



Australian Government
Geoscience Australia

GEOLOGY OF MINECRAFT

Minecraft is a popular computer game about blocks and rocks!

Obsidian

- Obsidian is a volcanic glass. It is produced when magma from volcanoes is cooled and solidified very quickly, before there is time for crystals to grow. It is usually a black colour.
- Obsidian shatters like glass and is even better than flint for making axe and arrow heads. Some surgeons today use obsidian for scalpel blades.
- The main mineral in obsidian is quartz (silica) which is harder than a steel blade but not as hard as a diamond. This means tools made of metal can be used to shape it, without needing diamond-tipped axes.
- Obsidian does **not** burn. Obsidian is **not** resistant to TNT. Obsidian is **not** purple.



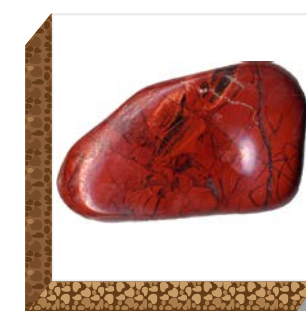
Diamond

- Diamonds are the hardest known material.
- They are used for jewellery and on some tools such as saw blades and drill bits.
- Diamonds form nearly 200 km underground in the mantle of the Earth.
- Temperatures of 1300° C and very high pressures are needed. They come to the surface in volcanic eruptions.
- Diamonds are **not** used for armour.



Redstone

- There are stones that are a red colour but they are not called redstone. One real rock that is red is *jasper*.
- There is **no** stone that can conduct electricity*. Metals such as copper conduct electricity.
- There is **no** stone that can burn*, although some stones contain material inside them which can burn.



Bedrock

- Bedrock is the solid rock that lies under the soil and broken, weathered rock.
- Bedrock is **not** 'at the bottom' of anything in particular. It simply lies below the loose weathered material on the surface. Bedrock can be many different types of rock that extend for kilometres down into the crust.
- Bedrock can be dug into but TNT is **not** essential for this.



Cobblestone

- Cobblestones were used to pave streets and footpaths in the olden days. They are large, smooth, round pebbles and were gathered from river beds.
- Many types of rocks could become cobblestones.
- Cobblestones **do not** form from water and flowing lava.
- Putting cobblestone into a furnace will **not** create stone. It would, in fact, achieve nothing but a very warm rock.



Gold ore

- Gold is a very beautiful metal, and is used for jewellery and electrical circuitry.
- Gold is very soft, nearly as soft as fingernails, and so is **not** useful for pickaxes or armour. Gold is **not** as durable as leather.
- Gold foil is more delicate than aluminium foil.



Iron ore

- Iron is produced from iron ore, which contains the minerals hematite and magnetite. A blast furnace operating at 2000° C is used to smelt the ore to extract the metal.
- Iron is the most widely used of all metals. Iron itself is relatively soft, so it is more often used in the form of steel. Steel is used to build bridges, large ships, building frames and machine tools.



*For the purposes of this poster, some of the statements have been generalised.

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