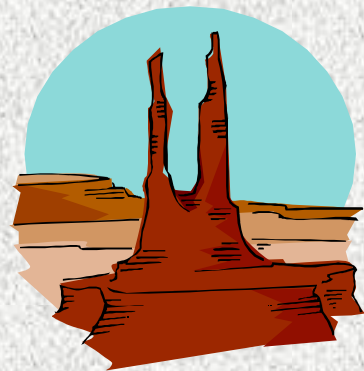


The Magic School Bus

A Science Chapter Book #20

Rocky Road Trip Lapbook

by
Amy Yee



Yee Shall Know

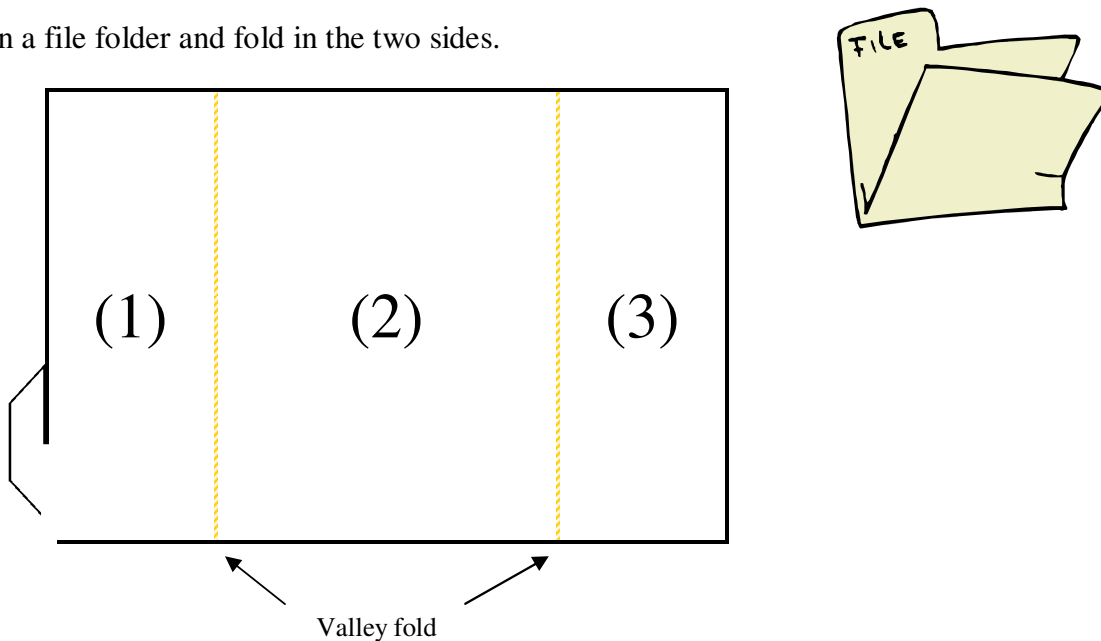
<http://www.yeeshallknow.com>



Lapbook Basics

Follow the instructions in the following page(s) to complete all the individual pieces that will go into your lapbook. And then assemble as follows:

Open a file folder and fold in the two sides.



Glue the booklets inside. Close the shutters and decorate the cover.

If more space is needed to complete your project, there are several methods to extend your file folder. You can fold another folder in the similar fashion and glue the back of section 3 of your first folder to the back of section 1 of your second folder. You can also lay an additional piece of paper (card stock) just above or below the middle section (2) of the folder. Use packing tape or other strong tape, secure the paper to the folder creating a flap that can be opened to display your student's work. You can also staple the crease between sections two and three of the first folder to the crease between sections one and two of the second folder using a long stapler. This method will give you two additional surfaces to add your student's completed work.

Some students prefer to assemble the lapbook after they have completed all the activities so they can arrange their booklets, while others prefer to affix each booklet to the lapbook after each activity. Either way will work.

A note on cutting and folding. In the following templates, please cut on the solid lines. The black dotted lines are folding lines for mountain folds (when you are done folding, the black dotted lines should be on the outside of the fold). The yellow dotted lines are for valley folds (when you are done folding, the line is tucked on the inside of your fold). Do make sure that you use firm pressure to make your creases as sometimes these creases will help the final booklet to fall into their proper positions.

For some younger students you may wish to have them dictate their answers to you or you may write down the answers for them to copy.

Lapbooks not only are fun for kids to do and help with their information retention, they also serve as a permanent record of their learning. The students can refer to it when looking for information, or they can use it in presentations to friends and relatives thus further reinforcing their learning.

I hope your student(s) will enjoy this lapbook and the information learned will remain with them.

Activities

1. What is a geologist?
2. What clues can help you identify a rock?
3. What natural processes can break up rocks into tiny pieces? What can change a rock from one type into another?
4. What are the three categories of rocks?
5. From what are igneous rocks formed?
6. What is underground molten rock called? What is above ground molten rock called?
7. What is the common characteristic between various igneous rock? Describe igneous rock that cools and hardens underground, those which cools and hardens above ground, and volcanic rocks.
8. What are sedimentary rocks like? Where are they found?
9. How are metamorphic rocks formed? Describe the crystal structure of a metamorphic rock when it's formed by heat and pressure, and when it's formed by heat alone.
10. What is the difference between a mineral and a rock?
11. What is the hardness scale used to test rocks? What number means softest? What number means hardest?
12. What are the four layers of rocks on Earth? Briefly describe each.
13. What are the dimensions of the Grand Canyon? (width, length, depth) How many layers are there?
14. What are fossils?
15. What is a plateau? A mesa? A butte?
16. Describe the process of erosion.
17. How are geodes formed? (4 steps)
18. How are trees turned to stones?
19. Where did the ancient Anasazi people build their homes?
20. Why are gemstones measured by weight in carats?
21. Describe these gemstones: diamond, ruby, sapphire, emerald, opal.
22. What is the streak test?
23. What are the flat sides of crystal called? What are some possible shapes?
24. What are the two tools used by a rock hound? How are they used?
25. What are four things you can look for with real gold?
26. What is "fool's gold?" How can you tell the difference between "fool's gold" and real gold? What can "fool's gold" be used for?
27. What are considered precious metals? Where can they be found?

Instructions

1. **Geologist.** Cut out the card, fold in half, and write your answer on the inside.
2. **Identify a rock.** Cut out the card, fold in thirds, and write your answer on the inside.
3. **Change a rock.** Cut out the card, fold in half, and write your answers on the inside.
4. **Three categories.** Cut out the card along all solid lines, and fold along the dotted lines into a connected matchbook. Under each matchbook, write one category of rocks.
5. **Igneous rocks formed.** Cut out the card, fold in half, and write your answer on the inside.
6. **Above ground/underground.** Cut out the card, fold along the dotted lines, and write down the names of the different molten rocks.
7. **Igneous rocks.** Cut out the two triangles, answer the questions, and make valley folds along the dotted lines. Glue the cover to your folded triangle.
8. **Sedimentary rocks.** Cut out the card, fold along the dotted lines, and write your answer under each flap.
9. **Metamorphic rock.** Cut out the shape and fold in the two flaps on the side and then fold down the top flap. Open the card. Behind the cover, answer how metamorphic rocks are formed and under each side flap write the brief descriptions.
10. **Mineral and rock.** Cut out the card, fold in half, and write your answer on the inside.
11. **Mohs Scale.** Cut out the card, fold accordion style along the dotted lines and label the scale.
12. **Layers of rock.** Cut out the five rectangles. Stack them together beginning with the longest rectangle on the bottom and staple them on top. On the parts of each blank rectangle which are showing, write the name of the layer, and open up the booklet and write a brief description of each layer.
13. **Grand Canyon.** Cut out the card and fold in thirds along the dotted lines. Fill in the width, length, and depth. Open up the flap and answer “how many layers?”
14. **Fossils.** Cut out the card, fold in half, and write your answer on the inside.
15. **Plateau/mesa/butte.** Cut out the cover and the tabbed pages. Write your description on each tabbed page. Stack them together with the cover on top and staple at the bottom.
16. **Erosion.** Cut out the card, fold in half, and write your answer on the inside.
17. **Geode formation.** Cut out the shapes. Apply glue to where indicated to attach the addition pages. Fold accordion style and write your description in the booklet.
18. **Petrified trees.** Cut out the card, fold in half, and write your answer on the inside.
19. **Anasazi.** Cut out the card, fold in half, and write your answer on the inside.
20. **Carats.** Cut out the card, fold in half, and write your answer on the inside.
21. **Gemstones.** Cut out the pocket. Fold along the dotted lines and glue the flap to the back of the pocket. Cut out the five gemstone cards and write the description of each gemstone on the card. Place all the cards into the pocket.
22. **Streak test.** Cut out the card, fold in half, and write your answer on the inside.
23. **Flat sides/shapes.** Cut out the card, fold in half, and cut along the solid line between the top and bottom parts of the cover. Write your answer on the inside under each flap.
24. **Rock Hounds.** Cut out the card along all solid lines, and fold along the dotted lines into a connected matchbook. Describe a tool used by a rock hound under each flap.
25. **Real gold.** Cut out the quarter circles for the pizza book. On each blank quarter circle,

write one thing about real gold. Follow the instruction on the page to assemble the pizza book.

26.Fool's gold. Cut out the shape and fold along the dotted lines making sure that the bottom flap is folded last. Write your answer under each flap.

27.Precious metals. Cut out the card, fold along the dotted lines, and answer the question under each flap.

What is a geologist?



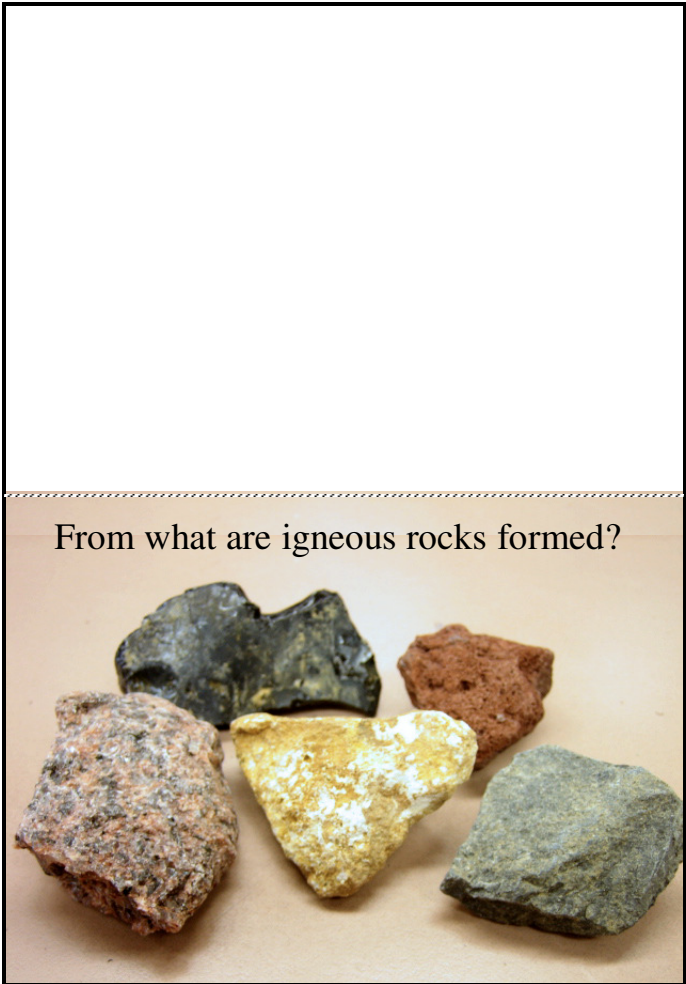
**WHAT CLUES
CAN HELP
YOU
IDENTIFY A
ROCK?**



How to change a rock to a different
type?



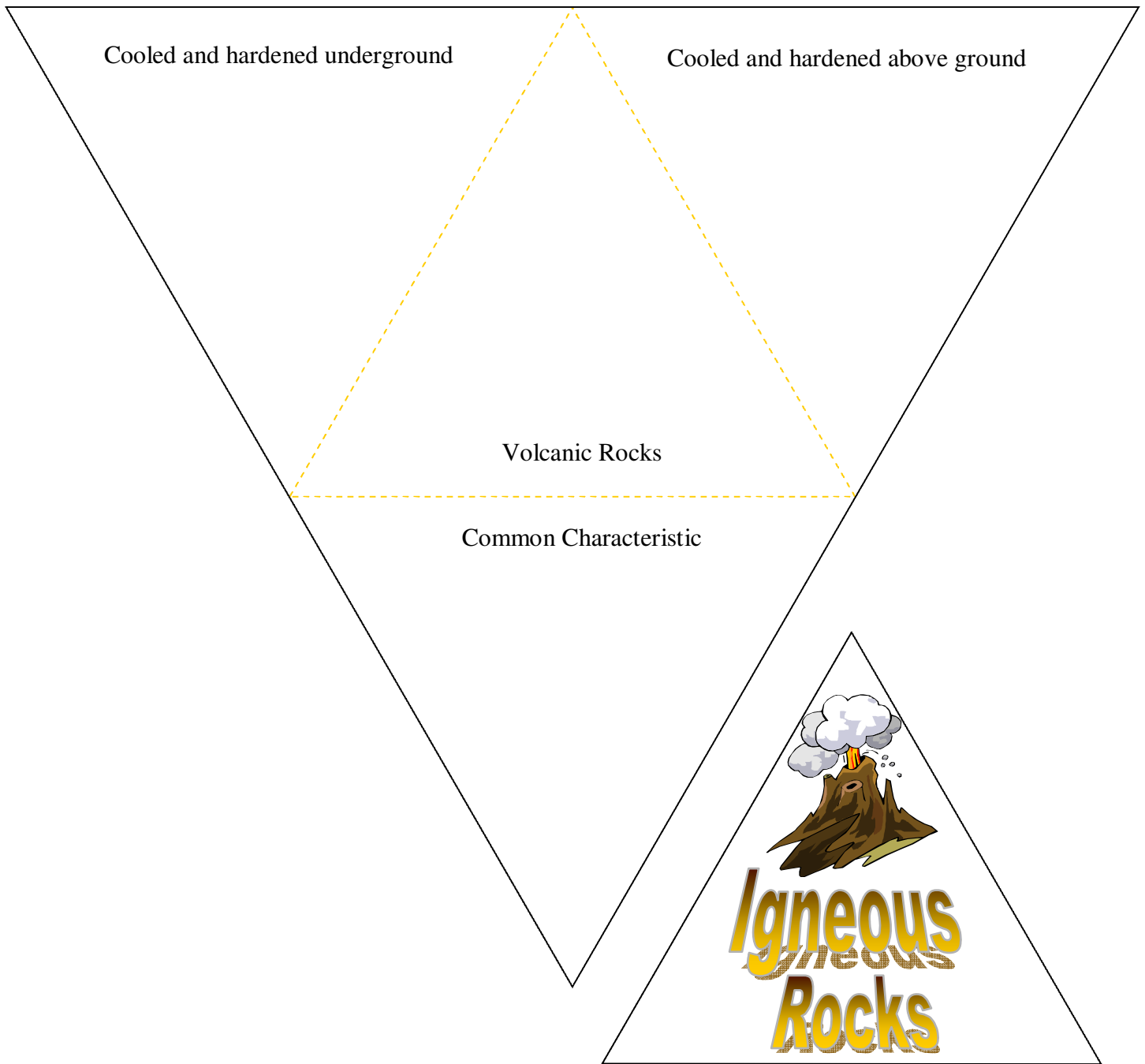
<h1>Three categories of rocks:</h1>		



Underground molten rock



Above ground molten rock



**Where are
sedimentary
rocks
found?**

**What are
sedimentary
rocks like?**

**How are
Metamorphic rocks
formed?**

**the crystal
metamorphic
is formed by:**

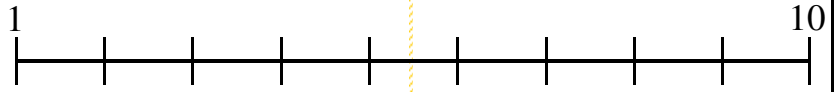
Heat
Alone

**Describe
structure of a
rock when it**

Heat and
Pressure

**What is the difference
between a mineral
and a rock?**

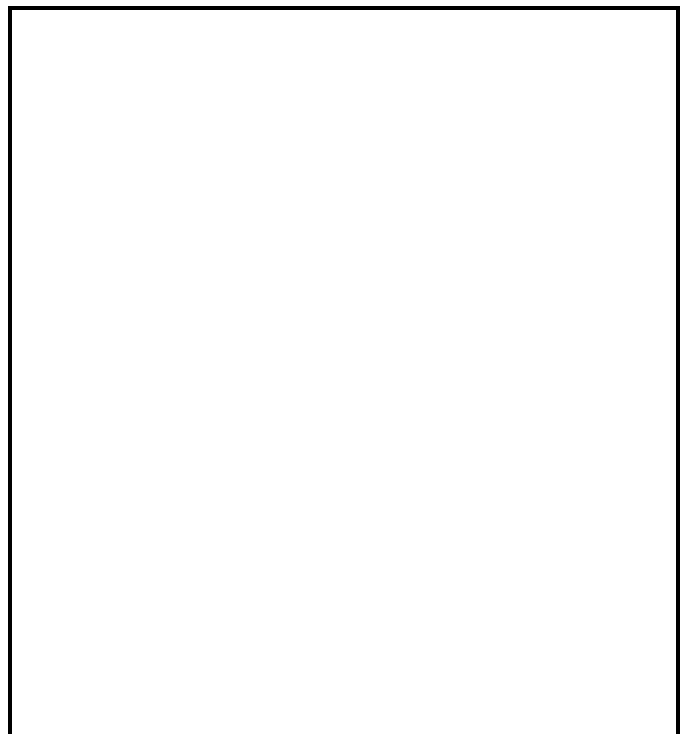
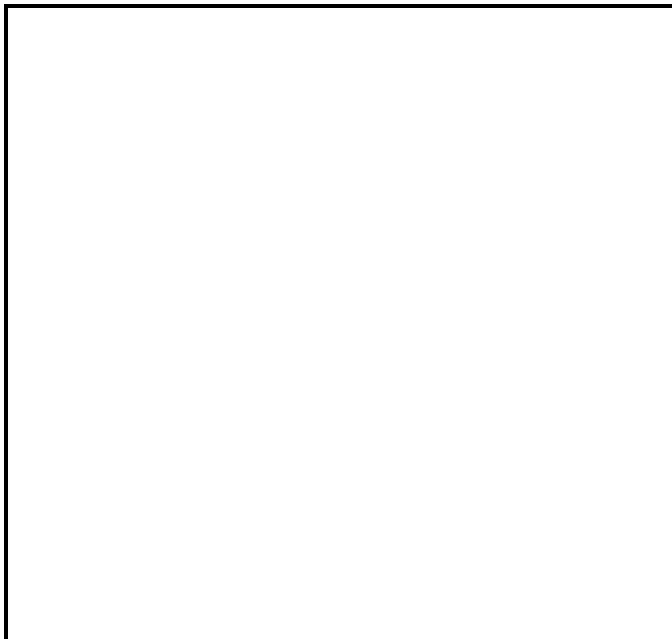
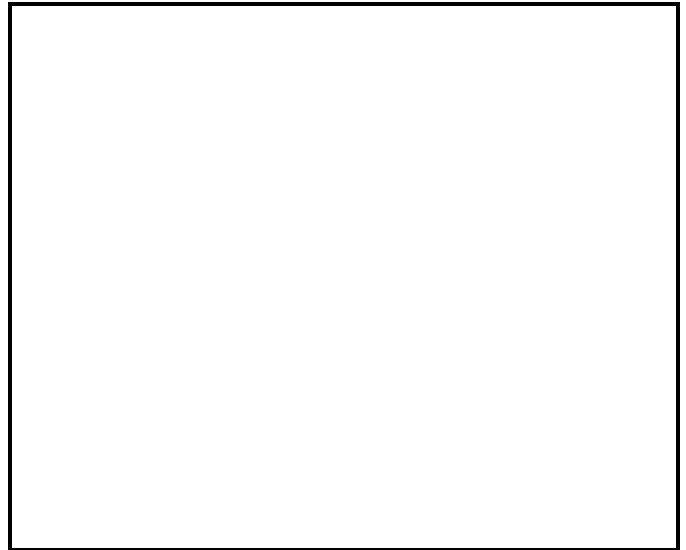
What is
Mohs
Scale?



Label the softest and hardest numbers.



**Four
layers
of rocks
on earth**



Blank rectangular area for drawing or writing.

Width:

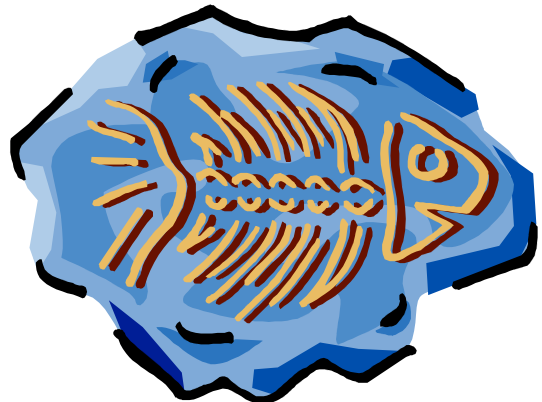
Length:

Depth:

How many layers
are there?



What are



Fossils



Plateau

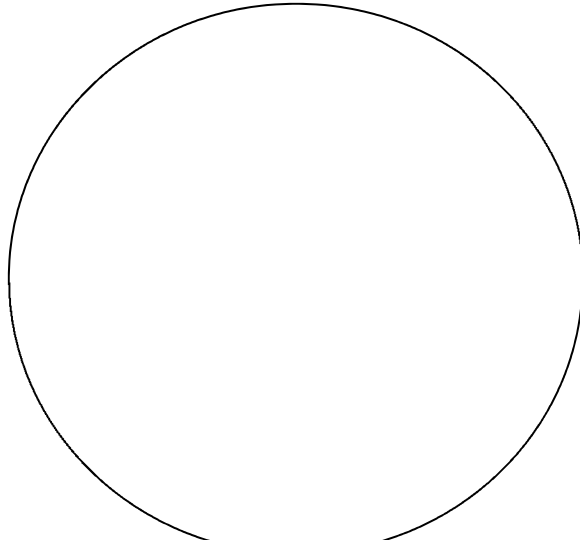
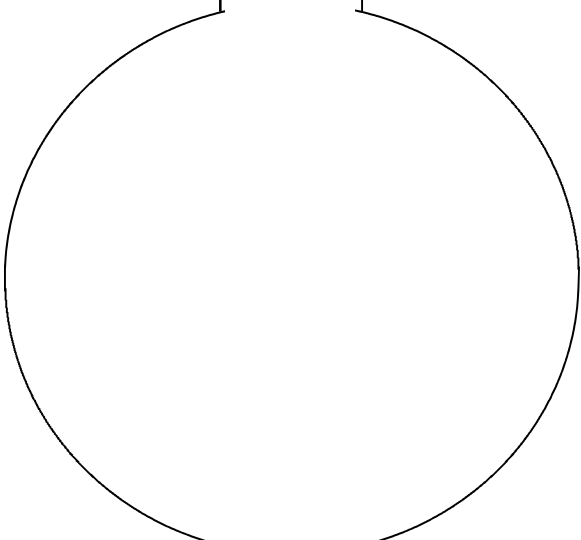
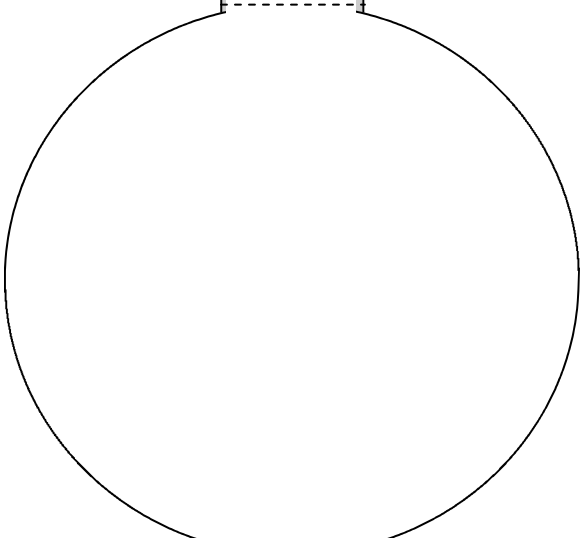
Mesa

Butte

What is

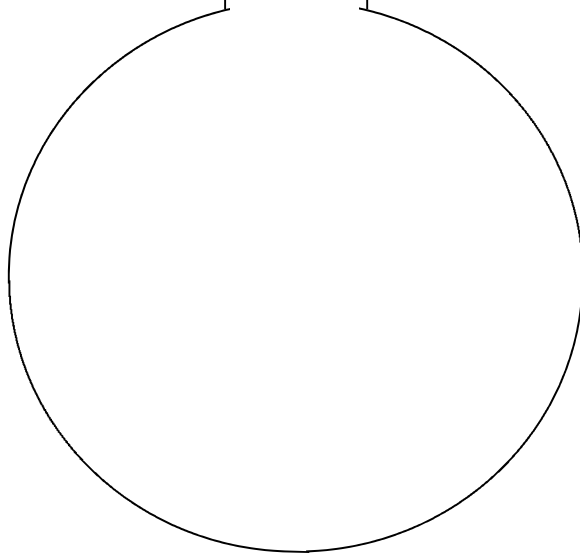


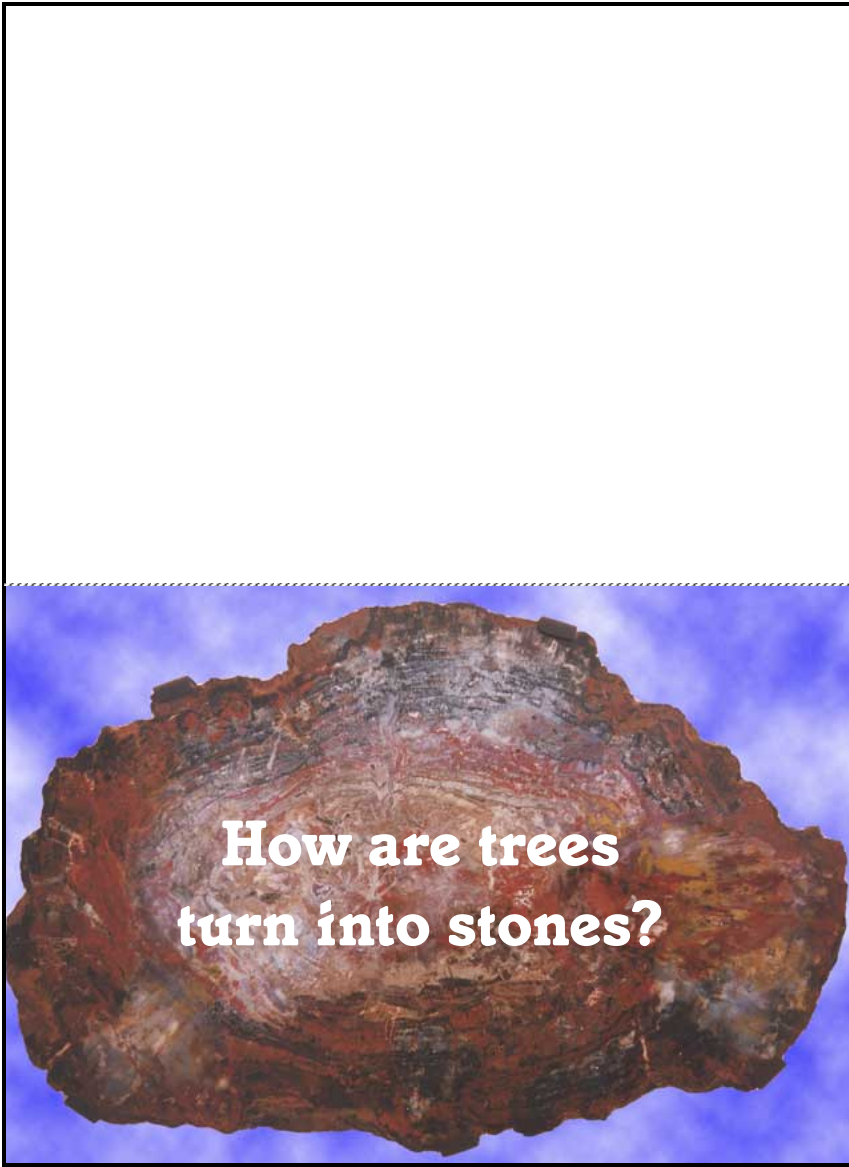
glue



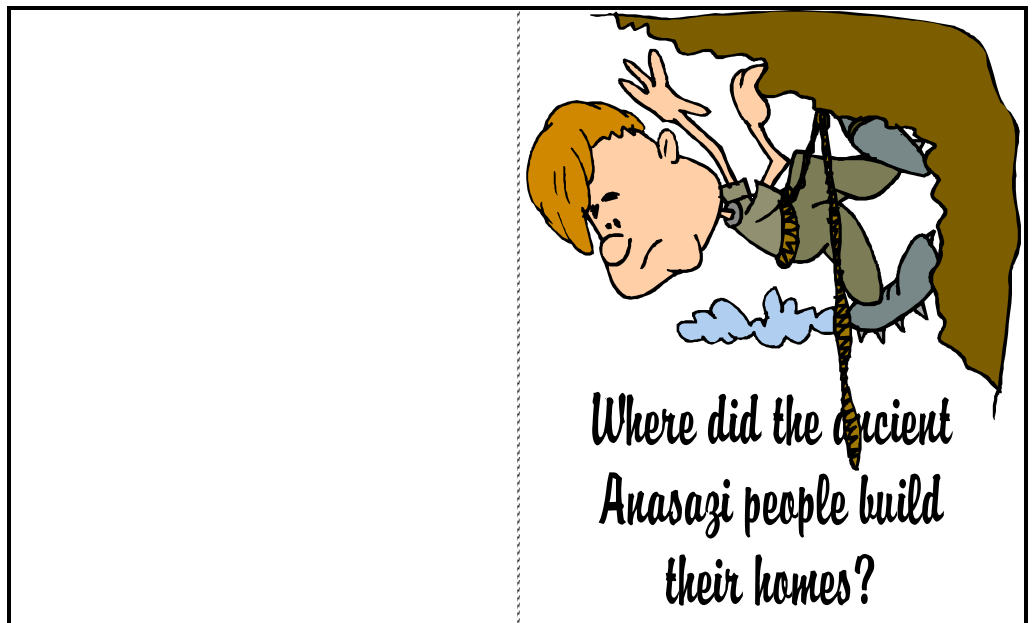
Geode

Formation

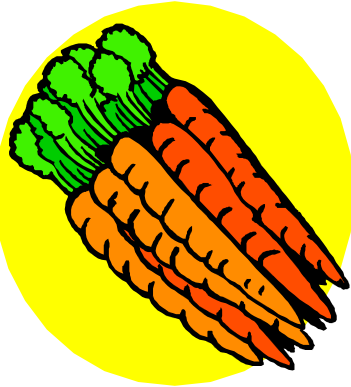




**How are trees
turn into stones?**

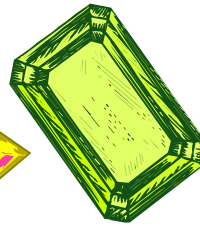
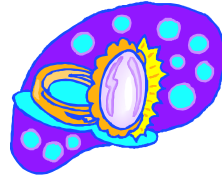


*Where did the ancient
Anasazi people build
their homes?*



*Why are gemstones
measured by weight
in carats?*

Opal

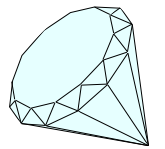


Gemstones

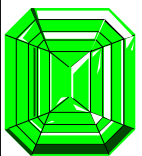
Sapphire



Diamond

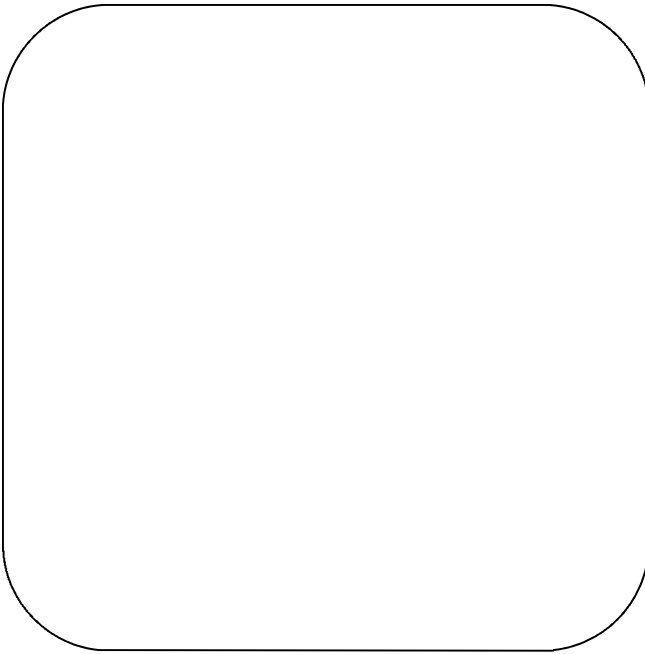


Emerald



Ruby



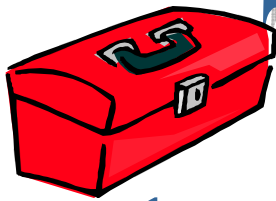


What is the streak test?

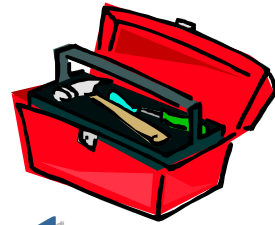


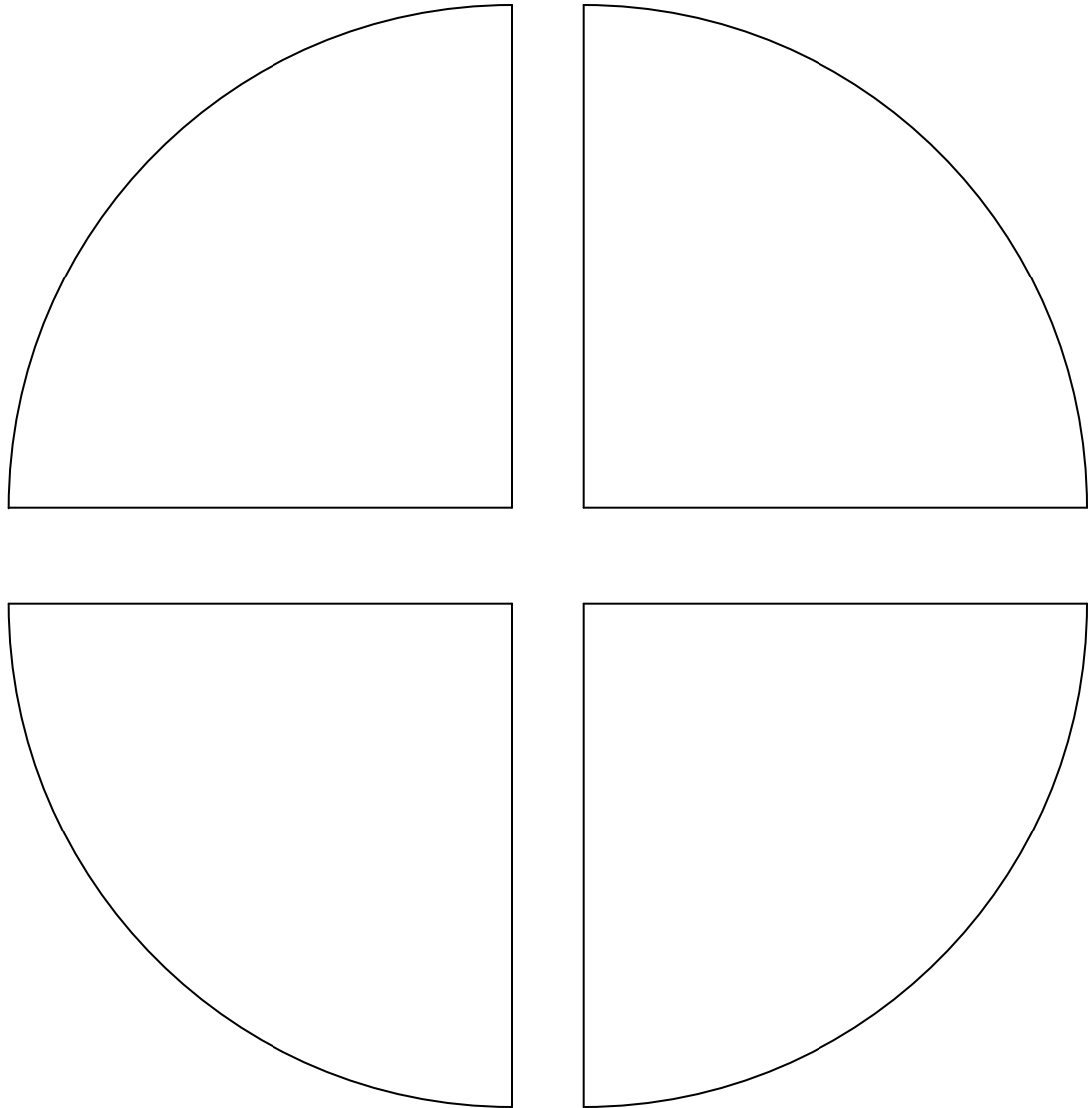
What are the flat sides of a crystal called?

What are some possible shapes?



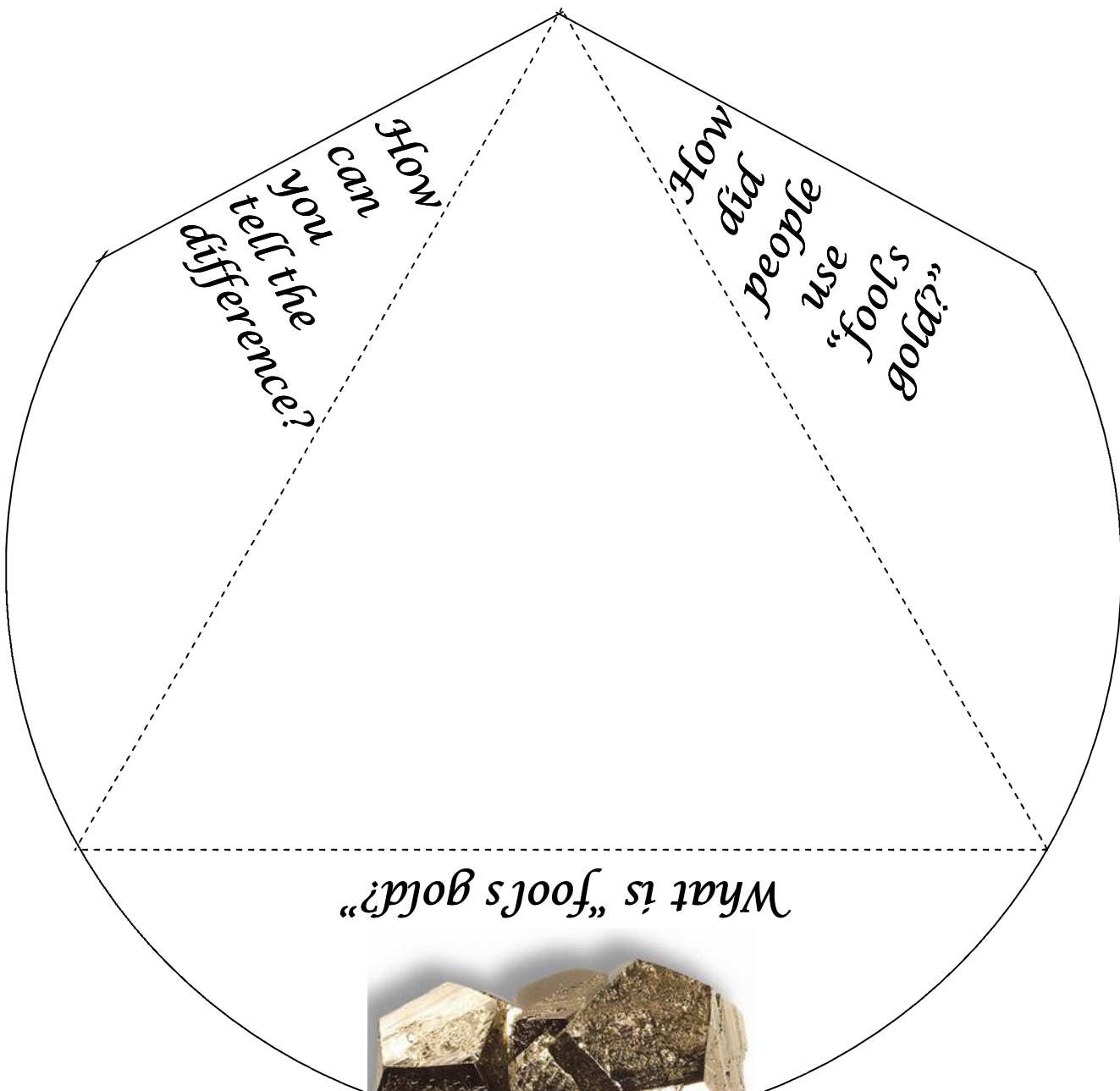
Tools used
by rock hounds





Cut out each quarter circle. Write out your answers. Tape the quarter circles together edge to edge to first form a circle and continue to spiral around the same circle shape making sure to leave a small gap between each piece. When done, roll up the spiral by folding along the taped edges. Glue the cover to the outside of the rolled up shape.





How
can
you
tell the
difference?

How
did
people
use
"fool's
gold?"

What is "fool's gold?"



**Where can they
be found?**



**What are
considered as
precious
metals?**



Extra Pictures

