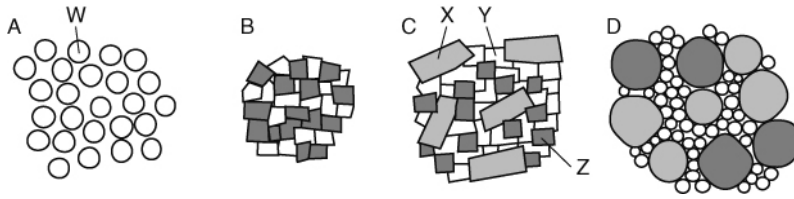


Rocks are mixtures of minerals. The grains in rocks can be different shapes and sizes. Interlocking grains (crystals) fit together without any gaps between them. If the grains are rounded, there can be gaps between them. A rock with gaps is porous. If water can soak through the gaps in the rock, the rock is said to be permeable.



- Look carefully at the drawings of rocks. Describe the texture of each rock in as much detail as you can. Include the following information:
  - shape of grains, and whether or not they interlock
  - size (or sizes) of grains
  - how many different kinds of mineral you can see.
- Write a list of the rocks in order of how porous they are. Put the most porous one first. Explain why you have put the rocks in that order.

Conglomerate consists of rounded pebbles set in a mixture of finer grains.

Sandstone usually consists of grains of quartz that are all of similar size.

Granite consists of interlocking grains of feldspar, mica and quartz. The grains are usually greater than 2 mm in size, and feldspar can develop into much larger crystals.

- Which rock (A–D) is sandstone?
  - Which rock (A–D) is conglomerate?
  - Which rock (A–D) is granite?
- Use information from the text above to work out the names of each of the minerals labelled W, X, Y and Z. (*Hint: two of these minerals are the same.*)
- Gabbro is a rock made from interlocking grains. It contains the minerals olivine, pyroxene and feldspar. The grains are similar sizes, usually between 2 and 4 mm across.  
Draw a diagram similar to the ones above to show the texture of gabbro.

**I can...**

- describe the texture of rocks
- identify rocks based on descriptions of their textures.