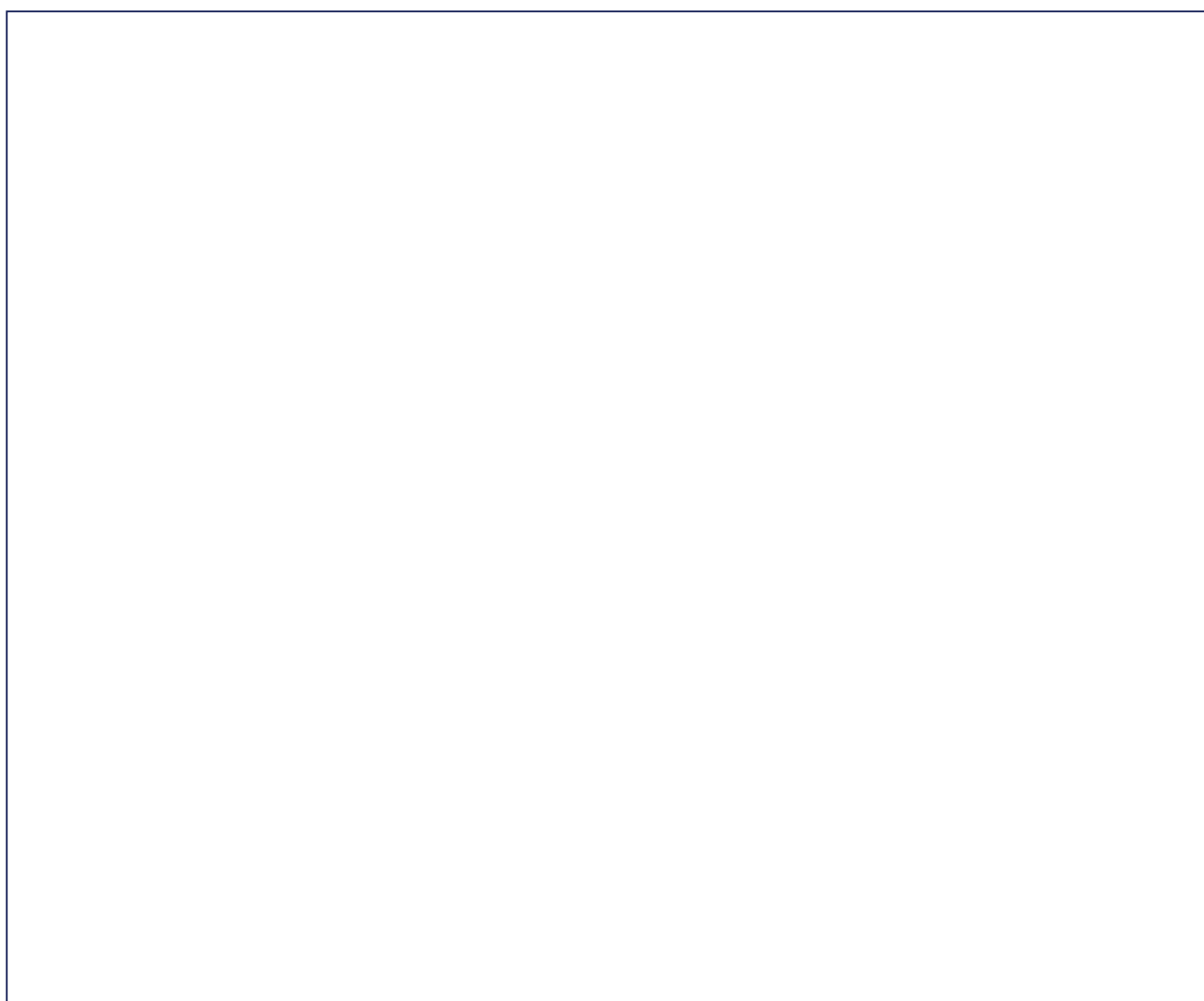


Nova's Geological Journey: The Rock Cycle

Learning objective: To identify and describe the processes involved in the formation of igneous, sedimentary, and metamorphic rocks.

Follow the drawing prompts below to create a diagram of the Rock Cycle. Use your labels from the word bank to explain how each rock type is formed.

Draw: Create a large, circular flow diagram in the centre of your page. Start at the top with a volcano erupting (Igneous). Draw an arrow pointing down to a riverbed where layers of sand and mud are settling (Sediment/Sedimentary). Draw a final section showing rock being squeezed between two large landmasses (Metamorphic) with arrows pointing back towards the volcanic heat. Use clear labels and include small, detailed sketches of the texture of each rock type.



Label words: Magma · Igneous Rock · Sediment · Sedimentary Rock · Metamorphic Rock · Weathering and Erosion · Heat and Pressure · Cooling and Solidifying

Steps:

1. Step 1: Draw a volcano at the top of your page. Label the 'Magma' beneath it and show it turning into 'Igneous Rock' as it cools. Explain why igneous rock is often found near volcanic activity.
2. Step 2: Draw layers of small pebbles at the bottom of a riverbed. Label this 'Sediment'. How does

sediment eventually become 'Sedimentary Rock'? Describe the process of compaction.

3. Step 3: Draw a mountain range being squeezed. Label this 'Metamorphic Rock'. Justify why heat and pressure are essential for creating this type of rock.

4. Compare and contrast the formation of igneous rock with the formation of metamorphic rock. What is the main difference in their origins?

5. What might happen to a sedimentary rock if it is pushed deep into the Earth's crust by shifting tectonic plates?

6. Explain why the Earth's surface is constantly changing due to the processes of weathering and erosion.