

Nova's Rock Discovery

Learning objective: To identify and describe the different types of rocks and how they are formed.

Read the text carefully and answer the questions below. Use your knowledge of rocks to help you.

Nova the barn owl loves to explore the rocky cliffs at night. She has discovered that the Earth is full of fascinating, solid ground! Nova explains that there are three main types of rock. Igneous rocks are formed when hot, molten magma cools down and turns solid. You can often see tiny crystals in these hard rocks. Next, Nova points out sedimentary rocks. These are formed over millions of years as layers of sand, mud, and pebbles settle at the bottom of lakes and oceans. These layers are squashed together by the weight above until they become solid rock. Sometimes, you can even find fossils trapped inside them! Finally, there are metamorphic rocks. These start as other rocks, but they are changed deep underground by intense heat and great pressure. They become harder and often look shiny or layered. Whether it is a crumbly piece of sandstone or a tough piece of granite, every rock tells a story about how our planet has changed over time. Nova always carries her magnifying glass to look for clues about where a rock came from.

Word bank: igneous · sedimentary · metamorphic · magma · fossil · sediment · pressure

1. According to the text, how are sedimentary rocks formed? (2 marks)

2. What does Nova use to help her look for clues on the rocks? (1 mark)

3. Why do you think fossils are more likely to be found in sedimentary rocks rather than igneous rocks? (2 marks)

4. Based on the description of metamorphic rocks, what do you think would happen if a rock was placed under high heat and pressure? (2 marks)

5. If you were a geologist like Nova, which type of rock would you be most excited to find and why? (2 marks)

Draw: Draw a diagram showing the three layers of the Earth or a collection of different rocks that Nova might have in her nest.



Extension challenge: Research one type of rock found in the UK, such as slate or chalk, and write two facts about how it is used in our everyday lives.