

Nova's Rock Investigation

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

Help Nova the owl sort the rocks she found on her expedition! Use the word bank to label the different sections of your diagram and fill in the labels to show how each rock type is created.

Draw: Draw a cross-section of the Earth's surface. On the left, draw a volcano erupting with lava cooling into 'Igneous' rock. In the middle, draw a riverbed with horizontal 'Sedimentary' layers. On the right, draw deep underground rocks being squeezed to show 'Metamorphic' rock. Use clear, labelled arrows to show the transformation processes.



Label words: Sediment · Magma · Heat and Pressure · Igneous · Sedimentary · Metamorphic · Layers

Steps:

1. Label the rock type that is formed from cooling magma or lava.
2. Label the part of your drawing where small pieces of rock build up in layers.
3. Explain one way that a metamorphic rock is different from a sedimentary rock.
4. Why are fossils usually only found in sedimentary rocks? Hint: think about how the rock layers form.
5. List two properties you might use to test or identify a rock (e.g., hardness or texture).