

# MINERALS

## What is a mineral?

It is a natural substance formed by rocks.

It is a solid, natural and inorganic substance, with its own chemical composition and formed under particular conditions of pressure and temperature.

It is a solid, natural and inorganic substance, with a certain chemical composition.

## What is the hardness of a mineral?

It is the resistance to being scratched

It is the resistance to breaking

It is the appearance of its surface when it reflects light

## What is the tenacity of a mineral?

It is the resistance to being scratched

It is the resistance to breaking

It is the fact that it breaks into regular shaped fragments (planes, polyhedral figures ...)

## Name the scale that allows us to know the hardness of a mineral.

## Types of minerals according to their uses (connect with arrows):

INDUSTRIAL MINERALS

Those from which metals are extracted

PRECIOUS STONES

They are used in large quantities, just as they are found in nature or with small changes

METALLIC MINERALS

Minerals that are very beautiful, very hard and very rare

## Classify the following minerals according to their use:

*Hematite, quartz, calcite, diamond, galena, ruby, halite, chalcopyrite, emerald, feldspar*

| METALLIC MINERALS | INDUSTRIAL MINERALS | PRECIOUS STONES |
|-------------------|---------------------|-----------------|
|                   |                     |                 |

For each metal, put the mineral/s from which it is obtained:

| METALS    | METALLIC MINERALS |
|-----------|-------------------|
| Aluminium |                   |
| Lead      |                   |
| Iron      |                   |
| Copper    |                   |
| Zinc      |                   |
| Mercury   |                   |

Galena

Hematite

Bauxite

Magnetite

Blende

Cinnabar

Chalcopyrite

Uses of industrial minerals:

| Quartz | Calcite | Feldspar | Halite |
|--------|---------|----------|--------|
|        |         |          |        |

-Porcelain  
-Glass  
-Enamels

-Cement  
-Mixed with quartz,  
we make glass

Salt

-Glass  
-Silicon chips  
-Solar cells

Write the correct mineral for each description:

- a) It can have different colours, it has a hardness of 7, it is an industrial mineral, a silicate, that is used to make glass, silicon chips, solar cells ...



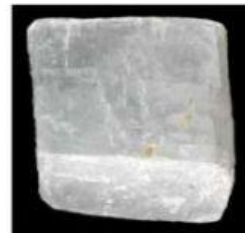
- b) It is a metallic mineral from which copper is obtained. It is called "the fool's gold" because it is yellow and looks like gold.



- c) It is a very dense metallic mineral from which lead is obtained. It has metallic luster.



- d) It is an industrial mineral, non-silicate, used to make cement, glass (mixed with quartz) and lime.



- e) It is a black metallic mineral from which iron is obtained. It is attracted to magnets.



- f) It is a precious stone. It is red and has a hardness of 9.



- g) It is an industrial mineral with a salty taste, from which salt is obtained. It is colourless or white and has a cubic cleavage.

