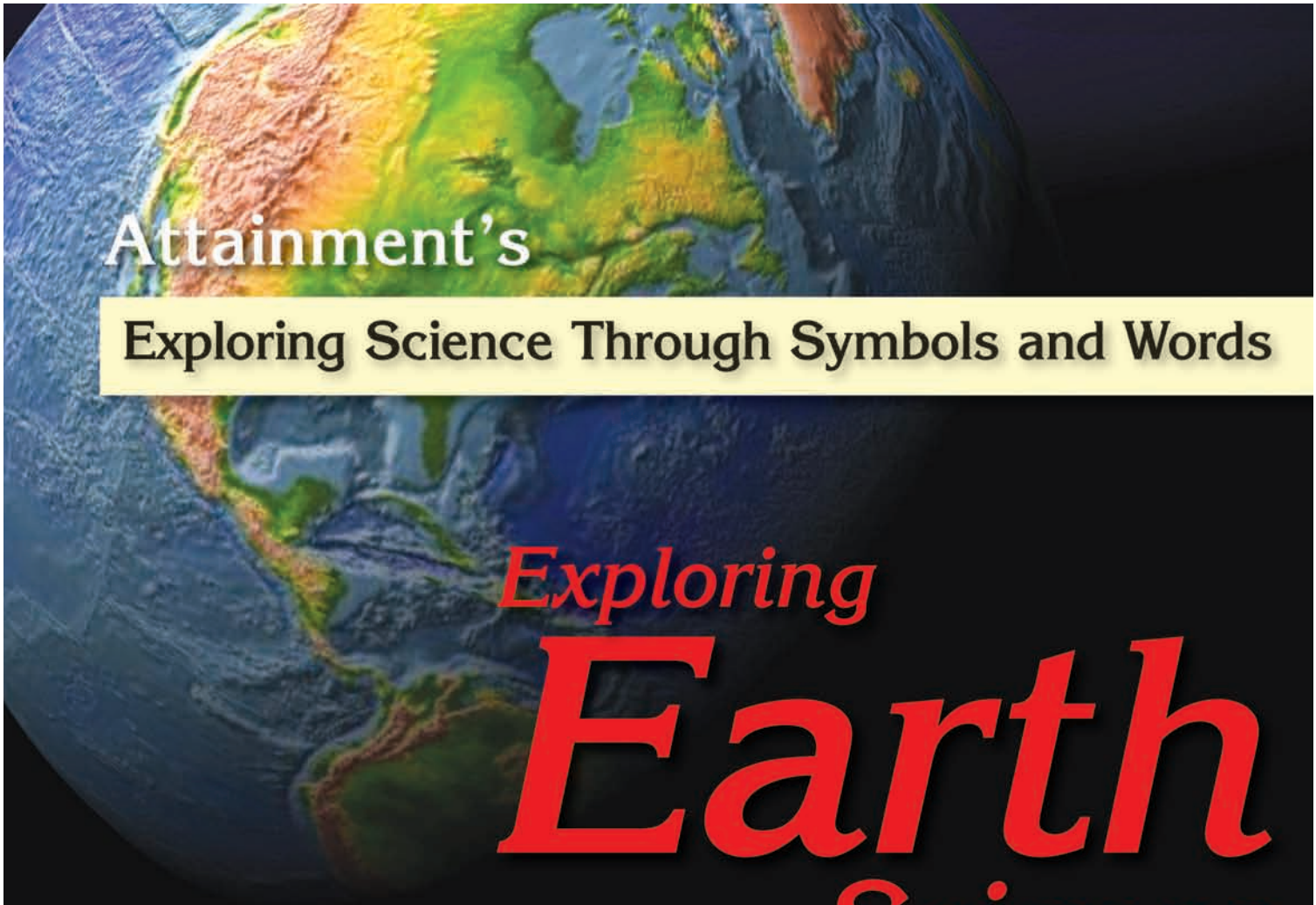

Attainment's

Exploring Science Through Symbols and Words

Exploring Earth Science

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Rocks and Everyday Life

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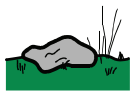
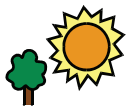
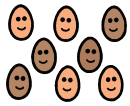
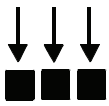
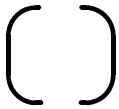
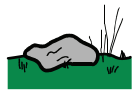
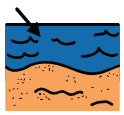
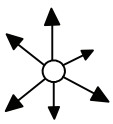
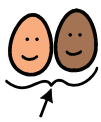
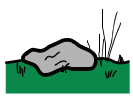
 Rocks  and  Everyday  Life

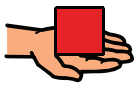
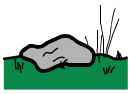
 Rocks cover   every place  on Earth.  They are beneath  our

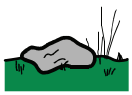
feet and under the oceans and glaciers. They are

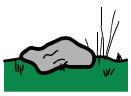
everywhere! We call this rock the Earth's crust. The

   3   

Earth's crust has three kinds of rock. They are igneous

   &  

rock, sedimentary rock and metamorphic rock.

IGNEOUS ROCKS:

Hot, liquid rock under the Earth's crust is called lava. This

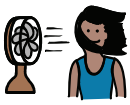
   

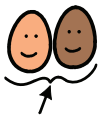
is what comes out of the top of a volcano when it






erupts. It pushes up from inside the Earth. When it

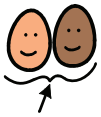




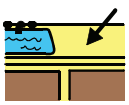
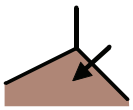



cools down we call it igneous rock. Granite, obsidian

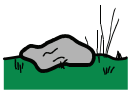


and pumice are all igneous rocks. We use granite to make





countertops, floors & statues. Pumice is a stone used to



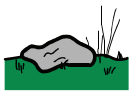




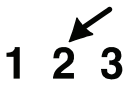
smooth rough skin on your feet and obsidian



makes very nice jewelry.

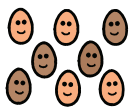
SEDIMENTARY ROCKS:



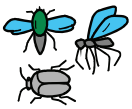

A second type of rock is called sedimentary. These are



rocks that become pressed together to form solid rock

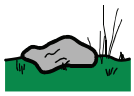



layers. Sometimes people find minerals, shells and even


insects


in

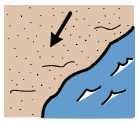

sedimentary


rocks.


Coal,


limestone

and

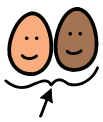

sandstone


are

all


sedimentary


rocks.


We

use


coal

to


make


electricity

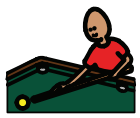
at


power

plants

and


make


billiard balls.


Limestone

is

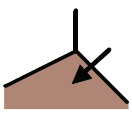
used

to


make


cement,

tile


floors,


&

and

even

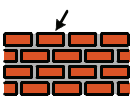
is

used

to


make


paint.


Brick


buildings

are

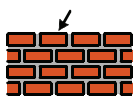

made

using


sandstone

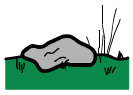
for

the

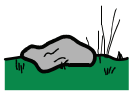

bricks.

Experiment

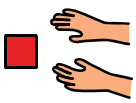



Let's perform an experiment to show how rocks press

together to form sedimentary rock.

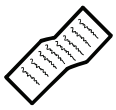
You will need:

3



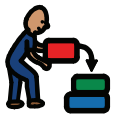
3 pieces of soft bread (two white and one brown)

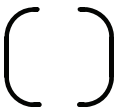

books a piece of paper

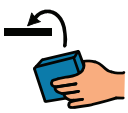
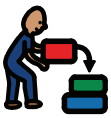


Directions:

1.  Cut off the crust from 1  white and 1  brown

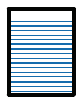
piece of  bread and  stack them on  top of each other.

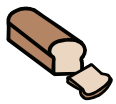
2.  Place a piece of  paper  over the  two pieces of  bread.

3.  Put a  stack of  heavy  books on  top of the

bread and paper.

4.  Wait  10 minutes and  remove the  books and  paper.

5.  Look at the  bread.  What happened to the  bread

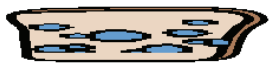
that was under the books? Compare it to the other piece of

bread.

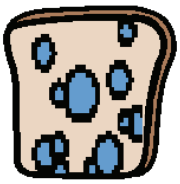
Cut out the pictures and paste them with the appropriate piece of bread on the next page.

The white and brown bread were pressed together.

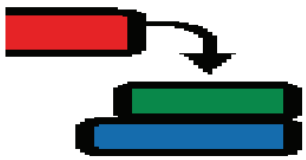
The bread had only a few air bubbles in it.



The bread had many air bubbles in it.



The heavy books compressed the bread.

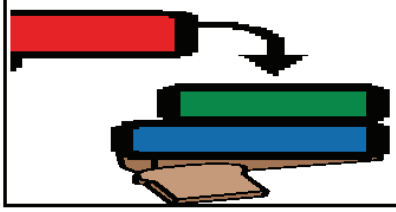


The bread was flattened.

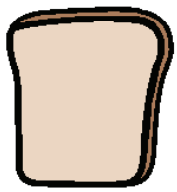
The bread was soft and fluffy.

Compare the compressed bread with the soft slice of bread.

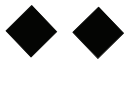
compressed bread



soft slice of bread



Quiz

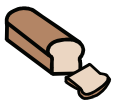
How is sedimentary rock like pressed bread?

2   

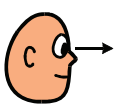
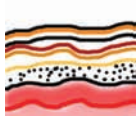
the two pieces of bread were pulled apart like rock

2   

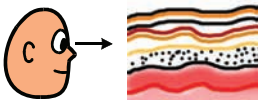
the two pieces of bread were pressed together like rock

  2  

Pressure on the bread caused the two pieces to press

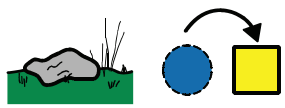
together. Can you see the layers of the pressed bread?

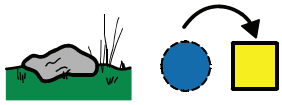
You can see layers in sedimentary rocks too.


METAMORPHIC ROCKS:



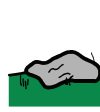



Metamorphic means to change. This means the rock changes

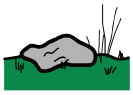
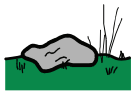
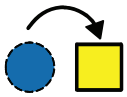



over time. It changes because of heat and pressure




below the Earth's surface. Igneous rocks, sedimentary

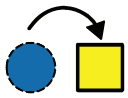
     

rocks and other metamorphic rocks can change into

metamorphic rocks.

Quiz

Circle the things that change over time.

books

caterpillar to a butterfly

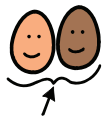
 

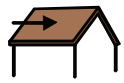
tadpole to a frog

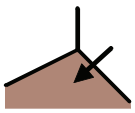
metamorphic rocks

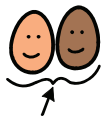


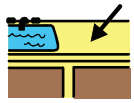





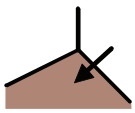
Slate is a metamorphic rock. We make roof tiles,

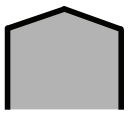
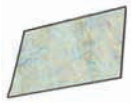



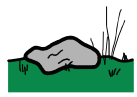




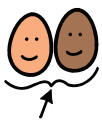
fireplaces and floors from slate. We use marble for counters,



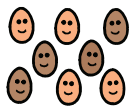



floors and buildings. Marble is a metamorphic rock.

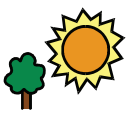




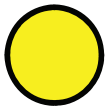




We use rocks for many things in our life



everyday!


Circle

items found

in

and

around

your

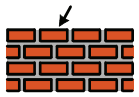
community that

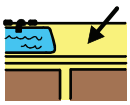

are made

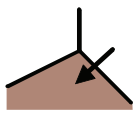
of rock.


cement blocks


books


bricks

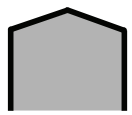

countertops


floors


birds


statues


paint


buildings

How are rocks alike and different?

Find 3 rocks around your schoolyard.
Circle how they feel and what they look like.

Name of your rock:	How many colors?	How does it feel?	Shiny or dull?	What size is it?	Do you see any layers?
	few many	bumpy smooth	shiny dull	size	yes no
	few many	bumpy smooth	shiny dull	size	yes no
	few many	bumpy smooth	shiny dull	size	yes no