Grades 2-7

Rocks and Minerals

Learning Lapbook with Study Guide

A Journey Through Learning

www.ajourneythroughlearning.com

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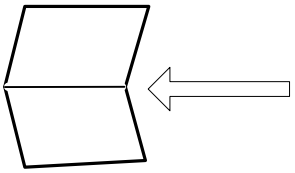
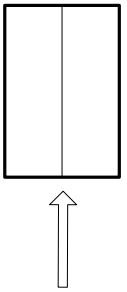
Things to Know

Hamburger Fold-Fold horizontally



Hotdog Fold-Fold vertically



Dotted Lines-These are the cutting lines.

Accordion Fold-This fold is like making a paper fan. Fold on the first line so that title is on top. Turn over and fold on next line so that title is on top again. Turn over again and fold again on the next line so that title is on top. Continue until all folds are done.

Cover Labels-Most of the booklets that are folded look nicer with a label on top instead of just a blank space. They will be referred to as "cover label."

How Long Does it Take to Complete the Lapbook?

Doing a study guide page and mini-booklet a day, a 3-folder lapbook takes about one month to complete. However, you can expand the study portion and make it last as long as you like! That's the beauty of homeschooling! Do it YOUR way!

Lapbook Assembly Choices

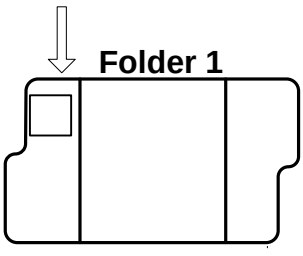
(see photos on how to fold and glue your folders together)

We recommend using Zip Dry Glue or Elmer's Extreme.

Choice #1 -Do not glue your folders together until you have completely finished all three folders. It is easier to work with one folder instead of two or three glued together.

Choice #2 -Glue all of your folders together before beginning. Some children like to see the entire project as they work on it. It helps with keeping up with which folder you are supposed to be working in. The choices are completely up to you and your child!

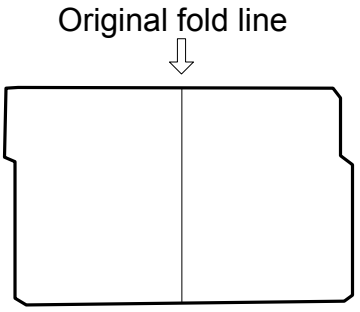
How do I know where to place each template in the folder?



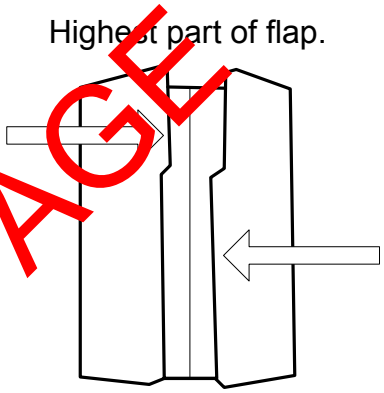
This placement key tells you the template goes in the first folder at the top of the left flap.

Folding a Lapbook Base

Gather the number of folders required for the project. Fold them flat as seen here.



For each folder, fold the left and right sides inward toward the original line to create two flaps. Crease so that the highest part of each flap is touching the original line. It is important not to let the two flaps overlap. *You may want to take a ruler and run it down each crease to make it sharper.*



Glue your folders together by putting glue (or you may staple) on the inside of the flaps. Then press the newly glued flaps together with your hands until they get a good strong hold to each other. Follow this step to add as many folders as you need for your project. Most of our lapbooks have either 2 or 3 folders.

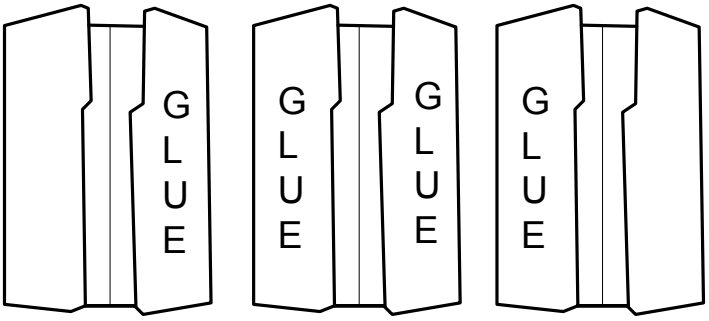
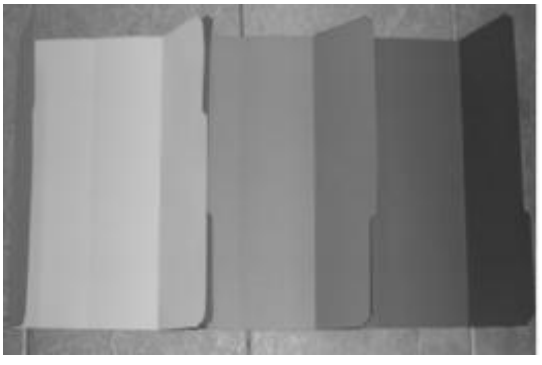


Photo of a completed lapbook base



Supplies and Storage

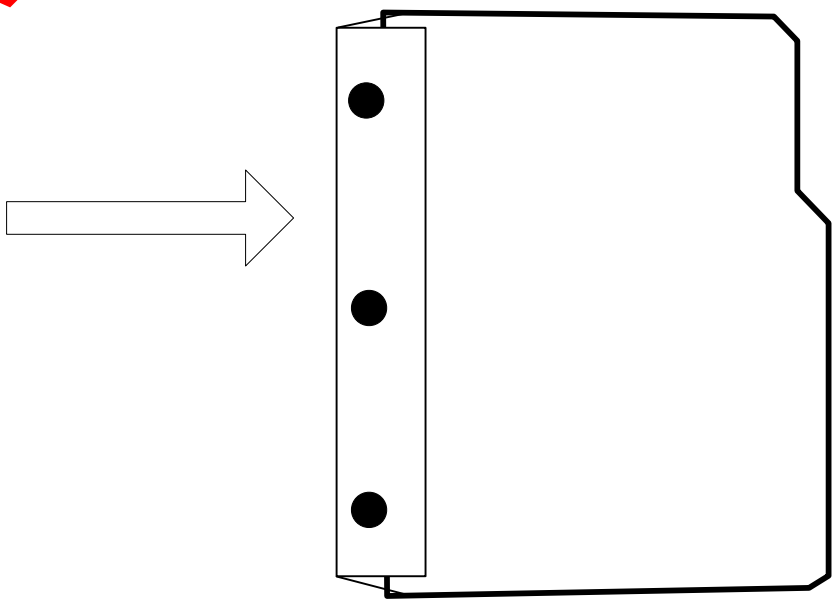
*Lapbook Pages
*3 Colored File Folders
*Scissors
*Glue
*Stapler
*Brads (not needed for every lapbook. If brads are not available, a stapler will do.)
*Hole Puncher (again, not needed for every lapbook.)

To make the storage system (optional)
See details below about the use of a storage system.
*Duct tape (any color)
*One 3-ring binder
*Hole Puncher

My child has made several lapbooks. Can I store all of the lapbooks together in one place?

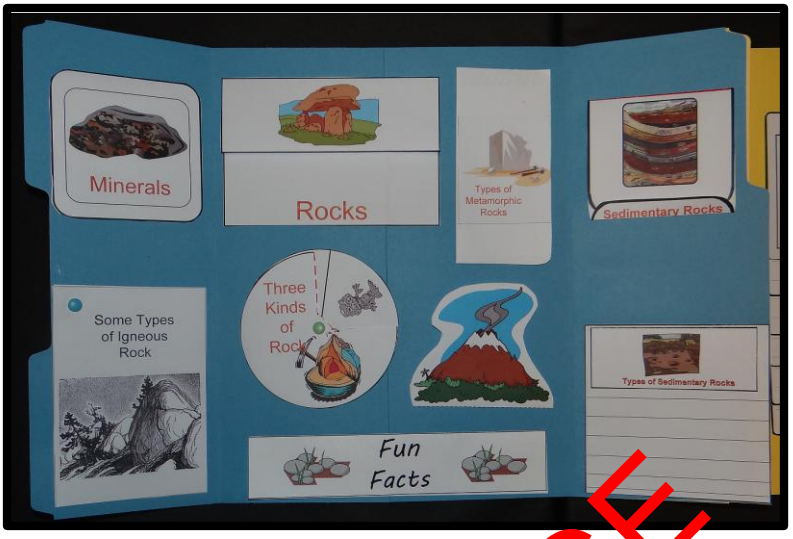
Yes! A three-ring binder serves as a great place to keep your lapbooks. This method of storage not only keeps your lapbooks from getting lost but also keeps them neat and readily available to share with dad, grandparents, friends, etc. When you are through sharing your lapbooks, just place the three-ring binder back on your bookshelf. Below are step-by-step directions of how to prepare each lapbook to be placed a in a three-ring binder.

Close the lapbook. Measure a piece of duct tape that is as long as the lapbook. Place the edge of the duct tape on the top edge of the lapbook. Then fold the duct tape over so that it can be placed on the bottom edge. Make sure to leave enough duct tape sticking out from the edges to punch three holes. Be careful when punching the holes that you do not punch the holes in the folder. If you do, that's okay. Then place in three-ring binder. Depending on the size of your three-ring binder, you can store many lapbooks in it.



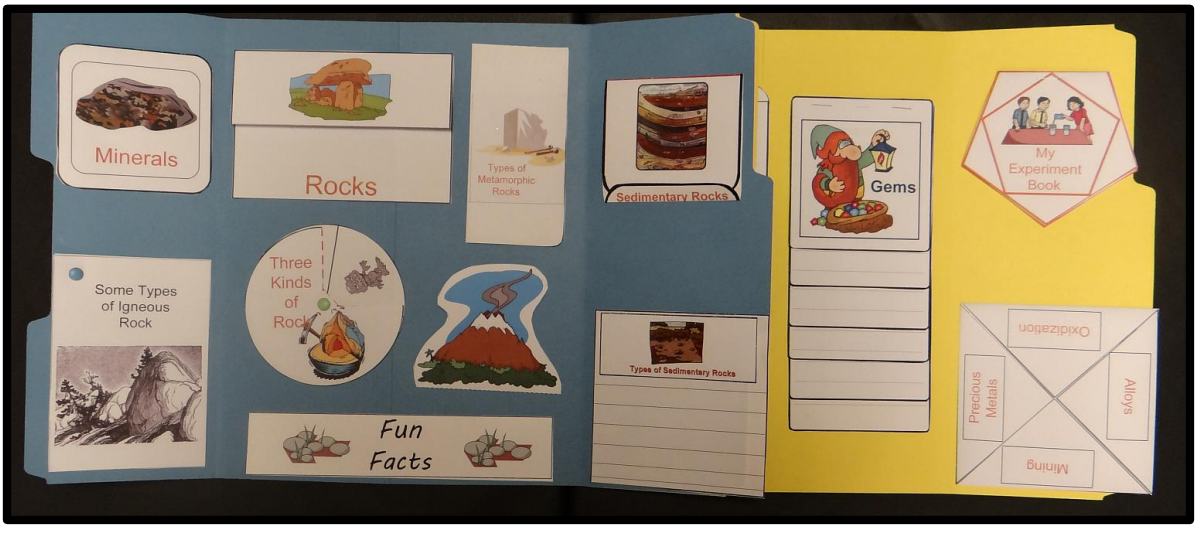
Photos of Assembled Lapbook

Folder 1



Folder 2

Both Folders



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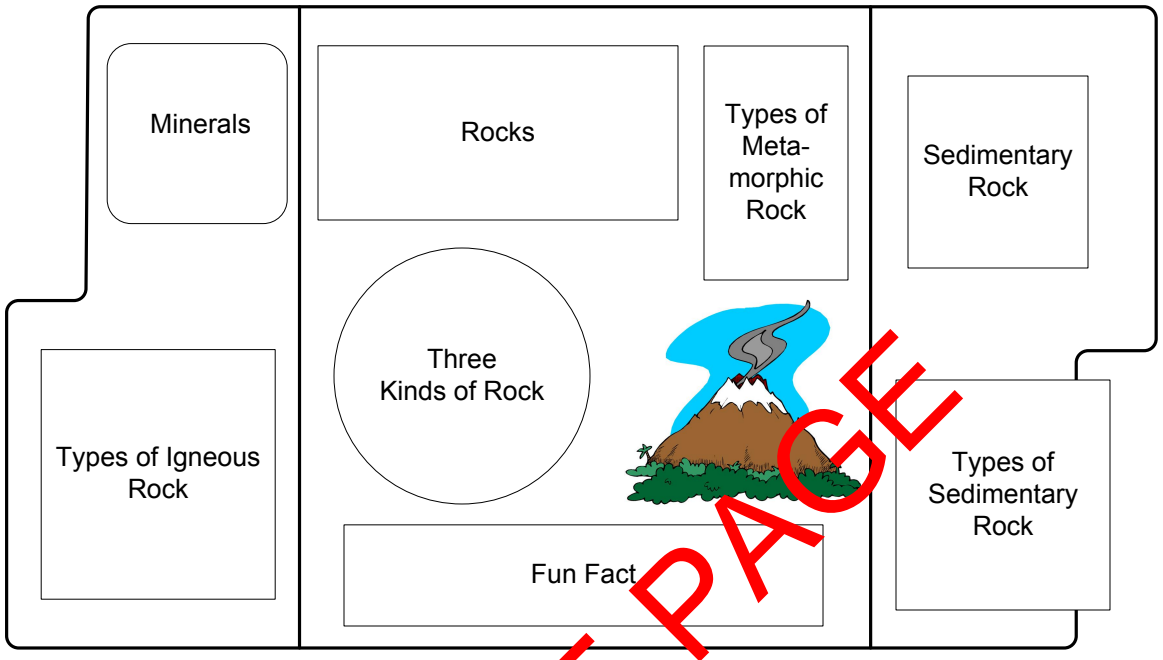
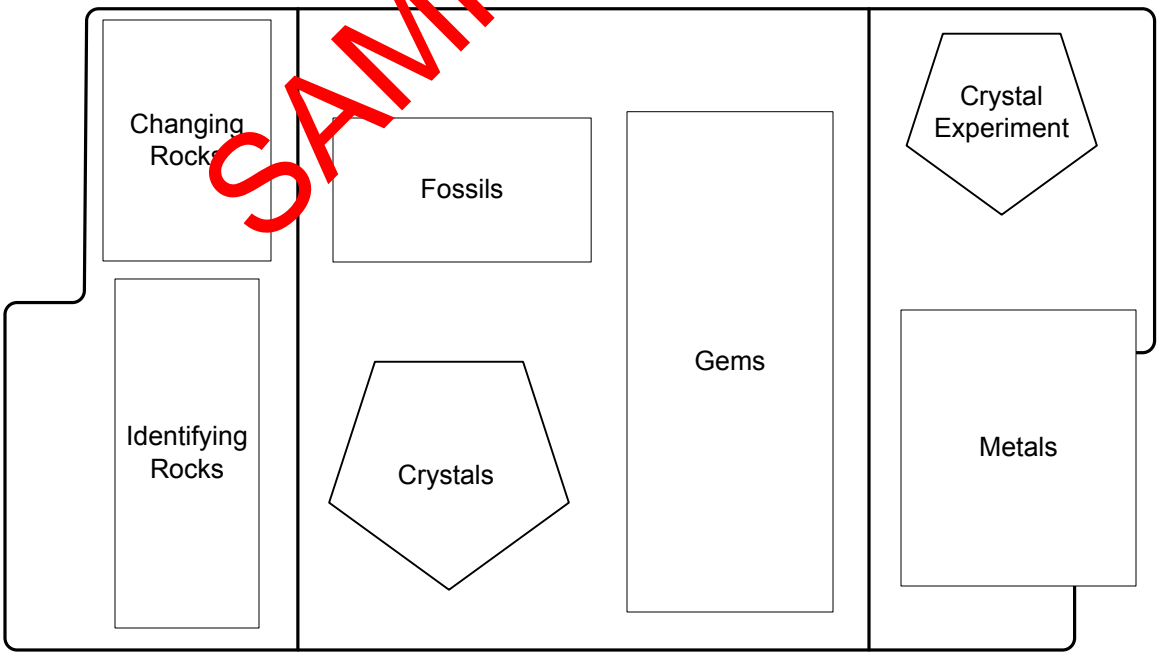


Folder 2



Rocks and Minerals

Rocks

Minerals

The Rock Cycle

Sedimentary

Igneous

Metamorphic

Identifying Rocks

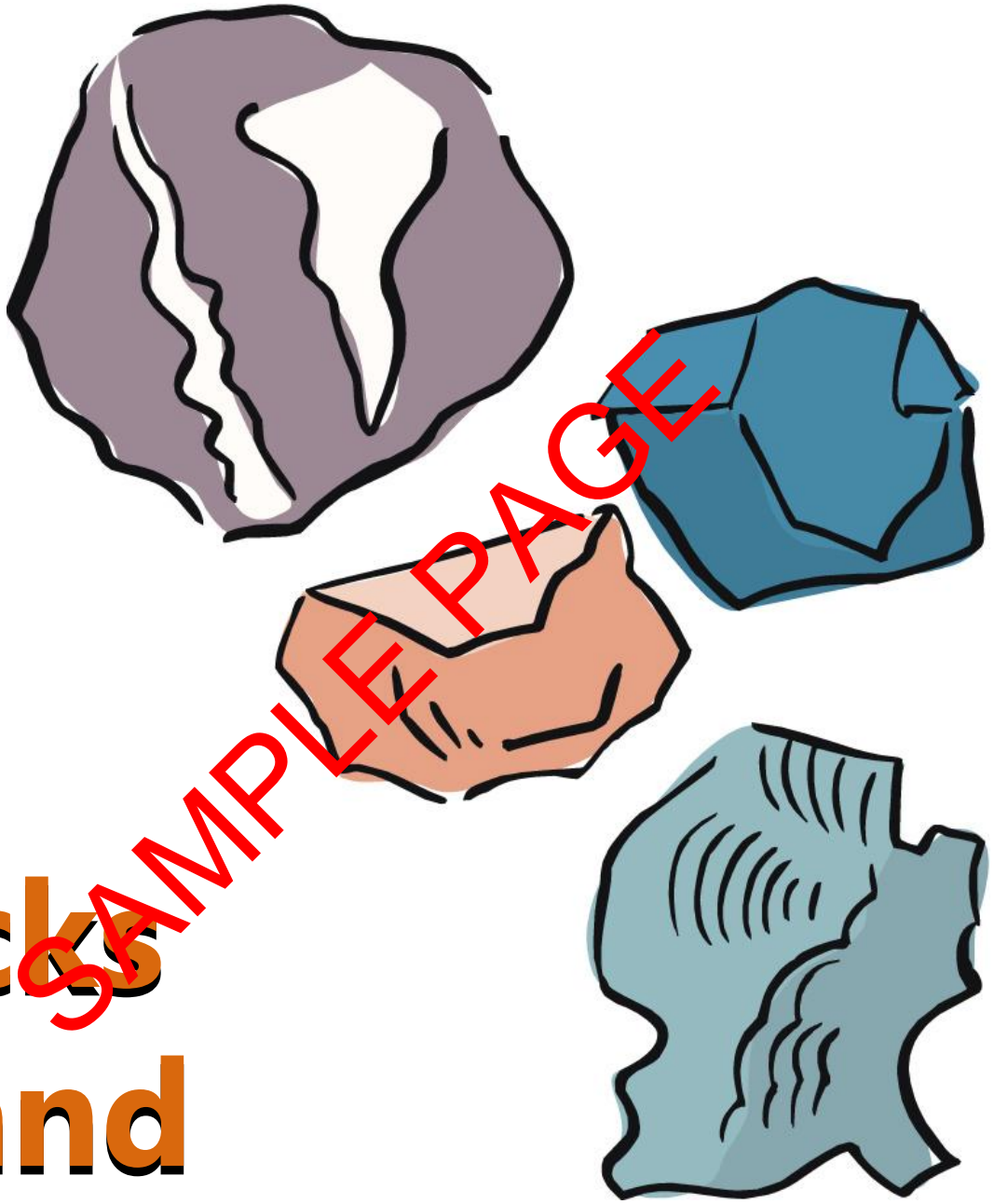
Fossilization

Crystals

Gems

Metals

Cut on dotted line. Draw your own rocks and minerals on this page. Glue to the front of your folder.



Rocks and Minerals

Rocks

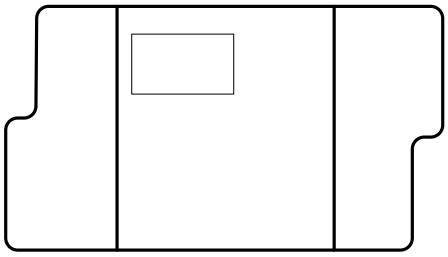
We all know what rocks are, right? We see them everyday, all around us. Rocks have specific characteristics we recognize: Rocks are natural (not made by humans) and solid, not a liquid or a gas. Rocks are found everywhere and in different colors and shapes. Rocks are very hard, and heavy for their size. We know all of this so it might seem pretty simple, but its harder to know what actually makes up a rock.

The answer is, rocks are made out of minerals. Like the ingredients in a cookie, minerals are not rocks, but rocks are always minerals; various combinations of minerals are pressed or melted together into a new solid. Some rock ingredients (minerals) are visible chunks, while some are blended well and you cannot distinguish them individually.

Whether or not you can see the different minerals in rocks is determined by what minerals they are and how they were formed. For example, you can see large chunks of quartz in granite, and marble also has visible crystals. Sandstone has very obvious grains of sand pressed together. Other rocks, such as obsidian and gems, are very smooth and separate crystals can't be seen at all.

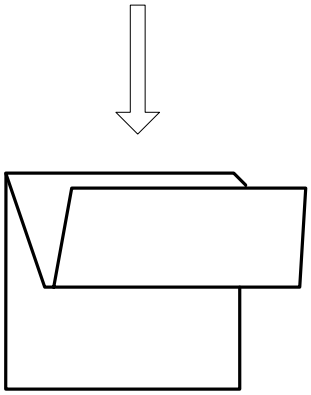
Different kinds of rocks are determined by the minerals that are found in them and the process that was used to form them. The process divides the rocks into one of three classifications, or types. These are called igneous, sedimentary, and metamorphic. However, minerals themselves are not as easy to classify.

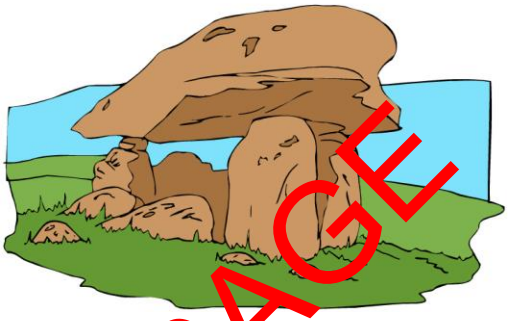
Folder 1



Read Rocks.
Cut out as one piece. Hamburger fold FORWARD on center green line. Then hamburger fold BACKWARD on the red line to make a flap at top of booklet. You should be able to pull top part of booklet up to see underneath the flap you just made. Glue into lapbook.
Directions: Write what you learned about rocks.

Example of fold





Rocks

Minerals

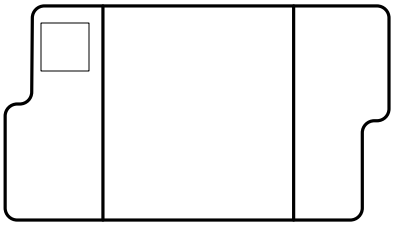
There are a lot of minerals on earth- about 4,000 of them- but most of these minerals are rare. Only about 30 are commonly found, and these can be placed into 8 groups according to the chemicals they are made of.

Minerals have some specific characteristics that help us know whether they are minerals, and what kind they are. Minerals are nearly always solid at normal temperatures, occur naturally, have a crystalline structure, and are made up of a fixed chemical formula. Minerals are also, with a few exceptions, not organic. This means they don't originate in a living being.

Some mineral classifications may get a bit tricky, because some things seem to be a mineral but aren't, such as sugar. Sugar has a crystalline shape and is a solid, but it is formed inside organic things- plants. On the other hand, some things that don't seem to be a mineral, are, such as gold, mercury and salt. Gold doesn't grow in an obvious crystalline shape, while mercury is liquid at room temperature. Salt is tricky because it is often found naturally in animals and plants, but doesn't originate there. It is absorbed by their bodies from the environment or food.

You don't have to know all the minerals to be able to identify rocks, but it is helpful to know some. The more you learn about rocks and how to identify them the more you will be able to recognize the minerals found in them. Minerals have specific characteristics, such as hardness and luster (the way light reflects off them) that help you tell what kind of rock you are looking at.

Folder 1



Read Minerals.
Hamburger fold in half on middle line. Cut out around shape. Do not cut fold. Glue into lapbook.
Directions: Write about the characteristics of minerals.

Minerals