East Dene Primary School

# Medium Term Planning: Geography

**Year group**: 4

**Geographical enquiry question for learning:** How do natural processes such as volcanoes, earthquakes, and mountain formation shape our planet and affect human life? (Environment and Interconnection)

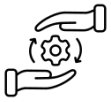

**Geographical scale for learning:** Local / UK/ World

**Geographical concepts:**

Place Environment Space Scale Diversity Change Interconnection Sustainability





**Subject rationale:**
This enquiry encourages pupils to explore various geological phenomena — such as mountains, earthquakes, and volcanoes — and their impacts on the Earth's surface and human settlements. It prompts investigation into the causes and effects of these natural events, fostering an understanding of how geological processes contribute to shaping landscapes and influencing human activities and decisions.

**Prior learning:**
From Key Stage 1, pupils had developed a foundational understanding of physical geography by exploring basic landforms, weather patterns, and using simple maps to identify continents, oceans, and the countries of the UK. In Year 3, their knowledge expanded to include specific study of hills and mountains. This prior learning provided a basis for their Year 4 studies, where they delved into more complex geological processes, such as the Earth's layers, tectonic plate movement, and the formation of mountains and volcanoes.

| Enquiry | Connecting Learning | Direct Instruction<br>Practice | Evaluation and Assessment<br>What if question? |
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| **Lesson 1: What lies below the Earth's surface and what happens when the Earth's tectonic plates meet?**<br>**Scale:** Introducing Earth's internal structure and tectonic plate interactions.<br>.  | Ask pupils to brainstorm what they think is beneath the Earth's surface. Write their ideas on the board, encouraging them | **Earth's Layers Introduction**<br>Explain that today, students will explore the different layers of the Earth and their roles in shaping our planet. Use an animation or interactive diagram to introduce the Earth's layers: crust, mantle, and core.<br>**What do you think is the outermost layer of the Earth? Why is it important?**<br>**How would you describe the mantle, and how does it support the movement of tectonic plates?** | Have pupils present their Earth models to the class, explaining the layers and their significance.<br><br>Review enquiry question: **What lies below the Earth's surface and what** |

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| **Curriculum Objectives:**<br>Physical Geography: Describe and understand key aspects of physical geography, including the structure of the Earth and tectonic plate movements.<br><br>**Key Questions:**<br>What are the different layers of the Earth, and what are their characteristics?<br>How do tectonic plates move, and what happens when they interact?<br><br>**Key Vocabulary:**<br>• Crust<br>• Mantle<br>• Core<br>• Tectonic Plates<br>• Fault Line<br><br>**Sticky Knowledge:**<br>The Earth has four main layers: crust, mantle, outer core, and inner core. Tectonic plates are pieces of the Earth's crust that float on the semi-fluid mantle and cause earthquakes and volcanic eruptions when they interact.. | to think about different layers or materials<br>**Do you think the Earth is the same all the way down?** | **What do you think happens inside the core, and why is it crucial for the Earth's magnetic field?**<br>**Which layer do you think is the hottest, and why do you think that is?**<br>**What might happen if the crust moves?**<br>**Discuss the function of each layer**: crust, mantle, core.<br>**Crust:** The Earth's outermost layer, where we live. Explain that this is where tectonic plates are located.<br>**Mantle:** The layer beneath the crust, which is semi-fluid and allows the tectonic plates to move. Highlight that the movement in the mantle causes tectonic plates to shift, leading to earthquakes, volcanic eruptions, and the formation of mountains.<br>**Core:** The innermost layer, consisting of a liquid outer core and a solid inner core, and explain its role in generating Earth's magnetic field.<br><br>**Earth Model Creation**<br>**Cross-Section Model Construction**:<br>Provide materials (e.g., clay, coloured paper, or Styrofoam balls) for pupils to create a cross-section model of the Earth.<br>Guide pupils to:<br>Layer the materials to represent the crust, mantle, outer core, and inner core.<br>Label each layer correctly and provide key facts about each layer.<br>Include tectonic plates as part of the crust. You could use thin strips of paper or cardboard to represent the tectonic plates on their models.<br>**Scaffolding:** Provide a step-by-step guide for building the model. Break down the process into smaller tasks (e.g., making the core first, then adding the mantle, etc.).<br>Provide a labelling template with spaces for each layer and facts. Help pupils write brief descriptions for each layer's function.<br>**How will you ensure that each layer of your model is accurate and distinct?**<br>**What important characteristics should you include on your labels for each layer?**<br>**How will you show the movement and interaction of tectonic plates on your model?** | **happens when the Earth's tectonic plates meet?**<br>What are the different layers of the Earth, and what is each layer made of?<br>How do tectonic plates interact with each other, and what can these interactions cause on the Earth's surface?<br>How can we use models to represent the Earth's layers and tectonic plate boundaries?<br>What tools or methods do scientists use to study the Earth's internal structure and tectonic plate movements?<br><br>**What If Question**: **What if the tectonic plates stopped moving or moved in a different way? How would this change the Earth's surface and our environment?** |

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| | | **Tectonic Plates**<br>Introduce tectonic plates and their movements. Show animations or videos illustrating different plate boundaries (convergent, divergent, transform).<br>Provide a chart showing different types of plate boundaries (convergent, divergent, transform). Have pupils fill in what happens at each type of boundary.<br>**What are the three main types of plate boundaries, and how do they differ from each other?**<br>**How do movements at each type of boundary affect the Earth's surface? For example, what happens at convergent boundaries compared to divergent boundaries?**<br>**How might the interaction of tectonic plates lead to earthquakes or volcanic eruptions?**<br><br>Discuss how tectonic plate movements cause various geological events and how they are represented in the model created by the students. | |

**Misconception: The Earth's layers are of equal thickness.**
**Strategy to Address: Explain Layer Thickness:** Clarify that the Earth's layers vary greatly in thickness. Use the model creation activity to highlight how the crust is relatively thin compared to the mantle and core. Illustrate the relative sizes of each layer using visual aids and comparisons to show their proportional thicknesses.
**Misconception: Tectonic plates are not part of the Earth's crust.**
**Strategy to Address: Integrate Plates into the Crust:** During the Earth model creation, explicitly show that tectonic plates are part of the crust. Use the model to demonstrate how plates fit within the crust and move relative to each other. Emphasize that these plates are sections of the crust that float on the semi-fluid mantle below.
**Misconception: The mantle is solid and immovable.**
**Strategy to Address: Demonstrate Mantle Movement:** Explain that the mantle is semi-fluid and behaves like a viscous fluid over long periods. Use animations or interactive diagrams to show how convection currents in the mantle drive the movement of tectonic plates. Highlight that this movement is responsible for geological processes like earthquakes and volcanic eruptions.
**Misconception: The core is all solid, not just part of it.**
**Strategy to Address: Clarify Core Composition:** Emphasize that the core has two parts: the outer core is liquid, and the inner core is solid. Use the model to separate the core into two distinct parts and explain their different states. Show how the outer core's movement generates the Earth's magnetic field while the solid inner core remains stable.
**Misconception: Plate boundaries are static and do not change.**

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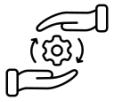
| **Strategy to Address: Explain Plate Movement:** Use animations or videos to demonstrate how plate boundaries are dynamic and change over time. Show real-world examples of how these movements lead to geological events such as earthquakes and volcanic eruptions. Highlight that plate boundaries are constantly shifting, which influences Earth's surface features.<br>**Misconception: The Earth's crust is the only layer that interacts with the atmosphere.**<br>**Strategy to Address: Explain Interactions Across Layers:** Discuss how processes in the mantle and core also affect the surface, such as volcanic eruptions that release materials from deeper layers. Use the model to show how mantle convection affects crustal movement and leads to surface phenomena. Highlight how the interactions between layers contribute to geological events that influence the atmosphere and surface. | | | |
| **Lesson 2: Why do earthquakes occur and what causes them?**<br>**Change:** Learning about the causes and mechanisms of earthquakes as examples of rapid geological change.<br>  <br><br>**Curriculum Objectives:**<br>Physical Geography: Describe and understand key aspects of physical geography, including earthquakes.<br><br>**Key Questions:**<br>What causes earthquakes, and how do they affect the Earth's surface?<br>How do seismic waves from earthquakes affect the Earth's surface?<br><br>**Key Vocabulary:**<br>• Earthquakes<br>• Seismic Waves<br>• Fault Lines<br>• Epicentre<br>• Richter Scale<br>• Magnitude<br><br>**Sticky Knowledge:** | Begin with a quick recap of the Earth's layers and the concept of tectonic plates from Lesson 1<br><br>Ask pupils to predict what might happen if these plates were to move suddenly.<br>. | **Introduction to Earthquakes**<br>**Interactive Exploration:**<br>Use a video or interactive simulation to demonstrate how earthquakes occur.<br>Pause at key moments to explain and discuss important concepts:<br>**Epicentre:** The point on the Earth's surface directly above where the earthquake originates.<br>**Seismic Waves:** Waves of energy that travel through the Earth's layers and cause the shaking felt during an earthquake.<br>**What is an epicentre, and why is it important in an earthquake?**<br>**How do seismic waves travel through the Earth and cause the ground to shake?**<br>Create cards with key terms (e.g., epicentre, seismic waves, magnitude). Show the cards to the class and have pupils work in pairs to discuss and match the terms with their definitions. This helps reinforce the vocabulary and concepts introduced in the video.<br>Engage the class in a discussion on what they think causes the ground to shake during an earthquake.<br>**What are some reasons people might feel shaking during an earthquake?**<br>**How might the distance from the epicentre affect the shaking you feel?**<br><br>**Seismograph Simulation**<br>**Earthquake Simulation:**<br>Set up a simple seismograph (either a digital app or a DIY version with a pendulum and paper) to simulate an earthquake. If using a DIY seismograph, set up a pendulum with a marker that traces on paper. If | Discuss how understanding earthquakes can help communities prepare for them.<br><br>Reflect on how studying the Earth's movements allows scientists to predict and mitigate the impact of natural disasters.<br><br>Review enquiry question:<br>**Why do earthquakes occur and what causes them?**<br>What are the main causes of earthquakes?<br>How does the movement of tectonic plates lead to earthquakes?<br>What evidence can help us determine where and why earthquakes occur?<br>How do scientists measure and record the strength of an earthquake? |

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| Earthquakes occur due to the movement of tectonic plates along fault lines.<br>Seismic waves cause ground shaking, which can lead to significant impacts on structures and landscapes. | | using a digital app, ensure all students have access and understand how to use it.<br><br>Have pupils simulate small, medium, and large earthquakes and observe how the seismograph records these events.<br>Encourage pupils to record their observations and compare the different seismic wave patterns.<br>Have students simulate different magnitudes of earthquakes using the seismograph. For DIY setups, gently shake the table or pendulum for small quakes, more vigorously for medium quakes, and with great force for large quakes.<br>Students should observe and record the seismic wave patterns generated by each type of earthquake.<br>**How do the patterns differ for small, medium, and large earthquakes?**<br>**What do the different patterns tell us about the strength and impact of the earthquakes?**<br><br>Have students compare their observations and discuss the differences in seismic wave patterns.<br>Discuss as a class how the seismograph helps scientists understand the magnitude and impact of earthquakes.<br>**How does a seismograph help us understand the effects of earthquakes?**<br>**What might scientists use the information from a seismograph for in terms of predicting or preparing for earthquakes?** | **What If Question:**<br>**What if there were no seismographs to record earthquakes? How would that affect our ability to understand and prepare for them?** |
| **Misconception: Earthquakes only happen at the Earth's surface.**<br>**Strategy to Address: Explain Depth and Origin:** Clarify that earthquakes originate from the Earth's interior and the energy is released from a focus deep within the Earth, not just at the surface. Use the video and simulation to show how seismic waves travel through different layers of the Earth, emphasizing the point of origin and its depth relative to the epicentre.<br>**Misconception: Seismic waves are the same everywhere and cause uniform shaking.**<br>**Strategy to Address: Demonstrate Different Patterns:** Use the seismograph simulation to show that seismic waves vary depending on the magnitude of the earthquake. Highlight how different magnitudes produce different patterns on the seismograph, which represent the varying strength and impact of the earthquake. Discuss how wave patterns can be affected by the distance from the epicentre and geological conditions.<br>**Misconception: Seismographs can predict earthquakes.** | | | |

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| **Strategy to Address: Clarify the Purpose of Seismographs:** Explain that while seismographs do not predict earthquakes, they are crucial for measuring and recording the magnitude of earthquakes and understanding their impact. Discuss how data from seismographs helps scientists analyse past earthquakes and improve preparedness rather than predicting future ones.<br>**Misconception: The epicentre is the location where the earthquake is strongest.**<br>**Strategy to Address: Differentiate Epicentre and Focus:** Clarify that the epicentre is the point on the Earth's surface directly above the focus, where the earthquake originates, but the strength of the shaking varies with distance from the epicentre. Use the video and simulations to show that the focus is where the earthquake's energy is initially released, and the impact diminishes as you move further from this point.<br>**Misconception: Small earthquakes don't cause significant damage.**<br>**Strategy to Address: Discuss Variability in Impact:** Explain that even small earthquakes can cause damage depending on various factors such as building structures, local geology, and preparedness. Use examples and data from the seismograph simulation to demonstrate that small earthquakes can have noticeable effects, especially in poorly constructed buildings or in areas with soft ground.<br>**Misconception: Shaking from an earthquake is uniform everywhere.**<br>**Strategy to Address: Discuss Variability in Shaking:** Explain how shaking intensity can vary based on factors such as distance from the epicenter, local soil and rock types, and building structures. Use examples from the seismograph patterns to illustrate how seismic waves lose energy over distance and how ground conditions can amplify or dampen the shaking. | | | |
| **Lesson 3: What can we learn from studying famous earthquakes?**<br>**Interconnection:** Analysing famous earthquakes to understand the interconnections between geological events and human society.<br>  <br>**Human and Physical Geography:** Understand geographical similarities and differences through the study of human and physical geography, including the impact of significant earthquakes.<br><br>**Key Questions:**<br>What are some famous earthquakes, and what caused them?<br>How do historical earthquakes help us prepare for future events? | Begin by revisiting what was learned in the previous lesson about why earthquakes occur.<br><br>**What causes an earthquake, and why do they usually occur along tectonic plate boundaries?**<br><br>**Can you describe what happens during an earthquake, including the** | **Case Study Analysis**<br>Begin with a short video or slideshow that provides an overview of famous earthquakes, such as the 2011 Japan earthquake and tsunami or the 1906 San Francisco earthquake. This should highlight key details like magnitude, impacts, and immediate responses.<br>**What major earthquakes have had significant impacts on cities around the world?**<br>**Why are these earthquakes studied in detail?**<br>Divide the class into small groups, each assigned a different earthquake case study. Provide each group with research materials, including articles, maps, and data about their assigned earthquake.<br>**Research Focus:**<br>**Magnitude and Cause:** What was the earthquake's magnitude, and what caused it?<br>**Impacts:** What were the immediate and long-term effects on people, buildings, and the environment?<br>**Lessons Learned:** What changes or improvements were made as a result of the earthquake (e.g., building codes, emergency responses)?<br>**What were the main causes of your assigned earthquake?** | Discuss how communities can use lessons from past earthquakes to improve preparedness and response efforts.<br>Reflect on the importance of geographical knowledge in helping to save lives during natural disasters.<br><br>Review enquiry question:<br>**What can we learn from studying famous earthquakes?**<br>What are some famous earthquakes, and what were their impacts on people and buildings? |

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| **Key Vocabulary:**<br>• Earthquake<br>• Magnitude<br>• Tsunami<br>• Aftershocks<br>• Disaster Preparedness<br><br>**Sticky Knowledge:**<br>Famous earthquakes provide insights into their causes and effects, helping us improve preparedness and response strategies.<br>Historical data on earthquakes aids in designing better safety measures and understanding their impacts on communities. | **roles of the epicentre and the focus?**<br><br>Introduce the idea that studying past earthquakes can teach us important lessons about how to prepare for and respond to future events. | **How did the earthquake affect the local community and environment?**<br>**What changes were made after the earthquake to improve safety?**<br>**Scaffolding:** Offer a structured template with sections for each focus area (Magnitude, Cause, Impacts, Lessons Learned) to guide students in their research and ensure they cover all necessary information.<br><br>**Group Presentations**<br>**Presentation Preparation:** Each group creates a presentation or poster summarizing their findings. They should highlight the key facts, impacts, and lessons learned from their assigned earthquake.<br>**What were the most surprising facts you learned about your earthquake?**<br>**How did your earthquake compare to others in terms of impact and response?**<br><br>Facilitate a discussion where students can ask questions about each group's presentation. Draw comparisons between the earthquakes in terms of their impacts and the lessons learned.<br>**What common impacts did these earthquakes have on their communities?**<br>**How did the responses and improvements differ between the earthquakes?**<br>**What can we learn from these earthquakes to prepare for future events?** | How can studying past earthquakes help us prepare for future ones?<br>What sources of information do scientists use to study the effects of historical earthquakes?<br>How can maps and data be used to analyse the impact of famous earthquakes?<br><br>**What If Question:**<br>**What if the largest earthquake ever recorded happened today? How would modern technology help us respond differently compared to the past?** |

**Misconception: Earthquakes are random events with no predictability.**
**Strategy to Address: Explain Earthquake Prediction and Monitoring:** Introduce the concept of seismic monitoring and earthquake-prone areas. Discuss how scientists use data to assess risks and improve preparedness, even though precise prediction is challenging. Show examples of how earthquake preparedness has improved in areas prone to seismic activity.
**Misconception: All earthquakes have the same level of impact on buildings and communities.**
**Strategy to Address: Discuss Variability in Impact:** Use case studies to illustrate how the impact of an earthquake can vary based on factors such as magnitude, depth, proximity to the epicentre, and local building practices. Encourage students to analyse how different earthquakes affected communities differently and why.
**Misconception 3: Building codes and safety improvements are immediate and always effective.**
**Strategy to Address: Highlight the Process and Challenges:** Explain that changes in building codes and safety practices can take time to implement and may face various challenges. Use historical examples to show that while improvements are made, they are often a gradual process and not always immediately effective in preventing damage.

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| **Misconception: Earthquake response and recovery are the same everywhere.**<br>**Strategy to Address: Compare Different Responses:** Use the case studies to compare how different regions and countries respond to earthquakes based on their resources, infrastructure, and preparedness. Discuss how local context and resources influence response and recovery efforts, highlighting differences in strategies and effectiveness.<br>**Misconception: Earthquakes only cause immediate damage and do not have long-term effects.**<br>**Strategy to Address: Discuss Long-Term Impacts:** Emphasize the ongoing effects of earthquakes, such as economic impacts, psychological effects on communities, and long-term infrastructure damage. Include examples from case studies that showcase the prolonged effects and recovery efforts after major earthquakes. | | | |
| **Lesson 4: What is a mountain and how are mountains formed?**<br>**Environment:** Exploring how geological processes create mountains and their significance in shaping local and global environments<br>  <br><br>**Curriculum Objectives:**<br>Physical Geography: Describe and understand key aspects of physical geography, including mountains.<br><br>**Key Questions:**<br>What are the different types of mountains, and how are they formed?<br>How do geological processes contribute to mountain formation?<br><br>**Key Vocabulary:**<br>• Fold Mountains<br>• Fault-Block Mountains<br>• Volcanic Mountains<br>• Erosion<br>• Uplift<br>• Sedimentary Layers<br><br>**Sticky Knowledge:** | Recap learning from the past 3 lessons.<br>**What are the three main layers of the Earth, and what is unique about each**<br>**How do tectonic plates move, and what are the three types of plate boundaries?**<br>What are the three main types of tectonic plate boundaries, and how do they affect the Earth's surface?"<br>**What causes earthquakes, and where is the epicentre?**<br>Now that we've refreshed our understanding of | **Introduction to Mountains**<br>Start with a video that explains what mountains are, how they are formed, and the different types of mountains. Ensure the video includes visual examples of fold mountains, fault-block mountains, and volcanic mountains.<br>Pause the video at key points to discuss the concepts. Use these pauses to ask questions and engage pupils in thinking critically about mountain formation.<br>**What do you notice about the shapes of different mountains in the video?**<br>**How are mountains formed according to the video?**<br>**Can you describe a mountain you have seen? How does it compare to the ones shown in the video?**<br>After the video, summarize the key points:<br>**Mountains:** Large landforms that rise prominently above their surroundings.<br>**Mountain Formation:** Typically caused by tectonic plate movements.<br>**Types of Mountains:**<br>**Fold Mountains:** Formed by the collision of tectonic plates, causing the crust to fold.<br>**Fault-Block Mountains:** Created when faults or fractures in the Earth's crust force blocks of rock up or down.<br>**Volcanic Mountains:** Formed by volcanic activity where magma erupts and builds up<br><br>**Mountain Formation Models**<br>Divide the pupils into small groups and provide them with materials such as clay, cardboard, or playdough. | Recap the lesson by highlighting the key concepts discussed and the types of mountains explored.<br>**What did you learn about how different mountains are formed?**<br>**Why do you think it's important to understand the different types of mountains?**<br><br>Review enquiry question:<br>**What is a mountain and how are mountains formed?**<br>What are the different types of mountains, and how are they formed?<br>Why are mountains important for the environment and for human activities?<br>How can we use models or diagrams to explain mountain formation? |

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| Mountains form through various processes: folding (fold mountains), faulting (fault-block mountains), and volcanic activity.<br>Tectonic plate movements are essential in creating and shaping mountain ranges. | Earth's layers and tectonic activity, let's explore how these processes create mountains. | Assign each group a type of mountain to model: fold mountains, fault-block mountains, or volcanic mountains.<br><br>**Fold Mountains:** Roll out clay or playdough, fold it in several layers, and then gently press and squeeze to create the appearance of folded layers. Use the plastic knife to add details of ridges and valleys.<br>**How do the folds in your model represent the collision of tectonic plates?**<br>**What would happen if the plates collided more forcefully?**<br><br>**Fault-Block Mountains:** Create a base layer of clay or playdough. Use tools to cut and lift blocks of clay to create a fault-block mountain effect. Arrange the blocks to show how the Earth's crust is divided and displaced.<br>**What does the separation of blocks in your model represent?"**<br>**How might different types of faults affect the appearance of the mountains?**<br><br>**Volcanic Mountains:**<br>Form a cone shape using clay or playdough to represent a volcano. Add a crater at the top and textured surfaces to represent lava flows and volcanic deposits.<br>**How does your model show the eruption of magma?**<br>**What features of a volcano do you see in your model that might affect its shape?**<br><br>As pupils work on their models, circulate and ask probing questions to assess their understanding of mountain formation and tectonic plate movements.<br>**What happens to the Earth's crust when tectonic plates move?**<br>**How might the speed of tectonic plate movement affect the mountain's shape and height?**<br><br>**Presentation and Sharing** Have each group present their model to the class, explaining the type of mountain they created and how it was formed. Encourage them to use terms like "folds," "faults," or "volcanic eruptions" in their presentations. | What tools do geologists use to study and measure mountains?<br><br>**What If Question: What if mountains could suddenly disappear? How might that affect the environment and human settlements?** |

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| **Misconception: All mountains are formed in the same way.**<br>**Strategy to Address: Use Distinct Visuals and Definitions:** Clearly differentiate between the types of mountains (fold, fault-block, volcanic) with distinct visuals and definitions. During the video and modelling activities, highlight the unique formation processes for each type. Ensure students understand that the processes are specific to the type of mountain they are working on.<br>**Misconception: Mountains are only formed by volcanic activity.**<br>**Strategy to Address: Emphasize Diverse Formation Processes:** During the video and model-building activities, explicitly state that mountains can form through various processes, not just volcanic activity. Use models and diagrams to illustrate fold and fault-block mountains alongside volcanic ones to show the variety in mountain formation.<br>**Misconception: The size and shape of a mountain are only determined by the eruption force.**<br>**Strategy to Address: Highlight Multiple Influences:** Discuss how factors like tectonic plate movements, erosion, and geological time also influence the size and shape of mountains. During model presentations, have students explain how these factors might affect the appearance of their models, not just the eruption force.<br>**Misconception: Mountains are static and do not change once they are formed.**<br>**Strategy to Address: Discuss Ongoing Geological Processes:** Explain that mountains undergo continuous changes due to erosion, weathering, and tectonic activity. Use examples of real-world changes in mountain ranges to illustrate this point. Prompt students to consider how their models might evolve over time due to natural processes.<br>**Misconception: All volcanic mountains are similar in appearance and formation.**<br>**Strategy to Address: Show Variability in Volcanic Structures:** Introduce different types of volcanic mountains (e.g., shield, stratovolcanoes) and their varying features. During the model-building activity, guide students to include and discuss different volcanic structures to demonstrate how volcanic mountains can differ significantly in appearance and formation. | | | |
| **Lesson 5: Where are mountains located around the world?**<br>**Space:** Identifying the global distribution of major mountain ranges.<br><br>**Curriculum Objectives:**<br>Locational Knowledge: Identify and locate key geographical features, including major mountain ranges, on maps and globes.<br><br>**Key Questions:**<br>Where are the major mountain ranges located globally?<br>How do mountain ranges influence climate and weather patterns? | Review the previous lesson by asking pupils to recall how mountains are formed.<br><br>**What are the three main types of mountains we learned about last lesson?**<br>**Can you describe how fold** | **Introduction to mountains**<br>**What do you know about mountains? Can you name any famous mountain ranges?**<br>Show a short video or slideshow highlighting some of the world's major mountain ranges, such as the Himalayas, the Andes, the Rockies, and the Alps.<br>**Can you name some of the major mountain ranges we just saw?**<br>**Why do you think these mountain ranges are important?**<br><br>**Mountain Range Mapping**<br>Provide each group with a world map and a list of major mountain ranges.<br>Have students use atlases or geography textbooks to locate and mark the positions of the listed mountain ranges on their maps. | Pupils to present their poster and share one interesting fact they learned about their mountain range.<br>**What new things did you learn about the locations and features of mountain ranges?**<br>**How do mountain ranges influence the world around them?**<br><br>Review enquiry question: |

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| **Key Vocabulary:**<br>• Mountain Range<br>• Continental Divide<br>• Elevation<br>• Ridge<br>• Altitude<br>• Topography<br><br>**Sticky Knowledge:**<br>Major mountain ranges include the Himalayas, Andes, Rockies, and Alps. Mountain ranges can impact local and global climates due to their elevation and geographical position. | **mountains are formed?**<br>**How do fault-block mountains differ from volcanic mountains in terms of their formation?**<br>**What role do tectonic plates play in the creation of mountains?**<br>**Why might mountains be considered dynamic rather than static?**<br>**How did the materials you used in our model activity help you understand mountain formation?** | Ask students to label each mountain range and use different colours to highlight each range.<br>**Scaffolding:**<br>Provide a partially labelled map with mountain ranges and their locations, allowing students to match and fill in missing information.<br>**For Extension:** Challenge students to research and add additional information about the mountain ranges, such as their highest peaks or countries they span.<br>**Where are the major mountain ranges located on your map?**<br>**What patterns or clusters do you notice in the locations of these mountain ranges?**<br>**How do the locations of these mountain ranges relate to the movement of tectonic plates?**<br><br>**Mountain Range Diagram**<br>Ask students to choose a mountain range or a set of mountain ranges to focus on for their individual diagrams.<br>Students to draw a map showing the location of their selected mountain range(s) on the world map.<br>Label the mountain range(s) and nearby countries or cities.<br>Include key facts such as the highest peaks, countries it spans, and any interesting features (e.g., climate, wildlife).<br>Use colours and symbols to make their diagrams clear and informative.<br>**Scaffolding:** Provide a diagram template with labelled sections (map, facts, features) to guide students in their drawing.<br>**For Extension:** Encourage students to include additional details about how the mountain range affects the local climate or human activities.<br>**What key facts did you include about your mountain range, and why are they important?**<br>**How does the mountain range impact the surrounding environment or people?**<br>**What is unique about your assigned mountain range compared to others?** | **Where are mountains located around the world?**<br>What are some of the major mountain ranges around the world?<br>How do the locations of these mountains affect the climate and environment of different regions?<br>How can maps and globes help us identify and understand the distribution of mountain ranges?<br>What methods do geographers use to study and document the locations of mountains?<br><br>**What If Question: What if a new mountain range appeared in a region with a lot of people? How might this impact the local environment and communities?** |

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| **Misconception: All mountain ranges are the same in terms of size and height.**<br>**Strategy to Address: Highlight Differences:** Emphasize the diversity among mountain ranges by discussing differences in their size, height, and geographical features. Use comparative visuals and facts from the video or slideshow. In the mapping and diagram activities, guide students to recognize and label these differences, such as the vast heights of the Himalayas compared to the Rockies.<br>**Misconception: Mountain ranges are randomly distributed and do not follow any patterns.**<br>**Strategy to Address: Explain Tectonic Plate Movement:** Discuss how mountain ranges are formed at the boundaries of tectonic plates. Use the world map to show how mountain ranges align with tectonic plate boundaries. In the mapping activity, ask students to identify patterns and clusters of mountain ranges relative to plate boundaries.<br>**Misconception: The climate and environment are the same in all mountain ranges.**<br>**Strategy to Address: Discuss Environmental Variations:** Explain how climate and environmental conditions can vary significantly between mountain ranges due to their location, altitude, and proximity to oceans. Use specific examples, such as the arid conditions of the Andes versus the lush vegetation in the Alps. Encourage students to include environmental details in their diagrams.<br>**Misconception: Mountains only affect the land they are on and have no impact on nearby regions.**<br>**Strategy to Address: Illustrate Regional Impact:** Discuss how mountain ranges can influence weather patterns, climate, and human activities in nearby regions. For instance, how mountains can affect rainfall patterns and create rain shadows. During the diagram activity, prompt students to consider and include these impacts in their diagrams.<br>**Misconception: All mountain ranges are young and still forming.**<br>**Strategy to Address: Differentiate Ages of Ranges:** Explain that mountain ranges vary in age, with some being relatively young (like the Himalayas) and others being much older (like the Appalachian Mountains). Provide examples of both types and how their formation processes differ. Use the mapping and diagram activities to illustrate these differences in age and formation. | | | |
| **Lesson 6: What is life like on a mountain, and specifically in the Himalayas?**<br>**Place**: Investigating life in mountainous regions, with a focus on the Himalayas.<br>  <br>**Curriculum Objectives:**<br>**Understand geographical similarities and differences through the study of human and physical geography of a region.**<br><br>**Key Questions:**<br>What challenges do people face living in mountainous regions like the Himalayas? | Review learning from previous lesson on where mountains are located around the world.<br><br>**Can you name one of the highest peaks in the Himalayas?**<br>**Which mountain range separates Europe from Asia?** | **Introduction to Life in the Himalayas**<br>Show a short video or read a story about daily life in the Himalayas.<br>**What are some daily activities of people living in the Himalayas?**<br>**How does the environment influence their way of life?**<br>**Scaffolding:** Use visuals and captions to help students understand the content.<br>Provide a brief summary or glossary of key terms used in the video/story.<br><br>**Research Activity: Life in the Himalayas**<br>Divide students into small groups and assign each group a different aspect of life in the Himalayas (e.g., food, clothing, housing, transportation, festivals).<br>Provide access to books, articles, and online resources. | Each group presents their research findings to the class.<br>After each presentation, prompt the class with questions such as, “How do the people in the Himalayas adapt to their environment?” or “What surprised you about life in the Himalayas?”<br>Conclude with a reflection on how geographical |

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| How does the environment of the Himalayas shape daily life and cultural practices?<br><br>**Key Vocabulary:**<br>• Altitude<br>• Climate<br>• Adaptation<br>• Terrace Farming<br>• Culture<br><br>**Sticky Knowledge:**<br>Living in the Himalayas involves adaptations to high altitude and rugged terrain, influencing daily activities and cultural practices.<br>Local adaptations, such as terrace farming and specific building techniques, help residents manage the challenges of mountainous environments. | **In which continents can you find the Andes mountain range?** | Each group gathers information about their assigned topic and creates a visual representation (e.g., poster or booklet).<br>**What are some unique aspects of life in your assigned area (food, clothing, etc.)?**<br>**How does living in the Himalayas affect these aspects of daily life?**<br>**Scaffolding:**<br>Offer a structured template for students to fill out information about their topic.<br>Provide guiding questions or prompts to help focus their research.<br><br>**Group Presentations**<br>Each group presents their findings to the class.<br>Presentations should cover key points about their assigned topic and include visual aids.<br>Encourage groups to explain how their topic influences daily life in the Himalayas.<br>**What did you find most interesting about the life in the Himalayas?**<br>**How does the environment specifically impact the aspect of life your group researched?**<br>**Scaffolding:** Provide a checklist for presentations to ensure all key aspects are covered.<br>Use guiding questions to help students structure their presentations.<br><br>Discuss as a class how the different aspects of life in the Himalayas are interrelated.<br>Ask students to write a short paragraph reflecting on what they learned and how it changes their understanding of life in mountainous regions.<br>**How do the different aspects of life in the Himalayas (e.g., housing, transportation) work together to adapt to the environment?**<br>**What challenges and advantages do people living in mountainous regions experience compared to those in flatter areas?**<br>**Scaffolding:**<br>Provide sentence starters or prompts to help students with their reflections. | features influence human culture and lifestyle.<br><br>Review enquiry question:<br>**What is life like on a mountain, and specifically in the Himalayas?**<br>What are some of the challenges and benefits of living in mountainous regions like the Himalayas?<br>How does the environment of the Himalayas influence the daily life and culture of its people?<br>What types of sources can we use to learn about life in the Himalayas?<br>How can we create presentations to share information about the lifestyle and culture of people living in high-altitude areas?<br><br>**What If Question: What if the Himalayas suddenly became much lower in altitude? How might this change the way people live there?** |

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| | | Offer examples of how to connect different aspects of life to the environment. | |

**Misconception: Life in the Himalayas is the same as life in other mountainous regions.**
**Strategy to Address: Highlight Regional Specifics:** Emphasize the unique aspects of life in the Himalayas compared to other mountainous areas. Use detailed case studies, examples, and visuals to show how cultural, environmental, and geographical factors make life in the Himalayas distinct. Compare and contrast with other regions to clarify these differences.
**Misconception: People living in the Himalayas face only negative challenges due to their environment.**
**Strategy to Address: Balance Challenges and Benefits:** Present both challenges and advantages of living in the Himalayas. Discuss how local adaptations, such as specific housing designs and transportation methods, address challenges. Highlight cultural practices and innovations that help people thrive despite difficult conditions. Use examples from the research activity and presentations to illustrate this balance.
**Misconception: All aspects of life in the Himalayas are solely determined by the environment.**
**Strategy to Address: Acknowledge Cultural Influence:** Explain that while the environment has a significant impact, cultural traditions and practices also play a crucial role in shaping daily life. Show how cultural heritage influences aspects such as festivals, clothing, and food. Use group presentations to illustrate these cultural elements alongside environmental influences.
**Misconception: People in the Himalayas do not use modern technology or conveniences.**
**Strategy to Address: Show Modern Adaptations:** Provide examples of how modern technology and conveniences are integrated into daily life in the Himalayas. Discuss innovations that address environmental challenges, such as solar energy or advanced transportation methods. Include these examples in the research activity and presentations to demonstrate the blend of tradition and modernity.
**Misconception: The lifestyle in the Himalayas is static and unchanged.**
**Strategy to Address: Discuss Change and Adaptation:** Highlight how life in the Himalayas has evolved over time. Include recent changes in lifestyle due to globalization, technology, or tourism. Show how the region adapts to new circumstances while preserving traditional practices. Use case studies or recent examples to illustrate these changes and adaptations.

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| **Lesson 7: What occurs inside a volcano and what happens when it erupts?**<br>**Environment**: Understanding the internal processes of volcanoes and the environmental impacts of volcanic eruptions.<br>  <br>**Curriculum Objectives:** | Begin with a quick review that ties together the impact of tectonic plate movements, mountain formation, and the connection between | **Introduction to Volcanoes**<br>Show a short, engaging video explaining what happens inside a volcano and how eruptions occur. Pause the video at key points to discuss concepts.<br>**What are the main parts of a volcano?**<br>**How does magma move from deep inside the Earth to the surface?**<br>**What causes a volcanic eruption?**<br>**Scaffolding:** Use simple language and visuals. Highlight key terms like magma, lava, and eruption. Have a diagram of a volcano labelled with these terms. | Review enquiry question:<br>**What occurs inside a volcano and what happens when it erupts?**<br>What are the main parts of a volcano, and how do they function?<br>What causes a volcano to erupt, and what happens during an eruption? |

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| Describe and understand key aspects of physical geography, including volcanoes.<br><br>**Key Questions:**<br>What happens inside a volcano, and how does it erupt?<br>How do volcanic eruptions affect the environment?<br><br>**Key Vocabulary:**<br>• Magma<br>• Lava<br>• Crater<br>• Eruption<br>• Ash Cloud<br><br>**Sticky Knowledge:**<br>Volcanic eruptions occur when pressure from magma inside the Earth builds up and forces its way to the surface. Eruptions can have various impacts, including the release of ash clouds, lava flows, and the formation of new land. | earthquakes and volcanoes.<br>**How do moving tectonic plates shape the Earth's surface?**<br>**What happens when two tectonic plates push against each other?**<br>**How do tectonic plates help create mountains?**<br>**What happens when plates collide to form mountains?**<br>**How can earthquakes happen in places with mountains?**<br>**Why might areas with lots of earthquakes also have tall mountains?** | Children to label a diagram to shoe the parts of a volcano (e.g., magma chamber, conduit, crater).<br>**What are the main parts of a volcano?**<br>**Where does magma collect before an eruption?**<br>**Scaffolding:** Provide a partially labelled diagram or a key for students to reference.<br><br>**Modeling Volcanoes**<br>Students use clay or playdough to build a simple 3D model of a volcano, including the magma chamber and crater.<br>**How can you show where magma comes from in your model?**<br>**What does the crater do during an eruption?**<br>**Scaffolding:** Provide step-by-step instructions and examples of completed models.<br><br>**Simulating a Volcano Eruption**<br>Demonstrate a simple eruption using baking soda, vinegar, and food colouring. Students will then recreate this in small groups.<br>**What happens when the baking soda and vinegar mix?**<br>**How does this simulation show us what happens during a real eruption?**<br>Discuss observations from the simulation and model.<br>Students to record their observations.<br>**Scaffolding:** worksheet with specific sections for students to record their observations.<br>• **Materials Used:** What ingredients did you use for the eruption?<br>• **Steps of the Simulation:** Describe the process of creating the eruption. What did you do first, second, etc.?<br>• **What Happened During the Eruption:** What did you see? How did the reaction look?<br>• **What Did You Notice:** Did anything unexpected happen? How did the mixture behave?<br><br>**Extension (Optional for early finishers):**<br>Students can draw what they think a volcanic eruption might look like, incorporating and describing the features they've learned about. | How can we use diagrams and models to show the structure of a volcano and the eruption process?<br>What scientific methods are used to monitor volcanic activity and predict eruptions?<br>Consider: **How are earthquakes and volcanic eruptions related?**<br>**Why might an area with frequent earthquakes also experience volcanic eruptions?**<br><br>**What If Question:**<br>**What if all the volcanoes on Earth erupted at the same time? How would this affect the planet?**<br><br>**Or**<br><br>**What if a volcano erupted in a place where no one had ever experienced one before? How might people respond and prepare?** |

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| **Misconception: Magma and lava are the same thing.**<br>**Strategy to Address: Clarify Terminology:** Use diagrams to explain the difference between magma (molten rock below the Earth's surface) and lava (magma that reaches the surface during an eruption). Highlight these terms during the video and in the diagram activity. Reinforce this distinction through discussion and visuals.<br>**Misconception: Volcanic eruptions are always explosive.**<br>**Strategy to Address: Variety of Eruptions:** Explain that there are different types of volcanic eruptions, ranging from explosive to effusive (lava flows). Use examples and images of various eruptions to show this range. During the modelling activity, emphasize that the simple simulation is a representation of an explosive eruption, but real eruptions can vary.<br>**Misconception: The magma chamber is always visible in a volcano.**<br>**Strategy to Address: Diagram Use:** In the modelling activity, emphasize that the magma chamber is located below the surface and is not visible during an eruption. Use diagrams to show where the magma chamber is located relative to other parts of the volcano. Reinforce this with explanations during the modelling activity.<br>**Misconception 4: Volcanoes only erupt once.**<br>**Strategy to Address: Eruption Cycles:** Explain that volcanoes can erupt multiple times over their lifetimes. Discuss examples of volcanoes that have had multiple eruptions. Use the video and discussion to highlight that eruptions can be separated by long periods of dormancy.<br>**Misconception: The eruption is the only important part of a volcano.**<br>**Strategy to Address: Focus on All Parts:** Emphasize the importance of all parts of a volcano, including the magma chamber, conduit, and crater. Use the modelling and diagram activities to show how each part plays a role in the eruption process. Discuss the functions of each part and how they work together. | | | |
| **Lesson 8: Where are volcanoes located around the world and how do volcanic eruptions impact the surrounding environment?**<br>**Environment:** Combining the geographical distribution of volcanoes with the environmental impacts of volcanic eruptions.<br><br>**Curriculum Objectives:**<br>Describe and understand key aspects of physical geography, including the environmental impact of natural phenomena.<br><br>**Key Questions:** | Start with a brief review of volcanic eruptions from the previous lesson, focusing on the internal processes and the types of eruptions.<br><br>**What happens inside a volcano that causes it to erupt?**<br>**How does lava flow from a volcano?** | **Concept Introduction:** Explain that volcanoes are not randomly located; they are found in specific regions around the world, often along tectonic plate boundaries. Highlight that understanding where volcanoes are located helps us prepare for and respond to volcanic eruptions.<br>Use a large, clear world map projected on a screen or displayed on a wall, showing the locations of major volcanoes.<br>Lead a discussion using the following questions:<br>**Where are the major volcanoes located around the world?** Show students the map with volcanoes highlighted and ask them to identify and point out some of these volcanoes.<br>**How do the processes inside a volcano contribute to its eruption?** Briefly explain that magma rises from deep inside the Earth, and pressure builds up until it escapes through the volcano.<br>**Why do volcanoes often occur in certain areas?** Discuss how many volcanoes are found along tectonic plate boundaries, such as the Ring of Fire around the Pacific Ocean or the Mid-Atlantic Ridge.<br>Provide each student with a blank world map and a list of key volcanoes (e.g., Mount Vesuvius, Mount Fuji, Mauna Loa). | Conduct a discussion where pupils consider both the positive and negative impacts of the eruption.<br>Review enquiry question:<br>**How do volcanic eruptions impact the surrounding environment?**<br>What are some of the major volcanic regions or hotspots around the world?<br>How do volcanic eruptions affect the environment and the people living nearby? |

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| Where are major volcanoes located around the world?<br>How do volcanic eruptions impact the environment and human settlements?<br>**Key Vocabulary:**<br>• Ring of Fire<br>• Lava Flow<br>• Volcanic Eruption<br>• Ash Fallout<br>• Geothermal Activity<br>• Tectonic Plate Boundaries<br>**Sticky Knowledge:**<br>Major volcanoes are often located along tectonic plate boundaries, especially in the Ring of Fire.<br>Volcanic eruptions can affect the environment through lava flows, ash deposition, and changes to local landscapes. | **How do the eruption processes we learned about (such as magma movement and pressure) contribute to different types of volcanic eruptions?**<br>**What similarities and differences are there between volcanic eruptions and other natural processes like earthquakes?** | Have students locate and label the volcanoes on their maps.<br>Supply students with a partially labelled reference map to help them accurately locate and identify the major volcanoes.<br>Include a simple list of volcanic regions like The Ring of Fire and the Mid-Atlantic Ridge to guide their understanding of where volcanoes are commonly found.<br>**Scaffolding:**<br>Use a simplified world map with clearly marked tectonic plate boundaries to help students understand the relationship between plate boundaries and volcanic activity.<br>Provide clear, step-by-step instructions for labelling the volcanoes and identifying volcanic regions.<br>Utilize visual aids such as diagrams of tectonic plate boundaries to reinforce the concept of why volcanoes are found in certain areas.<br><br>After completing their maps, have a brief discussion about the distribution of volcanoes. Ask students to share their observations:<br>**What patterns did you notice in the location of volcanoes?**<br>**How are the locations of volcanoes related to tectonic plate boundaries?**<br><br>**Extension:** Ask students to color-code the volcanoes based on their activity status (e.g., active, dormant, extinct).<br><br>**Impact of Volcanic Eruptions: Case Study Analysis**<br>Divide students into small groups and provide each group with a case study of a volcanic eruption (e.g., Mount St. Helens, Mount Krakatoa).<br>Include information on the eruption's impact on the environment, including lava flow, ash clouds, and pyroclastic flows.<br>Pupils to summarize their findings, highlighting the key impacts of their case study.<br>**Scaffolding:** Provide a structured template for students to fill out with sections for the eruption's impact on land, air, and local communities.<br>Include key points to help guide their analysis.<br>**What immediate effects did the eruption have on the environment?**<br>**How did the eruption impact the local communities and infrastructure?** | How can maps and satellite images help us track and study volcanic eruptions?<br>What tools and techniques do scientists use to assess the impact of volcanic eruptions on the environment?<br><br>**What If Question:**<br>**What if a major volcanic eruption occurred in a region without existing volcanoes? How might this affect the environment and local communities?** |

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| | | **What were the long-term environmental changes caused by the eruption?**<br>**Were there any positive effects of a volcanic eruption on the environment?** | |

**Misconception: Volcanoes are randomly distributed across the Earth.**
**Strategy to Address: Visual Demonstration:** Use a world map or globe to clearly show how many volcanoes are located along tectonic plate boundaries. Emphasize that volcanoes are not randomly distributed but are found in specific areas where tectonic plates meet or interact. Use diagrams or animations to illustrate how tectonic plate boundaries correspond with volcanic activity.
**Misconception: All volcanoes are located near oceanic plates.**
**Strategy to Address:Map Comparison:** Provide students with maps showing both oceanic and continental volcanic activity. Highlight volcanoes on land (e.g., Mount Vesuvius in Italy) and explain that volcanoes can also occur on continental plates. Discuss how volcanic activity is not limited to oceanic plates and is also significant on landmasses.
**Misconception: Volcanic eruptions are the same everywhere.**
**Strategy to Address: Case Studies:** Present different types of volcanic eruptions (e.g., explosive vs. effusive) using videos or images. Explain that the type of eruption can vary depending on the volcano's location, the magma's composition, and other factors. Provide examples of different eruptions from various volcanoes around the world to illustrate the variety of volcanic activity.
**Misconception: Volcanoes only affect their immediate surroundings.**
**Strategy to Address: Impact Exploration:** Discuss the broader impacts of volcanic eruptions, such as ash clouds affecting global weather and climate, and lava flows destroying large areas. Use case studies or news reports on major eruptions to illustrate the wide-ranging effects on both local and global scales. Encourage students to consider how volcanic eruptions can have far-reaching consequences beyond the immediate area.
**Misconception: Tectonic plates are only responsible for volcanic activity.**
**Strategy to Address: Broader Geological Processes:** Explain that while tectonic plates are crucial for volcanic activity, they are also responsible for other geological phenomena, such as earthquakes and mountain formation. Provide a brief overview of how tectonic plate movements influence various geological events, ensuring that students understand the broader context of tectonic processes.

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| **Lesson 9 How do natural processes such as volcanoes, earthquakes, and mountain formation shape our planet and affect human life?**<br>**Environment:** Understanding how natural processes shape the Earth's environment and landscapes. I  | Begin with a review of key concepts from previous lessons, focusing on how volcanoes, earthquakes, and mountain | **Concept Mapping:**<br>Have pupils create a concept map that links earthquakes, volcanoes, and mountain formation, highlighting the connections between these processes.<br>Ask pupils to include key vocabulary and concepts from previous lessons, illustrating how these processes interrelate and impact the environment.<br>Facilitate a class discussion where pupils share their maps and discuss the relationships between different natural processes. | Present and discuss posters or presentations with the class.<br><br>Reflect on the key lessons learned about natural processes and their |

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| **Interconnection**: Exploring the relationships between natural processes and their effects on both the environment and human life.  <br><br>**Curriculum Objectives:**<br>**Describe and understand key aspects of physical geography, including the interplay between natural processes and human life.**<br><br>**Key Questions:**<br>How do natural processes like earthquakes, volcanoes, and mountain formation shape the Earth's surface?<br>What are the impacts of these processes on human settlements and activities?<br>**Key Vocabulary:**<br>• Natural Processes,<br>• Interconnection<br>• Impact<br>• Adaptation<br>• Disaster<br>• Management<br>**Sticky Knowledge:**<br>Natural processes such as tectonic plate movements shape the Earth's surface, leading to earthquakes, volcanic eruptions, and mountain formation. These processes have significant impacts on human life, influencing where people live, how they build their homes, and how they prepare for natural disasters. | formation are interconnected.<br><br>Discuss how these natural processes affect the Earth's surface and human life, drawing connections between the different phenomena studied.<br>**How do these natural processes interact with each other?**<br>**What are the most significant impacts on human life?** | **Poster/Presentation Creation**<br>**Create a Poster or Presentation:** Develop a poster or presentation summarizing the effects of natural processes on the Earth and human life.<br>**Scaffolding:** Provide examples and guidelines for creating effective presentations.<br>**What key information did you include in your poster/presentation?**<br>**How do natural processes influence different aspects of human life?** | impacts on the planet and human life.<br>How can knowledge about natural processes help us make better decisions about where and how we live?<br>Discuss how understanding these processes can help us make better decisions about where and how we live, including preparedness and adaptation strategies.<br><br>Review enquiry question:<br>**How do natural processes such as volcanoes, earthquakes, and mountain formation shape our planet and affect human life?**<br>How do natural processes like volcanoes, earthquakes, and mountain formation shape the Earth's surface?<br>In what ways do these natural processes impact human activities and settlements?<br>How can we use scientific evidence to understand the effects of natural |

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| | | | processes on the Earth's surface?<br>What strategies can we use to investigate and analyse the relationships between natural processes and their impacts on human life?<br><br>**What If Question:**<br>**What if we could completely control natural processes like earthquakes or volcanic eruptions?** |