

# [Fact file ceramics](https://assignbuster.com/fact-file-ceramics/)

[Science](https://assignbuster.com/essay-subjects/science/)

Find out:

1. What is a ceramic material? Ceramic materials are inorganic, non-metallic materials made from compounds of a metal and a non metal.
2. The names of four types of ceramic • Structural • Refractories • White ware ceramic • Technical ceramic
3. Give examples of each of these types of ceramic Examples of structural ceramics are: bricks, pipes and roof tiles Example of Refractories ceramics: gas fire radiant’s, steel and glass making crucibles. Example of white ware ceramic: tableware, cookware, wall tiles, pottery products and sanitary ware.

Example of Technical ceramic: gas burner nozzles, ballistic protection, nuclear fuel uranium oxide pellets, biomedical implants, coatings of jet engine and turbine blades. Properties List 5 properties of ceramic materials. For each property, write a sentence to explain what the word means.

* Hard: not easily broken, bent, or pierced.
* Wear-resistant: it wont ware away easily if you keep it for along time
* Brittle: it can break easily if it drops on the floor.

Thermal insulators: it keeps heat in and the cold out. Ceramics – Porcelain and False Teeth!

1. What is porcelain? What are its properties and uses? Porcelain is a ceramic material made by heating raw materials, normally including clay in the form of kaolin, in a kiln to temperatures between 1, 200 °C Properties are low permeability and elasticity, strong , hardness, toughness, whiteness and thermal shock.
2. What happened to porcelain production in the 1950s and 1960s? (aluminous porcelains) The UK Ran out of Porcelain to make all different products. . How porcelain has been used to make false teeth? It is used to make a tooth shaped model with porcelain and the dentist screws it on. Also, they used to get layer of porcelain and put it on the teeth.

Crystalline and Non-crystalline ceramics (Types of ceramic materials)

* What are crystalline ceramics? Give some examples? Crystalline ceramic materials are not amenable to a great range of processing
* What are non-crystalline ceramics? Give some examples? No- crystalline ceramics, being glasses, tend to be formed from melts.