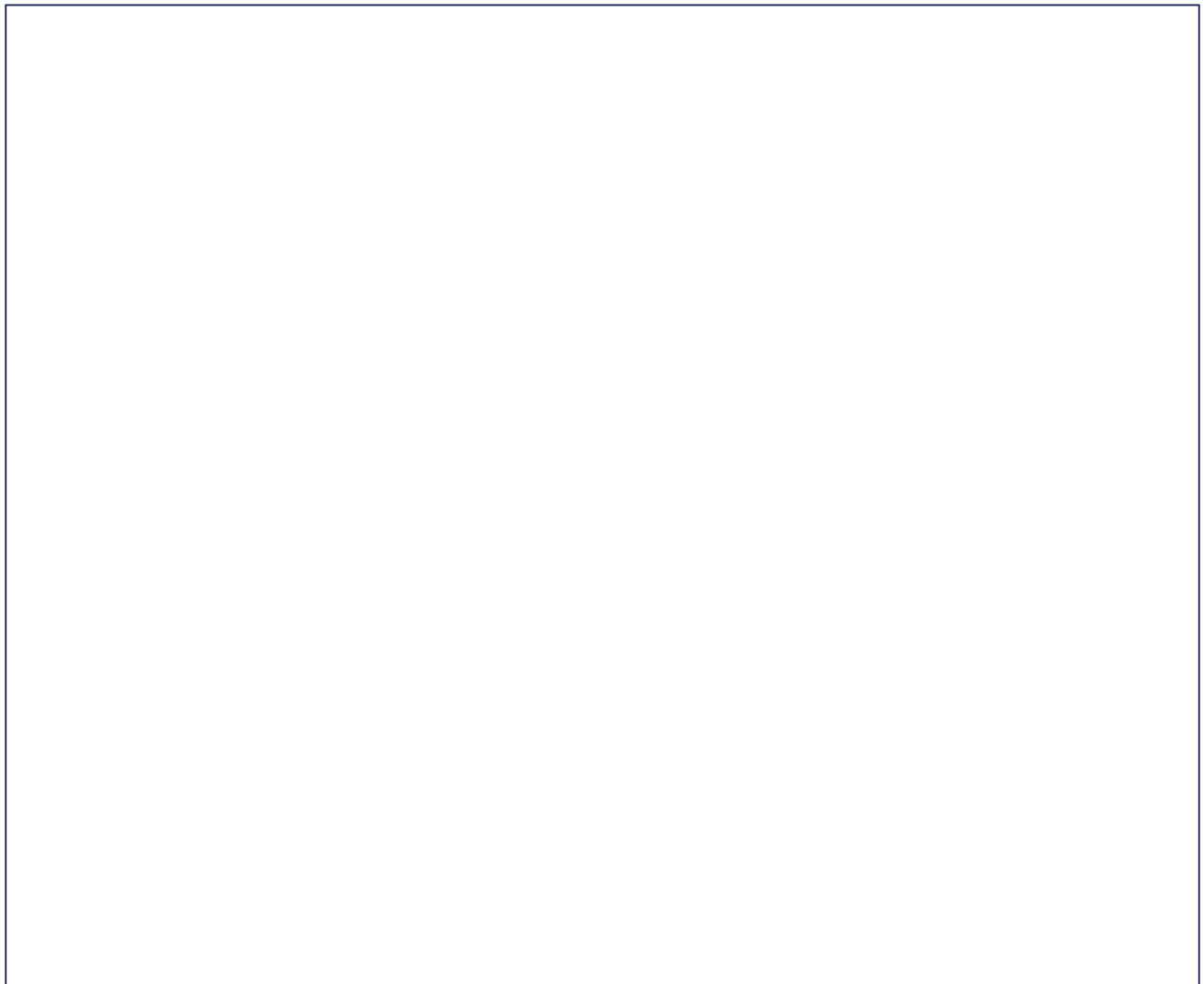


Mapping the Tremors: Understanding Earthquakes with Finn

Learning objective: To identify and illustrate the physical features of an earthquake, including the focus, epicentre, and seismic waves.

Follow Finn the Dolphin's guide to earth science. Use your scientific knowledge to label the anatomy of an earthquake on your diagram. Ensure your labels are clear and your drawing accurately represents the movement of the Earth's crust.

Draw: Draw a cross-section of the Earth's surface showing two large tectonic plates underground. Include a jagged crack between them representing the fault line. Draw a star deep underground to show the focus, and a smaller star directly above it on the surface to show the epicentre. Use curved, rippling lines radiating outwards from the focus to represent seismic waves. Use a clear, labelled diagram style, similar to a geography textbook.



Label words: Crust · Mantle · Focus · Epicentre · Seismic Waves · Fault Line

Steps:

1. Explain why the damage caused by an earthquake is usually most severe at the epicentre.
2. Compare and contrast the 'focus' and the 'epicentre'. How are they different?

3. What might happen to the landscape if a major fault line runs through a mountain range?
4. Justify your answer: Why is it important for architects to study seismic waves before building skyscrapers?
5. Label the point on your drawing where the tectonic plates meet and slip.
6. Identify which layer of the Earth lies directly beneath the crust.