

# MINERALS, THE BUILDING BLOCKS OF ROCKS

**Minerals** are solid substances that occur naturally in the Earth from non-living material. Minerals have a definite chemical composition—they are the same, through and through, no matter where they are found. All rocks are made up of a combination of minerals.



Minerals are the building blocks of rocks.



Granite  
Rock



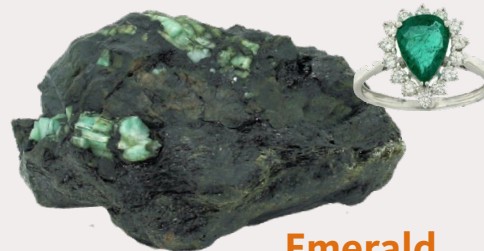
Rocks are the building blocks of our planet.



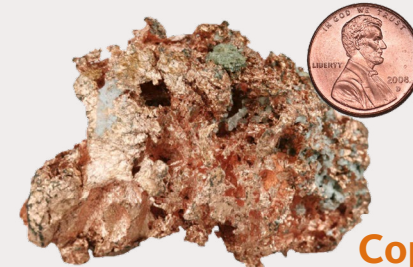
Earth  
Planet

## Minerals Grow Crystals

Most minerals have a regular crystal shape—which means the mineral grows in a repeating pattern of the same shape. The size of a crystal depends on how long it was growing and how much space was available for it to grow.



**Gemstones** are mineral crystals that are unusually beautiful, rare, and durable. Emeralds are beautifully formed crystals of a mineral called beryl.



**Ore minerals** are the source of most metals. Once the ores are mined out of the Earth, they are crushed and separated, then melted to produce metal.