

Getting fired up

You can find many different definitions of ceramics.

What you need to remember is that ceramics are hard, brittle non-metal materials made by heating to a high temperature. You were probably familiar with most of the objects you investigated. But have you ever thought about how they are made? What are the raw materials? What is the manufacturing process?



Wet clay is soft and easily moulded into shape. After moulding, the clay object is dried out by firing in a very hot kiln.

Pottery

Ceramics originally meant **pottery** - that is, materials made from fired clay. Clay is a very common natural material found in the earth. There's some in most soils.

Find out how the properties of fired clay differ from wet clay.

Wet, raw clay

Dry, fired clay

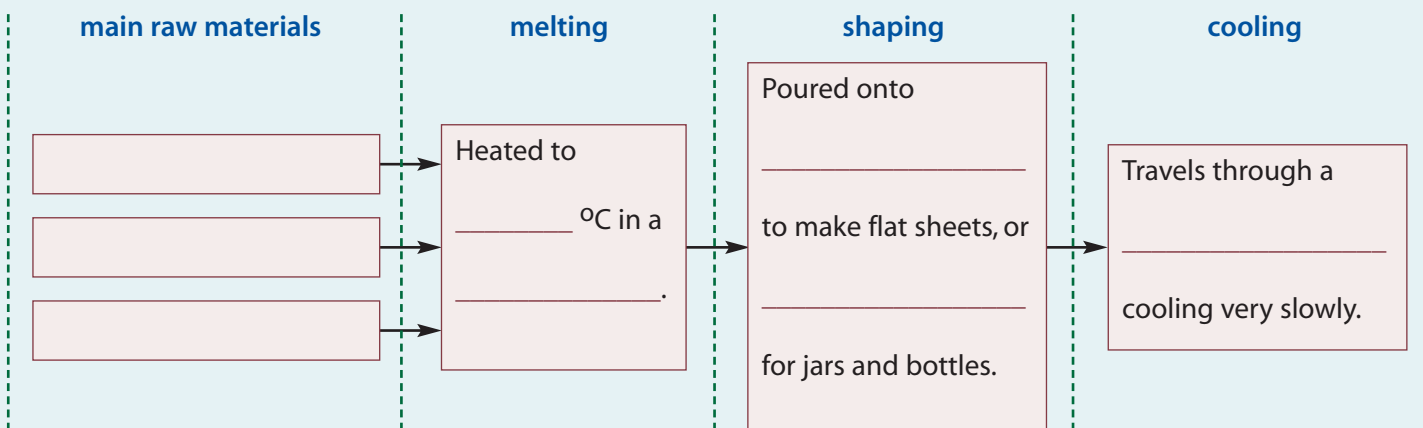
Importantly, pottery doesn't turn back into soft clay when it gets wet again.

Glass

Most pottery ceramics are glazed. This means they're coated with a glassy layer.

Glass is another type of ceramic, though it's not made from clay.

Find out how glass is made. Complete the flow chart, to show the main stages.



Cement

Like pottery and glass, cement is heated to high temperature during manufacture. Unlike them, it's made as a powder. Look back at your work on limestone to recall how cement is made. Summarise the process here:
