

Nova's Rock Discovery Challenge

Learning objective: To compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.

Read each question carefully and use your knowledge of geology to provide detailed answers. Use the word bank to help you with scientific terminology.

Nova the owl has been out collecting rocks from the local hillside. She has found some that are crumbly, some that are very hard, and some that have interesting layers. She needs your help to identify and categorize them based on how they were formed.

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

1. Nova has found a rock that contains a small fossilised leaf. Which type of rock is this most likely to be, and how do you know? (2 marks)

2. Explain the difference between igneous rocks and metamorphic rocks in terms of how they are formed. (2 marks)

3. If a rock is permeable, what does this mean when water is poured onto its surface? (1 mark)

4. Max the monkey wants to build a garden wall. He has two rocks: one is soft and chalky, the other is hard granite. Which should he choose and why? (2 marks)

5. Describe the process of how sediment turns into sedimentary rock over a very long period of time. (2 marks)

Draw: Draw a diagram showing the three layers of the earth's crust or a cross-section of a sedimentary rock formation showing different layers of sediment.



Extension challenge: Research a specific type of rock found in the UK, such as slate or limestone. Write a short paragraph explaining its properties and one common use for it in our daily lives.