

Mineral Madness

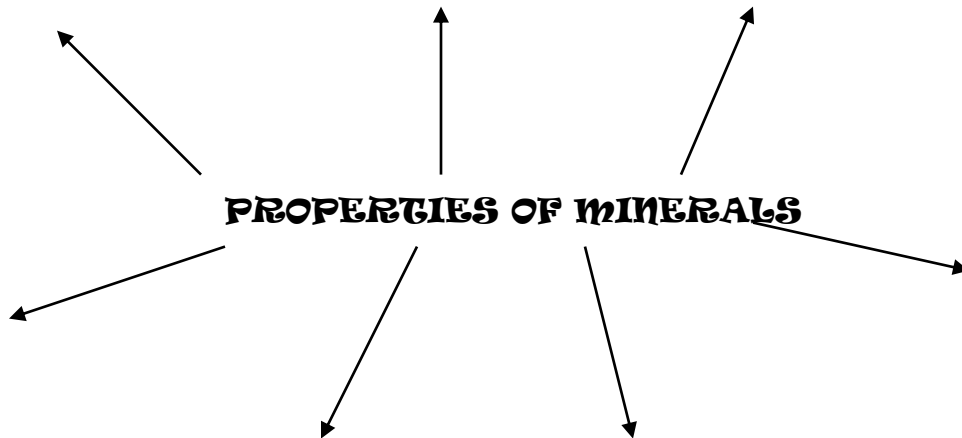
What is a mineral?

What does that mean?

A mineral MUST:

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What are the properties of minerals?



Mineral Madness Activities

Observing Minerals' Properties

PROPERTY	CHALK	MINERAL
Streak gently rub the object on the streak plates – record the color left behind		
Luster record whether or not the mineral reflects light – is it shiny or dull?		
Color What color is it?		
Hardness Give the mineral a Mohs rating based on the tools available.		

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Did you know that there are many minerals that we need for our bodies? In fact, 6% of our bodies are made up of minerals!

Check out the chart below and answer the following questions

Name of Mineral	Food Sources	Needed by Body for...
Calcium	milk, other dairy products, and green vegetables	building bones and teeth, regulating heart and nerve activity, and causing blood to clot.
Copper	liver, mushrooms, shellfish, cocoa, and bran	forming oxygen-carrying compounds in red blood cells
Iron	liver, red meat, eggs, leafy vegetables, and whole grains	Forming red blood cells; carrying oxygen by red blood cells
Magnesium	vegetables	muscle and nerve action
Phosphorus	milk, dairy products, meat, eggs, whole-grain cereals, and vegetables	building bones, teeth, and nerve tissue; energy production by cells
Potassium	vegetables, citrus fruits, bananas, and apricots	normal functioning of muscles and nerves; maintaining a chemical balance
Sodium	table salt, vegetables	normal functioning of nerves and muscles

1. Billy is having some issues with breaking his bones. He broke a toe last year and has now broken his arm! What minerals might he want to add to his diet to help with this problem of weak bones?

2. Jamie loves to eat salty potato chips. What mineral is she adding to her body and why does her body need it?

3. Fernando is lactose intolerant (can't eat anything dairy). What can he eat to help get the calcium into his body?

4. Oliver feels weak sometimes after he walks a long distance. What mineral might he be lacking and why?

5. Now you create a situation like those above using one of the minerals not already used.

Minerals are also used for many things that we use in our daily lives. Did you know that we use calcite to make chalk?

Check out the chart below and fill out the table below.

Name of Rock or Mineral	Products and Uses
Lead	Batteries, solder, and electronic components
Zinc	Brass (alloyed with copper), coatings for steel, used in rubber and paints
Copper	Electrical motors, generators, communication equipment, and electrical wiring
Aluminum	Beverage cans, lawn chairs, aircrafts, ships, & automobiles
Halite (salt)	Cooking, plastics, water purification, deicing, & degreasing
Clays such as Trona	Bricks, paper, paint, glass, pottery, and abrasives
Iron and Steel	Kitchen utensils, automobiles, ships, and buildings

Now, complete the chart below by stating one way that YOU use these minerals in YOUR daily life. An example is provided.

Name of Rock or Mineral	How I use this
Calcite	My teacher uses chalk which is made of calcite to teach me on the chalkboard!
Lead	
Zinc	
Copper	
Aluminum	
Halite (salt)	
Clays such as Trona	
Iron and Steel	