



Attainment's

Exploring Science Through Symbols and Words

*Exploring*

***Earth***  
***Science***

Laura Breault

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# Lesson 1

# *Rocks and Everyday Life*



inner core



Earth



sedimentary



igneous



metamorphic



Name \_\_\_\_\_



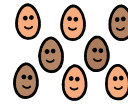
Rocks



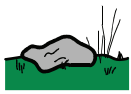
and



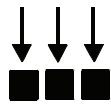
Everyday



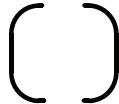
Life



Rocks cover



every



place

on



Earth.



They are beneath



our



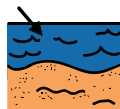
feet

and



under

the



oceans



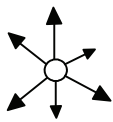
and



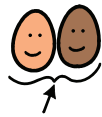
glaciers.



They are



everywhere!



We



call

this



rock

the

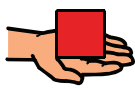


Earth's



crust.

The



3



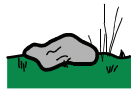
Earth's crust has three kinds of rock. They are igneous



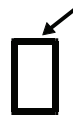
rock, sedimentary rock and metamorphic rock.



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



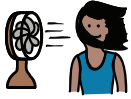
Earth.



When



it



cools



down



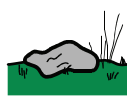
we



call



it igneous



rock.



Granite, obsidian



and pumice are all igneous rocks.



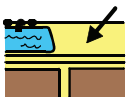
We



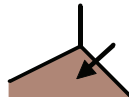
use granite to



make



countertops,



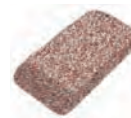
floors



and



statues.



Pumice is a



stone used to



smooth



rough



skin

on



your



feet



and



obsidian



makes very nice jewelry.



SEDIMENTARY ROCKS:

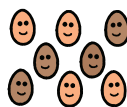
1 2 3



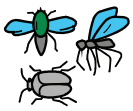
A second type of rock is called sedimentary. These are



rocks that become pressed together to form solid rock



layers. Sometimes people find minerals, shells and even



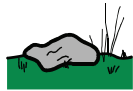
insects



in



sedimentary



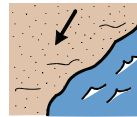
rocks.



Coal, limestone



and sandstone



are



all sedimentary



rocks.



We

use coal to



make



electricity



at power plants and



make



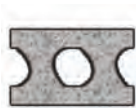
billiard balls.



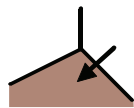
Limestone is used to



make



cement, tile



floors,



and

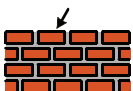
even is used to



make



paint.



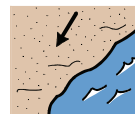
Brick



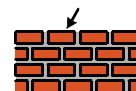
buildings are



made



using sandstone for the



bricks.



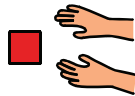
# Experiment



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



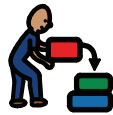
a piece of paper



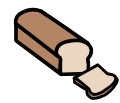
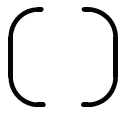
Directions:



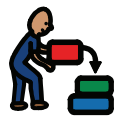
1. Cut off the crust from 1 white and 1 brown



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



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



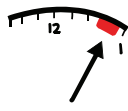
3. Put a stack of heavy books on top of the



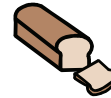
bread and paper.



10



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.

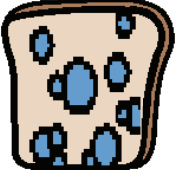
The white and brown bread were pressed together.




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.



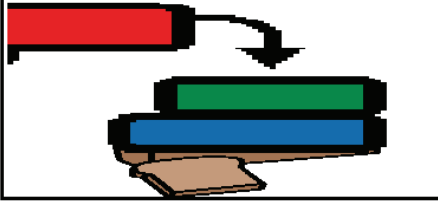
The bread was soft and fluffy.



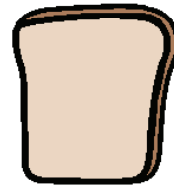


Compare the compressed bread with the soft slice of bread.

compressed bread



soft slice of bread





# Quiz



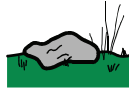
How



is



sedimentary



rock



like



pressed



bread?

2

the

two

pieces of



bread

were pulled apart like



rock

2

the

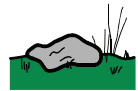
two

pieces of



bread

were pressed together like



rock



Pressure



on

the



bread

caused the

2

two

pieces



to



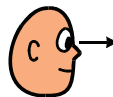
press

together.

Can



you



see

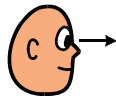
the layers of the



pressed



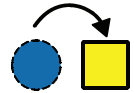
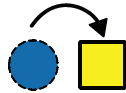
bread?



You can see layers in sedimentary rocks too.



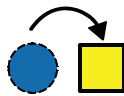
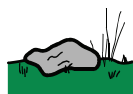
METAMORPHIC ROCKS:



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



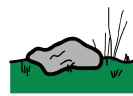
rocks



and

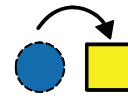


other metamorphic



rocks

can



change



into



metamorphic



rocks.



## Quiz



Circle

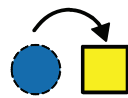
the



things

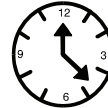


that



change

over



time.



books



caterpillar



to



a butterfly



tadpole



to



a frog



metamorphic



rocks





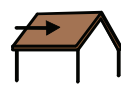
Slate is a metamorphic rock.



We



make

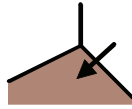


roof tiles,



fireplaces

and



floors

from slate.



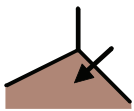
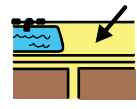
slate.



We

use marble

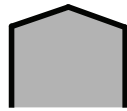
for counters,



floors



and



buildings.

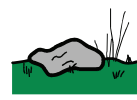


Marble

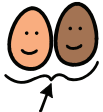


is

a metamorphic

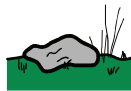


rock.



We

use



rocks

for



many



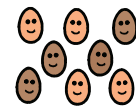
things



in



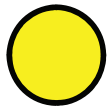
our



life



everyday!



Circle



items

found



in



and



around



your



community

that



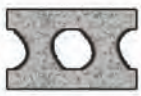
are

made

of



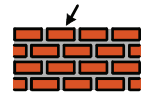
rock.



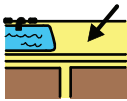
cement blocks



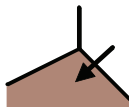
books



bricks



countertops



floors



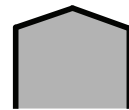
birds



statues



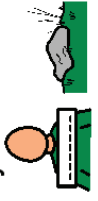



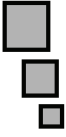


































paint



buildings

# How are rocks alike and different?

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

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