

Year 3 Science Assessment: Rocks and Soils

Learning objective: To identify and describe the properties of different rocks and understand how fossils are formed.

Read each question carefully. Write your answers clearly in the spaces provided. You have 30 minutes to complete this assessment.

Nova the barn owl has been exploring the local quarry. She found three different types of stones: one that was very hard and shiny, one that had layers like a sandwich, and one that felt crumbly and soft. She needs your help to classify them and understand how they changed over time.

Word bank: sedimentary · igneous · metamorphic · fossil · permeable · hard · soft · magma

1. Name the three main groups of rocks found on Earth. (3 marks)

2. Nova finds a rock that is made of layers and contains tiny shells. Which group of rocks does this belong to and how do you know? (3 marks)

3. Explain the difference between a permeable rock and an impermeable rock. Why is this important for building houses? (4 marks)

4. Max the monkey wants to know how a fossil is made. Describe the process of fossilisation in three simple steps. (3 marks)

5. What is soil made of? List three things that can be found mixed with weathered rock to create soil. (3 marks)

6. Bea the honeybee is looking at two rocks. One is very hard and used to build castle walls. The other is soft and leaves a mark on paper. Why are rocks used for different jobs based on their properties? Give an example of a job for each. (4 marks)

7. Imagine you are a geologist. Write a short paragraph explaining the journey of an igneous rock. Start with the rock deep underground as molten magma and explain how it becomes solid stone. (5 marks)

Draw: Draw a diagram of a fossil inside a sedimentary rock. Label the layers of rock and the fossil.



Extension challenge: Total: /25