

Nova's Guide to Remarkable Rocks

Learning objective: To identify and describe the physical properties of different types of rocks and understand their formation.

Read the text carefully and answer the questions below using full sentences.

Nova the owl loves to swoop over the mountains to study the earth beneath her wings. She knows that rocks are all around us, but they aren't all the same. Igneous rocks, like granite, are formed when hot, molten magma cools down and turns solid. They are often very hard and tough. Next, there are sedimentary rocks, such as sandstone. These form over millions of years as layers of sand and pebbles are squashed together at the bottom of lakes or oceans. Because they have tiny gaps between their grains, they are often permeable, meaning water can soak through them. Sometimes, you might even find a fossil hidden inside a sedimentary rock! Finally, Nova enjoys finding metamorphic rocks. These start as other types of rock, but are changed deep underground by immense heat and pressure. This process turns soft rocks into much stronger ones, like marble. Whether they are smooth, jagged, or sparkly, every rock tells a story about how our planet has changed over time. Next time you go for a walk, look closely at the ground—you might just find a piece of history right under your feet!

Word bank: sedimentary · igneous · metamorphic · permeable · magma · fossil · texture

1. Name two types of rocks mentioned in the text that are formed by heat or pressure. (2 marks)

2. What does the word 'permeable' mean according to the passage? (2 marks)

3. Why is it more likely to find a fossil in a sedimentary rock than in an igneous rock? (2 marks)

4. Based on the description of how they are formed, why might metamorphic rocks be very strong? (2 marks)

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

Draw: Draw a diagram showing the three layers of the earth or different types of rocks, and label them as Nova would in her science journal.



Extension challenge: Research one type of rock found in the UK. Write three facts about how it is used in buildings or statues in your local area.