

Nova's Rock-Solid Science Quiz

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

Join Nova the owl on an adventure through the Earth's crust! Read each question carefully and write your answers in the spaces provided. Good luck, young geologists!

Answer Key: 1. A (Igneous), 2. True, 3. Sedimentary, 4. C (Metamorphic), 5. False, 6. Permeable, 7. B (Magma), 8. True, 9. 100 million years (or similar geologic time), 10. B (Erosion).

Word bank: Igneous · Sedimentary · Metamorphic · Magma · Fossil · Hardness · Permeable · Erosion

1. Which type of rock is formed when molten rock cools down and hardens? A) Igneous* B) Sedimentary C) Metamorphic D) Chalk (1 mark)

2. True or False: Sedimentary rocks are often formed from layers of sand, mud, and pebbles over a long time. (1 mark)

3. What type of rock is formed when existing rocks are changed by extreme heat and pressure deep underground? (1 mark)

4. Which rock is known for being soft and easily worn away? A) Granite B) Slate C) Chalk* D) Marble (1 mark)

5. True or False: Fossils can be found in Igneous rocks. (1 mark)

6. If a rock allows water to pass through it, we say it is _____. (1 mark)

7. What is molten rock called when it is still trapped beneath the Earth's surface? A) Lava B) Magma* C) Ash D) Crystal (1 mark)

8. True or False: Hardness is a property used to describe how easily a rock can be scratched. (1 mark)

9. Roughly how long does it take for a fossil to form: a few days or millions of years? (1 mark)

10. 10. What is the process called where wind and water break down rocks into smaller pieces? A) Melting B) Erosion* C) Cooling D) Polishing (1 mark)

Draw: Draw a diagram showing the three layers of a sedimentary rock formation. Label the layers with different materials like 'Sand', 'Mud', and 'Pebbles'.



Extension challenge: Imagine you are a geologist. Write a short paragraph explaining why you would choose granite to build a kitchen worktop instead of chalk, thinking about the properties of each rock.