

CRITICAL MINERALS KS3 lesson 1 resource sheet: minerals in everyday life





Department for Business & Trade

## KS3 activity 1: minerals in everyday life

Photograph	Statement	Mineral name
Salt	Sodium chloride comes from the mineral halite	Halite
Toothpaste	Fluoride helps to reduce tooth decay	Fluorite
Brass padlock	Copper and zinc combined make the alloy brass	Chalcopyrite (copper) and sphalerite (zinc)
Aluminium foil	Aluminium is a very light metal	Bauxite
Drill bits	Tungsten and steel (iron) are added to improve hardness	Wolframite (tungsten) and haematite (iron)

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Photograph	Component	Mineral name
Water pipe	Copper is used to make pipes	Chalcopyrite
Car battery	Lead and zinc are used as electrodes inside batteries	Galena (lead) and sphalerite (zinc)
Toilet	Porcelain is a ceramic material processed through high levels of heat	Kaolinite
Pencil	Graphite is mixed with clay to form the pencil 'lead'	Graphite
Wristwatch	Quartz is used in the electronics to keep it accurate	Quartz
Cement	Limestone and clay are the main components of this product	Calcite (calcium carbonate) and kaolinite (clay)

Photograph	Component	Mineral name
Glass	This is made from silica, which is composed of small grains of quartz crystals, commonly known as sand	Quartz
Talcum powder	Talc is one of the softest minerals	Talc
Kitchen utensils	Steel (iron), nickel and chromium are combined to make an alloy that is used to make eating utensils	Haematite (iron), pentlandite (nickel) and chromite (chromium)

