






Copy the charts in your journal then use the resource book pages 42-46 to identify the rocks.

Rock Set A

Rock #	Rock Name	Rock Type
 11	Granite.	
 13	Basalt.	
 16	obsidian	
 17	Pumice.	
 21	Tuff.	

Rock Set B

Rock #	Rock Name	Rock Type
 14	Gneiss.	Metamorphic
 15	Marble	"
 18	Quartzite.	"
 20	Slate.	"
 1	Schist	"

Learning

target:






I can identify and compare differences in the three rock groups.

Copy the charts in your journal then use the resource book pages 42-46 to identify the rocks.

Rock Set A

Rock #	Rock Name	Rock Type
 11	Granite	Igneous.
 13	Basalt	Igneous.
 16	Obsidian.	Igneous.
 17	Umie	Igneous.
 21	Tuff	Igneous.

Rock Set B

Rock #	Rock Name	Rock Type
 14	Gneiss	Metamorphic.
 15	Marble	
 18	Quartzite	
 20	Slate.	
 1	Schist.	

Learning

target:

I can identify and compare differences in the three rock groups.

Use the resource book pages 42-46 to identify the rock names.

Rock Set A

Rock #	Rock Name	Rock Type
 2		
 12		
 16		
 17		
 21		

Rock Set B

Rock #	Rock Name	Rock Type
 14		
 15		
 18		
 20		
 1		

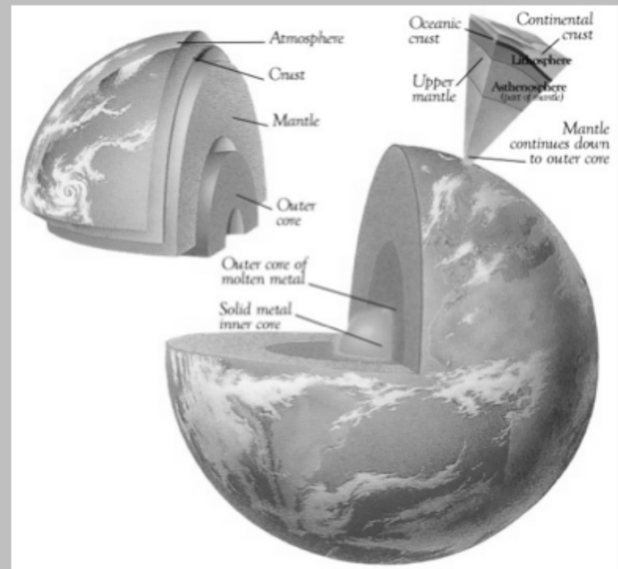
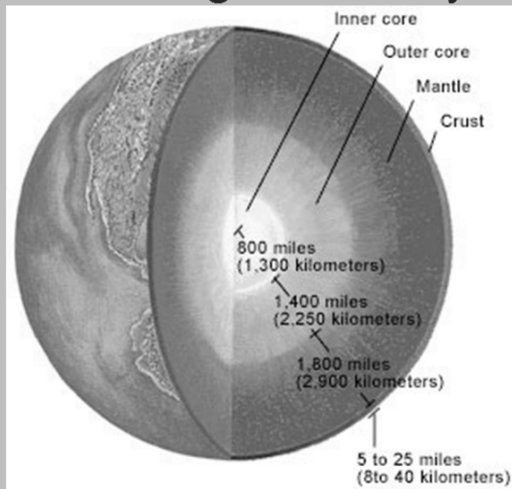
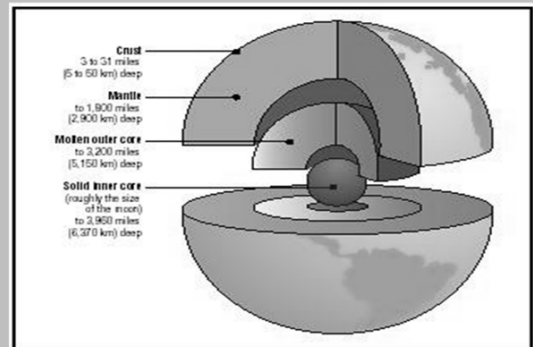
Learning target:

I can identify and compare differences in the three rock groups.

If the earth were the size of an egg.
The crust would be the thickness of an egg shell.

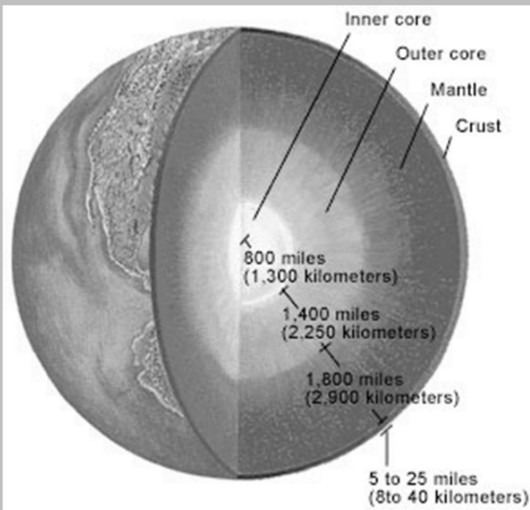
The mantle is the egg white!

The core would be the size of a cherry.
P. 5 Washington history



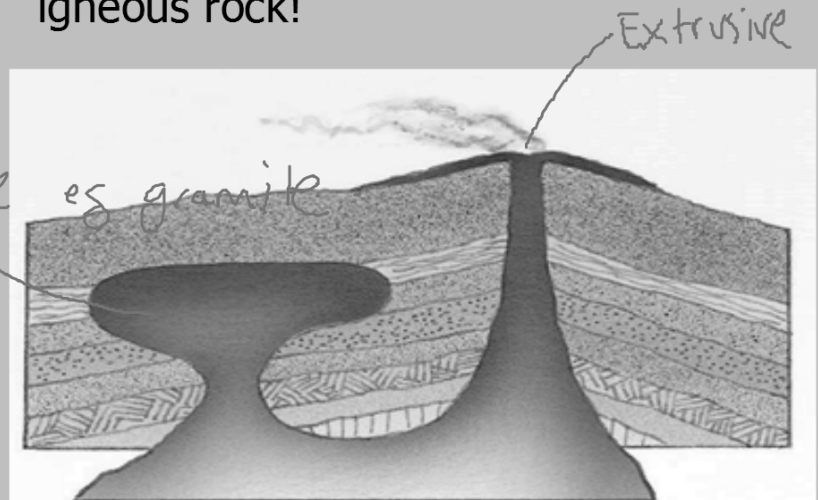
Learning target:

I can identify and compare differences in the three rock groups.



Igneous Rock Formation

Igneous rock is formed from magma in Earth's Mantle! When magma cools and crystallizes – igneous rock!



When magma cools down and solidifies it is called rock-igneous rock

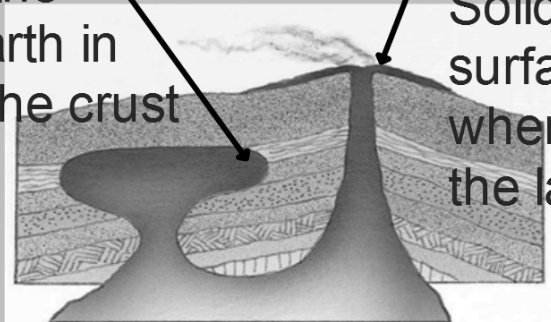
Learning target: Identify and compare differences in the three rock groups.

INTRUSIVE AND EXTRUSIVE
IGNEOUS ROCKS**Intrusive**

Solidifies below the surface of the earth in the structure of the crust

Extrusive

Solidifies above the surface of the earth when it spills out over the land.



Go back to your chart and identify those igneous rocks that are intrusive and those igneous rocks that are extrusive.

Learning

target: I can identify and compare differences in the three rock groups.

Intrusive

Solidifies below the surface of the earth in the structure of the crust

obsidian
Tuff
Basalt
pumice
Granite

Extrusive

Solidifies above the surface of the earth when it spills out over the land.



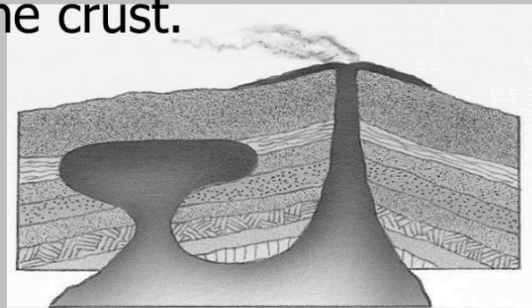
Learning target:

I can identify and compare differences in the three rock groups.

Intrusive and Extrusive Igneous Rock

Magma can solidify in two ways:

- ***Intrusive Igneous Rock:*** Solidifies below the surface of the earth, in the crust.
 - ***Examples:*** granite



- ***Extrusive Igneous Rock:*** Solidifies on the surface of the land. (*When lava spills onto land through a volcano!*)
 - ***Examples:*** obsidian, pumice, tuff, scoria, basalt



<http://activities.macmillanmh.com/science/ca/scienceinmotion/Common/SIM.html?Module=../Grade4/Chapter3-IgneousRockFormation/>

Metamorphic Rock Key Facts

Metamorphic means changed. Metamorphic rocks are rocks that have changed from one kind of rock to another.

- Change is brought about by heat and/or pressure.
- Pressure results when rocks are buried deep in the ground or magma pushes up from below.
- Heat results when rocks are covered in lava.
- Metamorphic rocks never completely melt.



Learning

target:

I can identify and compare differences in the three rock groups.

Try to guess the source rock for each morph rock.

Source

–**Source Rock:** The original rock that changes into the metamorphic rock.

Limestone ----->

Morph

–**Morph Rock:** The metamorphic rock the source rock changes into.

Schist

Gneiss

Marble

Quartzite

slate

Rock Cycle Animation

http://www.classzone.com/books/earth_science/terc/content/investigations/es0602/es0602page02.cfm