

Key Vocabulary Overview	
gneiss	a hard, grainy rock made up of alternating layers of white and dark grey minerals
marble	a lightly coloured, smooth stone with veins running through it
chalk	a very soft, white rock with a crumbly texture
sandstone	a grainy rock that often has stripes of different colours running across it
granite	a hard, heavy rock that is made up of a combination of minerals
pumice	an extremely light, porous stone made of lava from volcanoes
texture	what an object feels like
layers	sheets of different materials, colours or textures piled one on top of the other

grains	tiny, solid pieces of rock that give the rocks they are a part of a rough texture
crystals	a shiny, smooth, solid material, often with flat faces, found within some types of rocks, such as granite
brittle	breaks easily, for example when bent
sink	fall below the surface of a liquid, usually water
float	stay on the surface of a liquid, usually water
hardness	how resistant a material is to denting and scratching
reaction	a change that happens when two or more materials interact
weathering	the wearing down of an object due to exposure to the atmosphere

What Are Rocks?

Rock is a naturally occurring material made up of minerals. Minerals are solid pieces of non-living material.



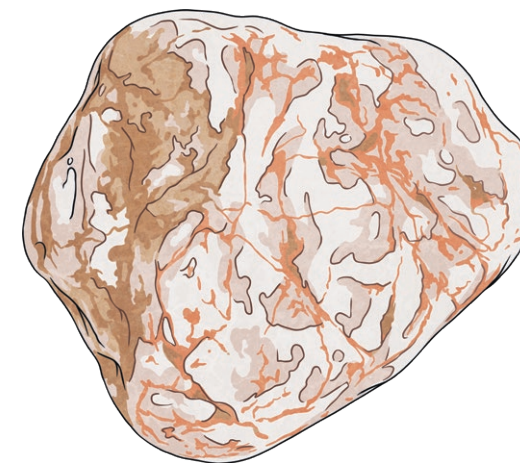
Granite

- **hard**, heavy rock made of various minerals
- often has a grainy **texture**
- recognisable by large **crystals** in its structure
- often used in building and construction



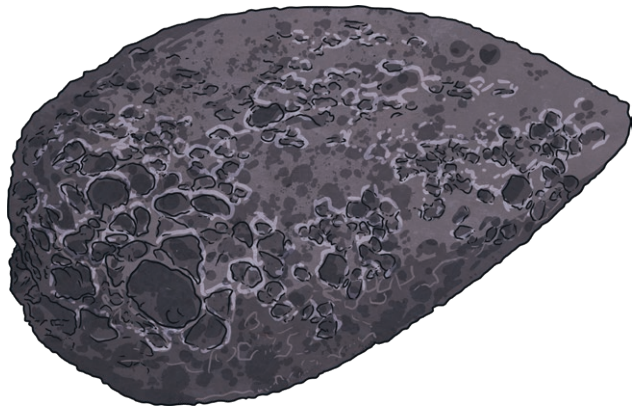
Sandstone

- a grainy rock
- often has stripes of different colors
- formed by **grains** of sand compressed together
- takes millions of years to form
- used throughout history for building



Marble

- known for its beauty, used decoratively (e.g. countertops, statues, pillars)
- easy to carve but also breaks easily



Pumice

- light, porous volcanic stone
- **floats** on water
- reasonably **hard** and doesn't crumble easily
- used in cleaning



Chalk

- used to create powder called 'whiting' for ceramics and other materials
- made into putty for filling holes or cracks
- improves soil for plant growth



Gneiss

- **hard**, grainy rock with alternating white and dark grey **layers**
- used in construction and decoration
- sometimes contains gemstones, used in jewellery

Crystals

Some rocks have small **crystals** in their structure. **Crystals** are smooth, shiny pieces of material.

Grains

Some rocks have a grainy or gritty **texture**. This is due to tiny pieces of rock called **grains**.

Layers

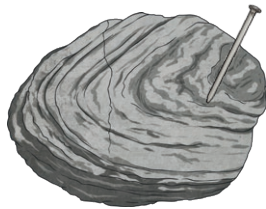
Some rocks have **layers** of colour or material in them. **Layered** rocks form when great pressure and heat is put on materials, forcing them to compress into rock.

Acid Rain

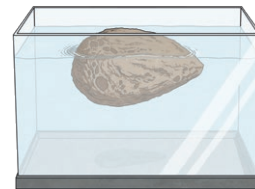
Acid rain occurs when rain is very slightly acidic. This isn't dangerous at all to humans. However, it can cause rocks to erode (wear away) over time.

Tests to Identify Rocks

Some rocks have properties that are not so easily noticed. Some tests that can be done to investigate less visible properties in rocks are:



hardness



floating and **sinking**

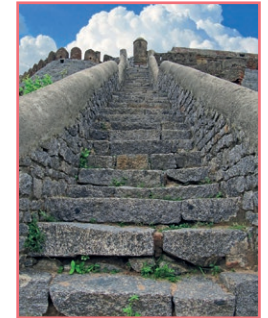


reactions to acid

Stone

As well as meaning a small rock, 'stone' can mean the material made from rocks that is used in construction. Stone is also used to make:

- buildings
- walls
- monuments
- tiles
- cobblestones
- other structures



What properties might be important for a builder when choosing what type of stone to use?