

Elements, Minerals, and Rocks

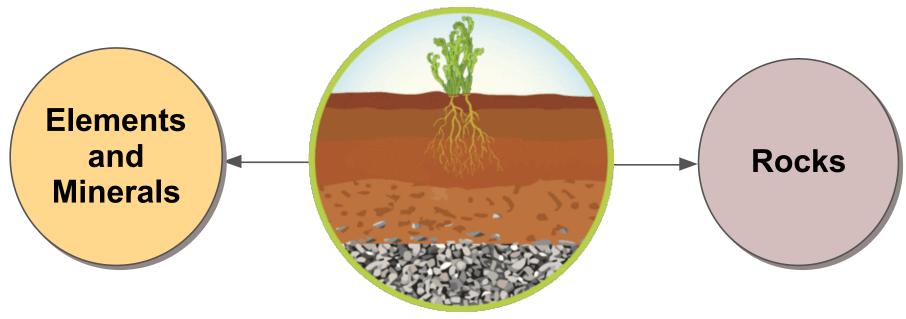
Elements and Minerals





Elements, Minerals, and Rocks

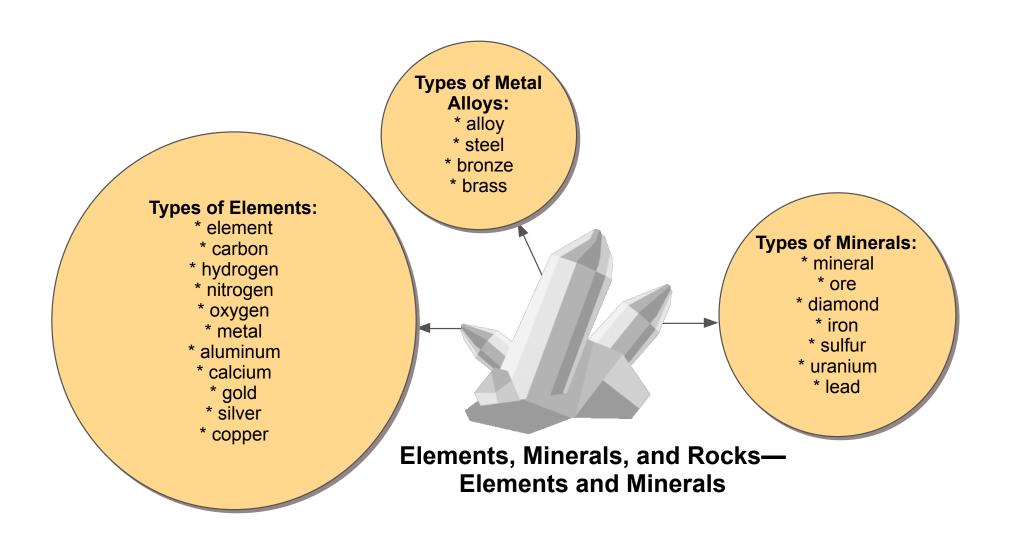
Earth is made of elements, minerals, and rocks. There are many words used to describe different elements and minerals. There are also many words to describe different kinds of rocks and their different sizes.



Elements, Minerals, and Rocks

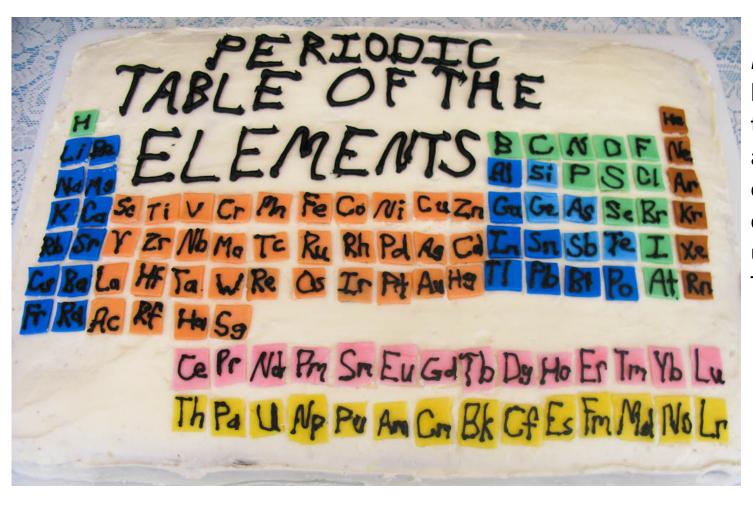
Elements and Minerals

Scientists study elements and minerals everyday. They look at what types of elements and minerals exist, where they are found on Earth, and how we use them in everyday life.



element

(el·e·ment)



Elements are the basic substances that make up life and physical objects. Scientists organize elements using the Periodic Table of Elements.

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carbon

(car·bon)

Carbon is an element that is in all living plants and animals.



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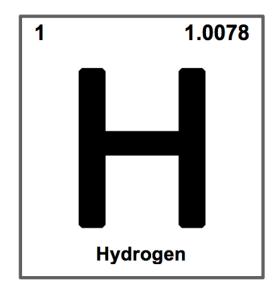
Image: Carbon chemical symbol. August 2015. Created by Jessie Thorsen. Used with permission.

hydrogen

(hy·dro·gen)



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Hydrogen is an element that has no color or smell and that is the simplest, lightest, and most common element. One place it can be found is between stars in space.

Image: Hydrogen chemical symbol. August 2015. Created by Jessie Thorsen. Used with permission.





nitrogen (ni·tro·gen)

Nitrogen is a element that has no color or smell. At room temperature it is a gas.

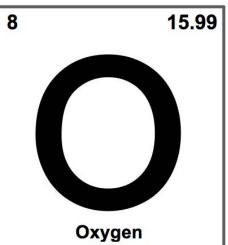
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Image: Nitrogen chemical symbol. August 2015. Created by Jessie Thorsen. Used with permission.

oxygen

(ox·y·gen)





Oxygen is an element that is found in the air and has no color, taste, or smell.

metal

(met·al)



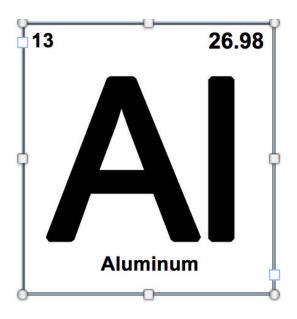
Some elements are *metals*.

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aluminum

(alu·mi·num)



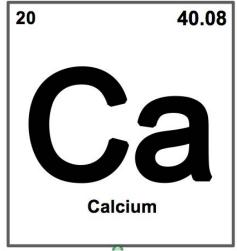


Aluminum is and element that is a silver metal. It is strong and light and is used for making many products.

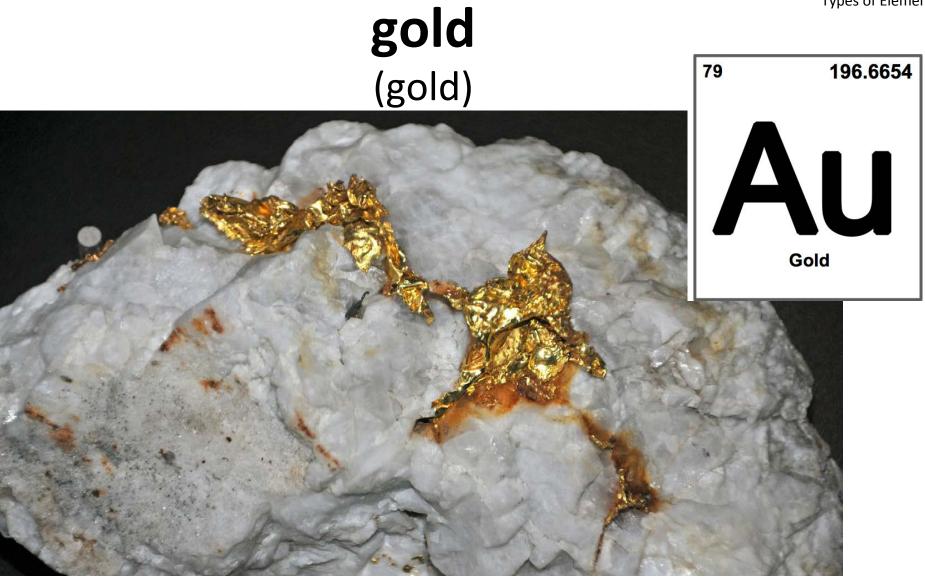
calcium

(cal·ci·um)





Calcium is a element that is found in most plants and animals. It is especially important in people so they can have strong healthy bones



Gold is an element that is a soft yellow metal. It is very valuable and is used to make jewelry.

silver

(sil·ver)



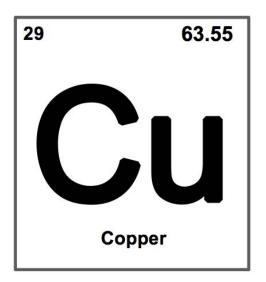
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Silver is an element that is a soft grayish-white metal that is very valuable and is used to make jewelry, coins, knives, and forks.

copper

(cop·per)





Copper is a common metal element that is good at conducting heat.

alloy (al·loy)

An *alloy* is a metal made by melting and mixing two or more metals or a metal and another material together. Alloys are use to build many things.



steel (steel)

Steel is a strong, hard metal alloy made of iron and carbon.



bronze

(bronze)

Bronze is a metal alloy that is made by combining copper and tin.



brass (brass)

Brass is a yellow metal alloy that is made by combining copper and zinc.



mineral (min·er·al)

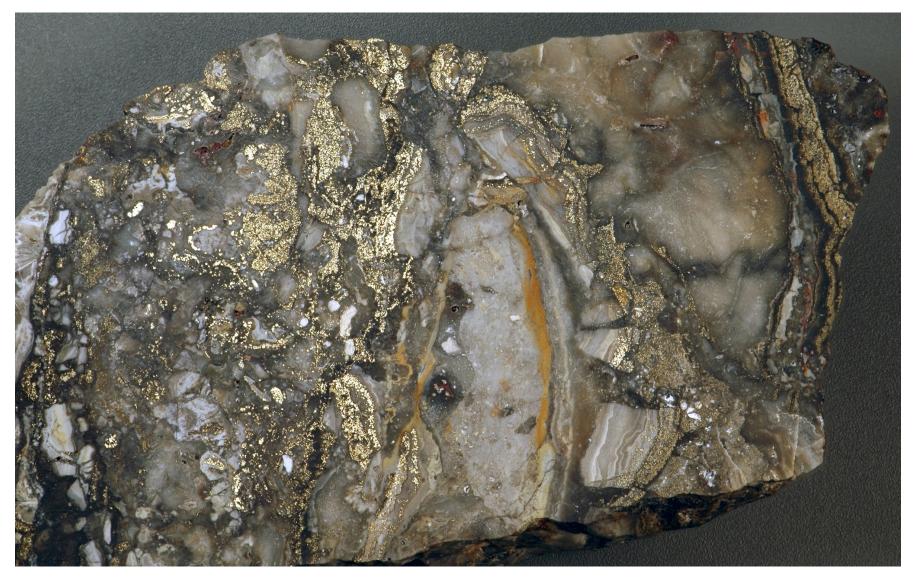
A *mineral* is a naturally occurring substance made of one or more elements. Most minerals are crystals, like diamonds.



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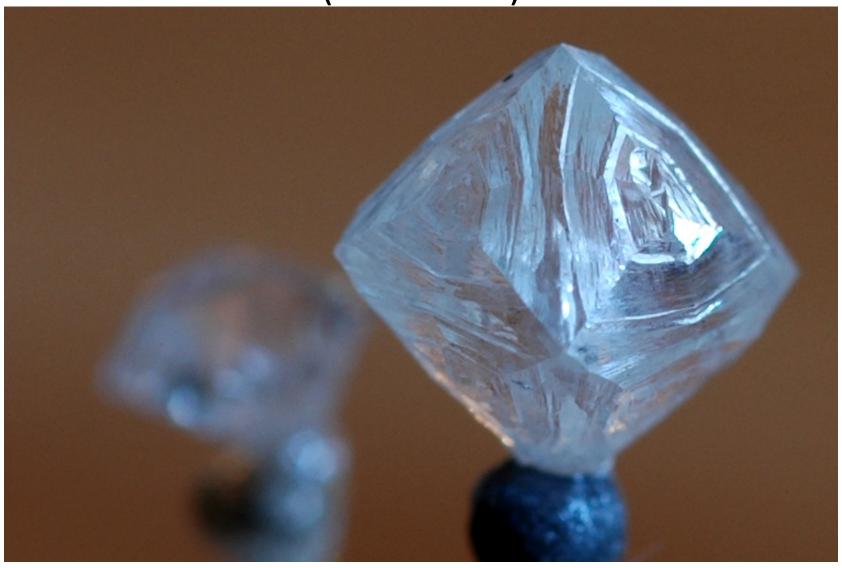
ore (ore)

Something that is considered an *ore* is a naturally occurring mineral that is valuable.



diamond

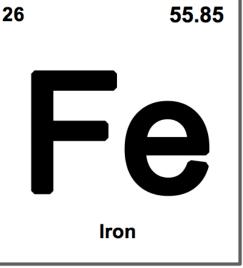
(di·a·mond)



iron

(iron)

Iron is an element that is a type of mineral.



26



Photo: Iron in rocks. Uploaded by Joanjoc~commonswiki at Wikimedia in 2005. Released into the public domain.

Image: Iron chemical symbol. August 2015. Created by Jessie Thorsen. Used with permission.

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Sulfur

sulfur

(sul·fur)



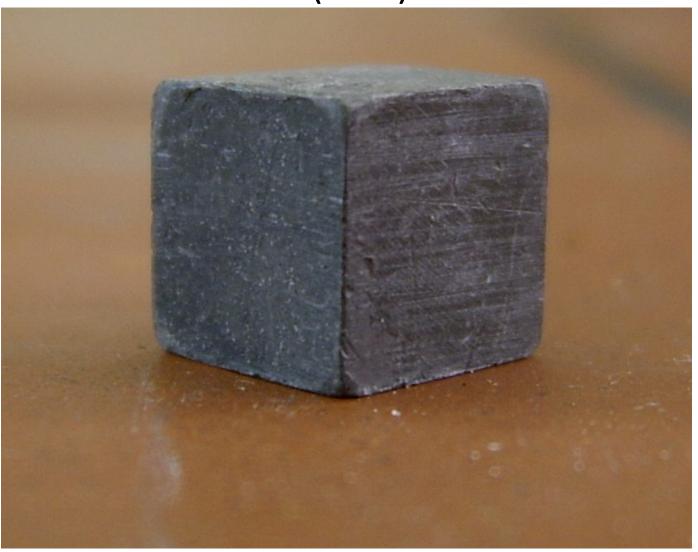
Sulfur is a yellow chemical element that has a strong, unpleasant odor when it is burned and that is used in making paper, gunpowder, and in medicine. It is also considered a mineral.

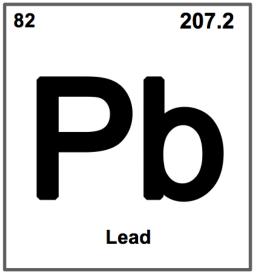
16



Uranium is a radioactive element that is used to make nuclear energy and nuclear weapons. It is also considered a mineral.

lead (lead)





Lead is a soft malleable chemical element that is also considered a mineral.

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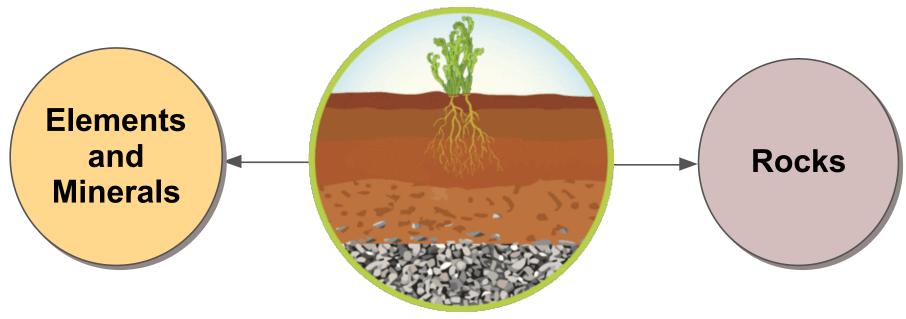


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Rocks of Different Shapes and Sizes



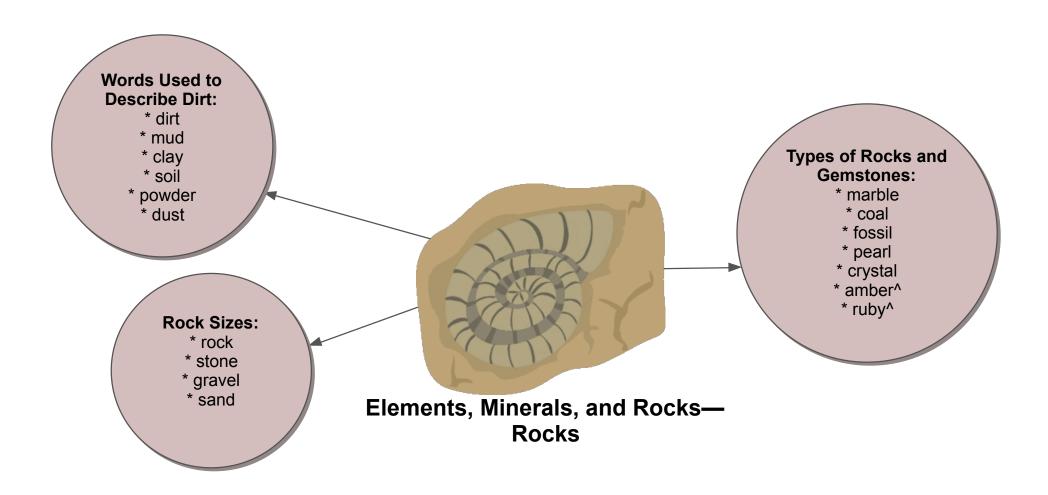




Elements, Minerals, and Rocks

Rocks

Rocks are everywhere. There are different sizes of rocks, different types of soil, and many types of rocks and gemstones.



rock (rock)



stone

(stone)

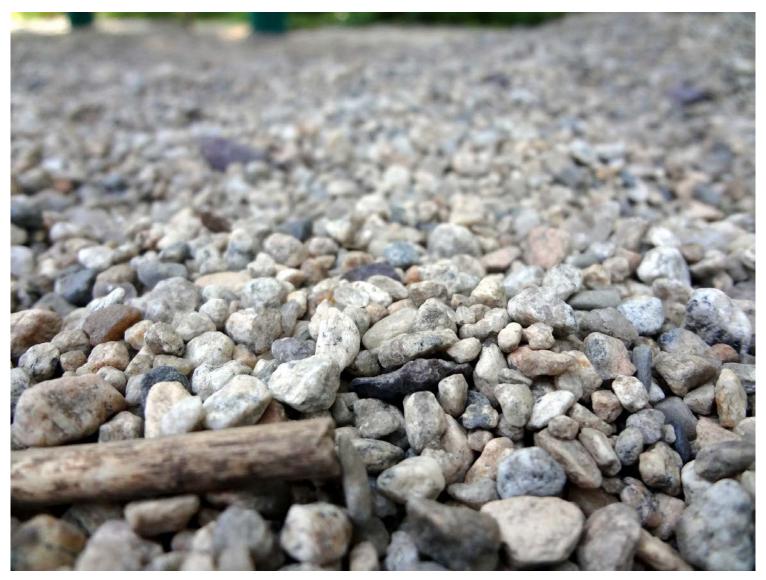
A stone is a small piece of rock.



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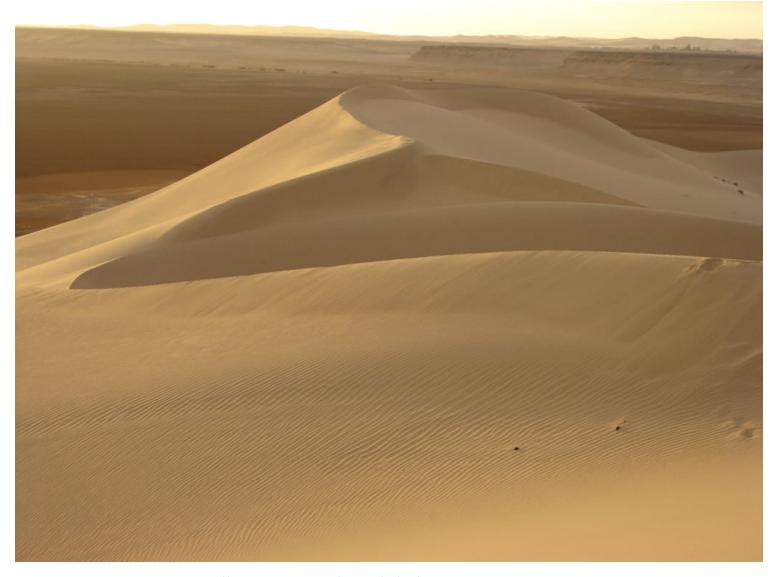
gravel (grav·el)

Gravel is many small rocks together.



sand (sand)

Sand is the very tiny, loose pieces of rock that cover beaches and deserts.



dirt (dirt)



soil (soil)

Dirt and soil are both words used to describe the upper layer of earth that is not rock.

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mud (mud)

Mud is soft, wet dirt.



clay (clay)

Clay is a sticky material made of small particles and minerals.



powder (pow·der)

Powder is a dry substance made up of very tiny pieces of something.



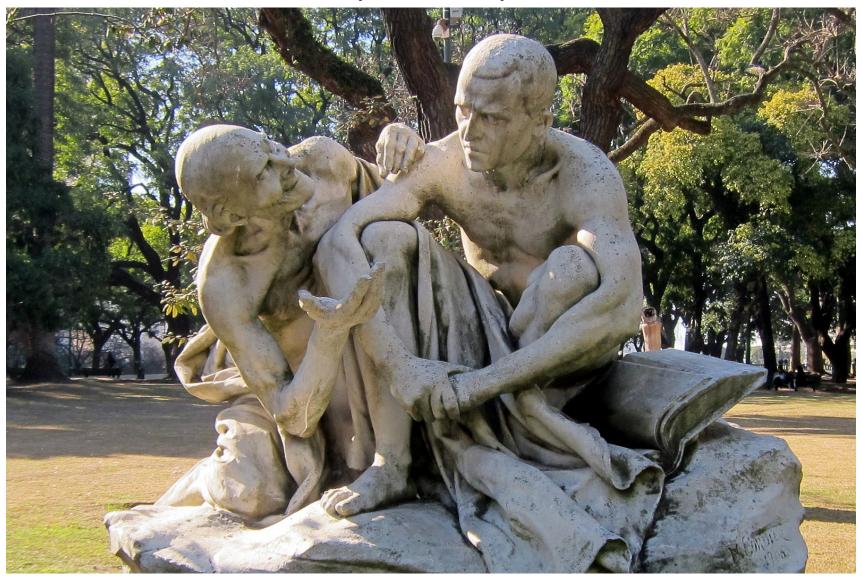
dust (dust)

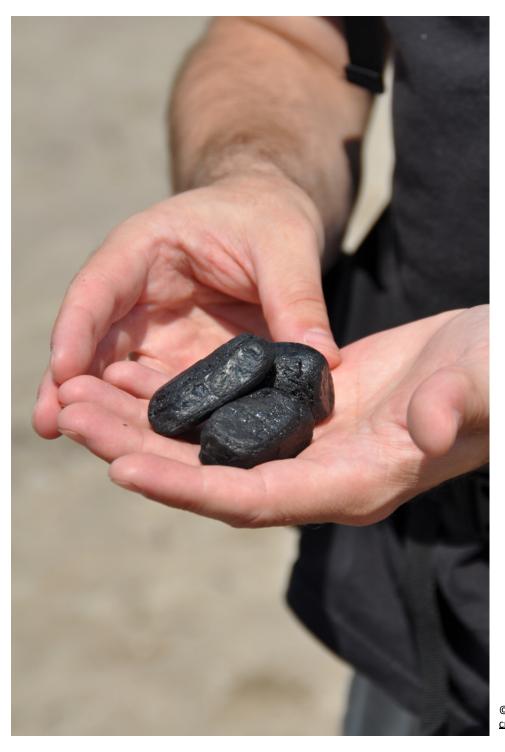
Dust is a fine powder made up of very small pieces of dirt.



marble

(mar·ble)





coal (coal)

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fossil (fossil)

A *fossil* is something (such as a leaf, skeleton, or footprint) that is from a plant or animal which lived in ancient times and that you can see in some rocks.



pearl (pearl)

A pearl is a growth within the shell of some mollusks. It is used to make jewelry.



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crystal (crys·tal)



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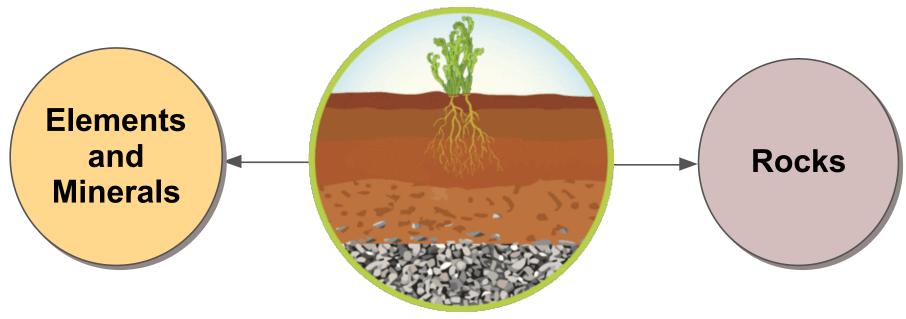
amber

(am·ber)



ruby (ru·by)





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