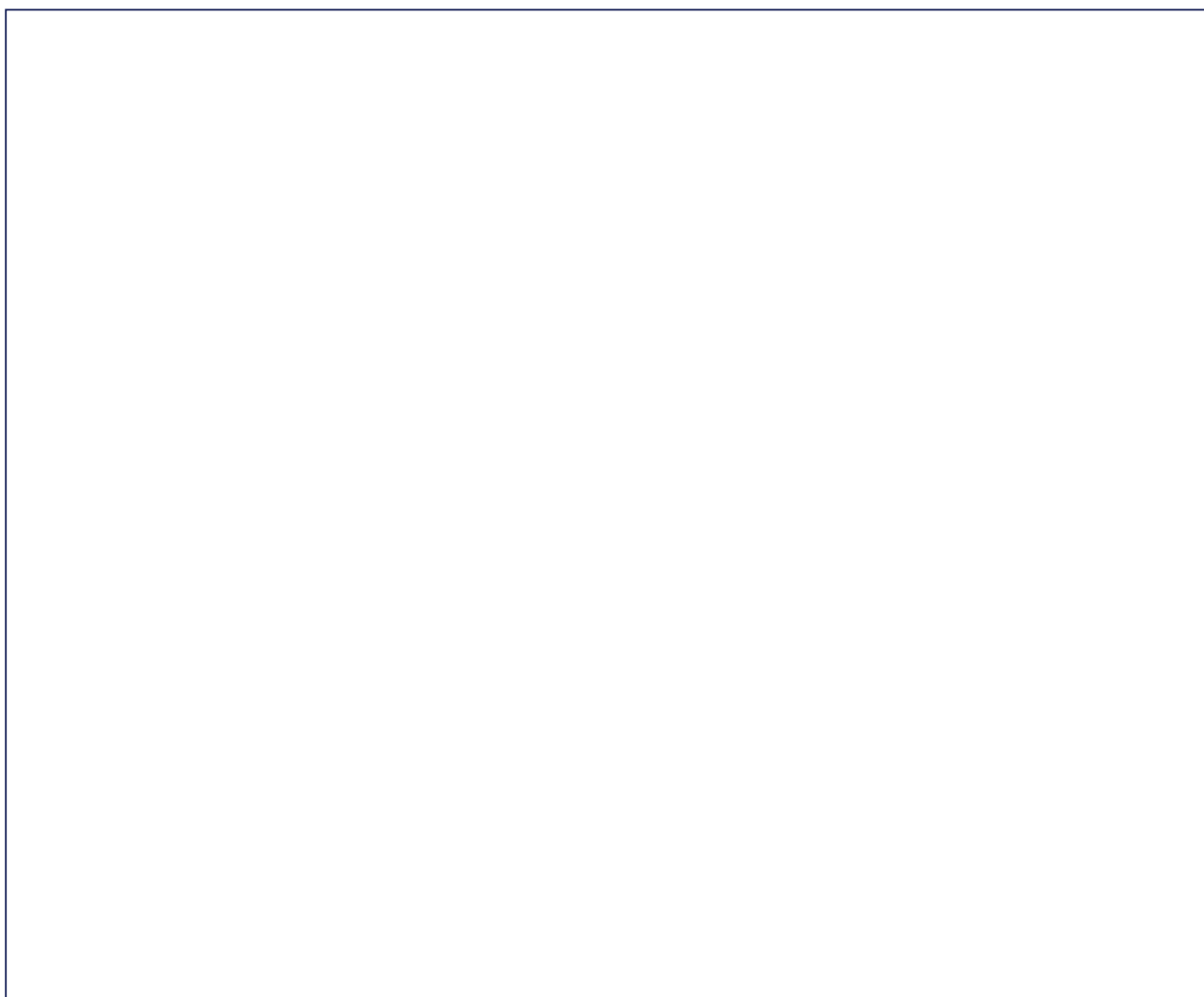


Mapping the Earth: Understanding Earthquakes with Finn

Learning objective: To understand the physical processes of an earthquake and identify key terminology related to tectonic activity.

Use the diagram space below to illustrate how an earthquake occurs. Refer to the word bank to add labels that explain the geological process. Ensure your drawing shows the cross-section of the Earth's crust.

Draw: Draw a cross-section of the Earth's crust showing two large, jagged rocky plates side-by-side. Use a 'zig-zag' line to represent the fault line where they meet. Draw circular ripples spreading outwards from a central point deep underground to show energy radiating as seismic waves. Use bright colors to highlight the difference between the solid crust and the internal layers. Include a small drawing of Finn the dolphin near a coastline to show perspective.



Label words: Epicentre · Focus · Seismic Waves · Fault Line · Tectonic Plates · Crust

Steps:

1. Label the point on the Earth's surface directly above where the earthquake begins. What is this point called?
2. Explain why the movement of tectonic plates causes the ground to shake. Use the term 'energy' in your

explanation.

3. Compare the 'Focus' and the 'Epicentre'. How are they different in terms of their location within the Earth?
4. Justify your answer: Why do you think buildings in countries near plate boundaries are often designed with flexible materials?
5. What might happen if a large earthquake occurs underneath the ocean? Describe the potential impact on the coastline.
6. List two ways that scientists might monitor the movement of tectonic plates to help keep people safe.