

Fast Five

Name a use for the following rocks:

Graphite

Marble

Talc

Chalk

Coal

Answers

Graphite – used in pencils to write with.

Marble – used in flooring and outsides of buildings.

Talc – often used in Talcum Powder.

Chalk – used for writing and drawing.

Coal – used to generate heat.

Can I understand what
permeable and impermeable
means when discussing
rocks?

Properties

- Rocks have many different properties. Today we will look at whether rocks are permeable or impermeable.

Permeable

- **Permeable** rocks allow water to pass through and **impermeable** rocks do not allow water to pass through

Both of these rocks are permeable. What, do you think, allows the water to pass through?
Write your answer in a sentence.



Answer

- Permeable rocks are rocks that have small holes in them. This means that there are different types of matter that can pass through them specifically through liquids and gases. One example of a permeable rock is the one that can be found in the river. It will be easy for the water in the river to pass through the rock so that the water can easily flow. Rocks that are permeable may easily break down. This explains why stones are all different-sized.

Impermeable rocks

- Impermeable rocks, on the other hand, are very strong rocks and will be able to withstand the test of time. They do not allow water to pass through.
- On the next slide are two examples of impermeable rocks. Try and think about why they need to be impermeable.
- Hint: what are they used to build?
- Write a sentence for each.

Marble



Slate



Possible answers

- Marble is an impermeable rock. It is often used on floorings, or to make large ornate buildings such as the Taj Mahal. It needs to not allow water through, as it will weaken its structure and cause damage.
- Slate is an impermeable rock. It is often used for roof tiles. It needs to not let water through as it protects the house from the rain.

Permeable rocks

- On the next slide are two examples of permeable rocks. Look at the pictures. What makes them permeable ?
- Write a sentence for each.

Limestone



Sandstone



RED

- Write a definition of permeable and impermeable.
- Explain the difference to an adult.

YELLOW

- Draw a table titled Permeable and Impermeable and put these rocks under the correct heading.

- | | |
|-------------|---------|
| • Marble | Granite |
| • Slate | Coal |
| • Limestone | Chalk |
| • Sandstone | Talc |

GREEN

- Write 2 paragraphs entitled permeable and impermeable.
- For each paragraph include a definition of the title, examples of rocks, their uses and their properties.

- **Example sentences for a paragraph**

Marble is an impermeable rock. It is hard and strong and does not allow water through. It is used for flooring and so needs to be strong and hard-wearing.