Introduce the children to the structure and characteristics of the Earth’s layers, using the [Layers of the Earth poster](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8239) or [Layers of the Earth information sheet](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8239). Encourage them to ask any questions they may have and discuss the information. Challenge the children to work in pairs to complete the [Layers of the Earth question sheet](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8239) and then share their answers with the group, checking against the [Layers of the Earth answer sheet](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8239). | | |
| **GEOGRAPHY Session 3:**  Objective:  .Convergent tectonic plates push together. Divergent tectonic plates pull apart. Transform tectonic plates slide past each other | **WALT:** Describe the activity of plate tectonics and how this has changed the Earth’s surface over time (continental drift). | | |  |
| **ACTIVITY:** Share the [Plate tectonics presentation](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8248) with the children. Take time to study each slide and use a world map to identify the location of plate boundaries. Discuss how the tectonic plates move and the potential impact on the Earth’s surface. Ask the children to work in pairs to complete the [Plate tectonics recording sheet](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8248) then feedback their answers to the group. Identify and correct any misconceptions the children may have. | | |
| **GEOGRAPHY Session 4:**  Objective   * The Ring of Fire is a large area around the Pacific Ocean where many earthquakes and volcanic eruptions occur. * Significant volcanoes include Mount Vesuvius in Italy, Laki in Iceland and Krakatoa in Indonesia. | **WALT:** Name and locate significant volcanoes and plate boundaries and explain why they are important. | | | * [Ring of Fire presentation](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8249). * [Tectonic plate map](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8249). * [Ring of Fire sorting cards](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8249) * [Ring of Fire answer sheet](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8249). * Computer or tablet * Web access |
| **ACTIVITY:** Show the children the [Ring of Fire presentation](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8249). After reading the information, challenge the children to draw the Ring of Fire on the [Tectonic plate map](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8249). Ask the children to work in pairs to read the [Ring of Fire sorting cards](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8249) and sort them into two groups: true or false. Encourage them to work with another pair to check and compare their answers using the [Ring of Fire answer sheet](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8249). Gather the children together to see how they have sorted the cards and summarise, in their own words, why the Ring of Fire is significant. | | |
| **GEOGRAPHY Session 5:**  Objective:   * A volcano is a physical feature, typically a conical mountain or hill, that has a crater or vent through which lava, rock fragments, hot vapour, and gas erupt or have erupted. * A volcano can be active, dormant or extinct | **WALT:** Classify, compare and contrast different types of geographical feature | | | * [World volcanoes map](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8252) * [Fact file template](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8252) * Web access * Computer or tablet |
| **ACTIVITY:** Show the children the [World volcanoes map](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8252). Explain that they will be investigating a volcano of their choosing and creating a fact file about it. Encourage them to use books and a child-friendly internet search engine to find out information about it, including its location, size, type, status and date of last eruption. Encourage the children to record their findings on the [Fact file template](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8252). When complete, ask them to share their fact files within a small group and compare their choices. The children could complete another fact file as part of their home learning. | | |
| **GEOGRAPHY Session 6:**  Objective | **WALT:** | | |  |
| **ACTIVITY:** | | |
| **GEOGRAPHY Session 7:**  Objective | **WALT:** | | |  |
| **ACTIVITY:** | | |
| **GEOGRAPHY Session 8:**  Objective | **WALT:** | | |  |
| **ACTIVITY:** | | |
| **HISTORY** | | | | |
| **LEARNING OBJECTIVES:**  **Historical periods and people:**   * Roman Empire and its impact on Britain   **Chronology:**   * Create timelines across and within historical time periods | | | **Historical concepts:**   * Understand the cause and significance of historical events * Compare historical periods (Similarities and differences) * Ask historical questions about characteristics, links and evidence * Use historical sources to support historical knowledge | |
| **Lesson objectives:** | | **WALT and Activity** | | **Possible resource** |
| **HISTORY Session 1:**  Objective   * Pompeii was an ancient Roman city that perished when Mount Vesuvius erupted in AD 79. * Pompeii is an archaeological site of great importance | | **WALT:** Explain the cause and effect of a significant historical event. | | * [The eruption of Mount Vesuvius audio](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8255) * [The eruption of Mount Vesuvius audio transcript](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8255) * [Mount Vesuvius sorting cards](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8255) * Computer or tablet * Web access |
| **ACTIVITY:**  Share [The eruption of Mount Vesuvius audio](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8255) with the children, and provide copies of [The eruption of Mount Vesuvius audio transcript](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8255) for the children to follow as they listen if needed. After listening, use the [Mount Vesuvius sorting cards](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8255) to help the children discuss the causes and effects of each stage of the eruption. Ask them to write a short explanation of the causes and effects, using the statements to help them. Gather the children together to compare their findings and allow them to add to and edit their work. Invite them to word process their explanations and illustrate them using images found online. | |
| **HISTORY Session 2:**  Objective:  Make deductions and draw conclusions about the reliability of a historical source or artefact | | **WALT:** Make deductions and draw conclusions about the reliability of a historical source or artefact | | * [Pompeii excavations information sheet](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8256) * [Pompeii excavations picture cards](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8256) * [Pompeii excavations recording sheet](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8256) |
| **ACTIVITY:** Share the [Pompeii excavations information sheet](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8256) with the children and discuss the work of archaeologist Giuseppe Fiorelli. Display the [Pompeii excavations picture cards](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8256) on the IWB and explain that the illustrations are taken from a magazine called *Tour du Monde*, published in 1864 during the excavations of Pompeii. Discuss the provenance of the illustrations, asking questions such as ‘Are these a primary source? Could the artists have changed the scenes in any way? Are they a reliable source of information?' Encourage the children to look at each picture carefully and ask them to decide what they can infer about life in Pompeii before the eruption. Provide them with the [Pompeii excavations recording sheet](https://my.cornerstoneseducation.co.uk/project/rocks-relics-and-rumbles/lesson/8256) and encourage them to answer the questions about each of the illustrations. When complete, talk through the children’s ideas, then, using the illustrations as a starting point for further research, ask the children to write a report about life in Pompeii before the eruption. | |
| **HISTORY Session 3:**  Objective | | **WALT:** | |  |
| **ACTIVITY:** | |
| **HISTORY Session 4:**  Objective | | **WALT:** | |  |
| **ACTIVITY:** | |
| **HISTORY Session 5:**  Objective | | **WALT:** | |  |
| **ACTIVITY:** | |
| **HISTORY Session 6:**  Objective | | **WALT:** | |  |
| **ACTIVITY:** | |
| **HISTORY Session 7:**  Objective | | **WALT:** | |  |
| **ACTIVITY:** | |
| **HISTORY Session 8:**  Objective | | **WALT:** | |  |
| **ACTIVITY:** | |
| **ART** | | | | |
| **LEARNING OBJECTIVES:**  **ART**   * to create sketch books to record their observations and use them to review and revisit ideas * Improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay] | | | **DT**   * Make: Use a wide range of materials according to their function | |
| **Lesson objectives:** | **WALT and Activity** | | | **Possible resource** |
| **ART Session 1:**  Objective  Students will create a three-dimensional model of a volcano using various materials, demonstrating their understanding of the structure of a volcano and its eruptive features. They will incorporate both artistic elements (such as texture and colour) and scientific concepts (like layers of the volcano and lava flow) into their designs. | **WALT:** create a 3D model of a volcano, using different materials to show its layers and structure, and to understand how a volcano erupts. | | | * Clay, papier-mâché, or modelling materials (like foam or playdough) * Paints and paintbrushes * Baking soda * Vinegar * Small plastic bottles or containers (for the volcano's core) * Glue * Craft paper (for papier-mâché) * Scissors * Markers or colored pencils * A tray or plastic sheet to contain mess * Protective aprons or old clothes (to prevent paint spills) * Plastic spoons or small cups (for mixing baking soda and vinegar) *  Water for mixing papier-mâché (if used) |
| **ACTIVITY:** In today’s lesson, the students will create their very own volcanoes. First, they will learn about the different parts of a volcano, including the layers, the magma chamber, and the crater. Then, using clay, papier-mâché, or other craft materials, they will build a 3D model of a volcano. Once their volcanoes are ready, the students will paint them to make them look realistic.  Finally, they will simulate a volcanic eruption using baking soda and vinegar to see how the lava flows. By the end of the lesson, each student will have their own erupting volcano and will have gained an understanding of how volcanoes work, both artistically and scientifically. | | |
| **ART Session 2:**  Objective | **WALT:** | | |  |
| **ACTIVITY:** | | |
| **ART Session 3:**  Objective | **WALT:** | | |  |
| **ACTIVITY:** | | |
| **DT Session 1:**  Objective | **WALT:** | | |  |
| **ACTIVITY:** | | |
| **DT Session 2:**  Objective | **WALT:** | | |  |
| **ACTIVITY:** | | |