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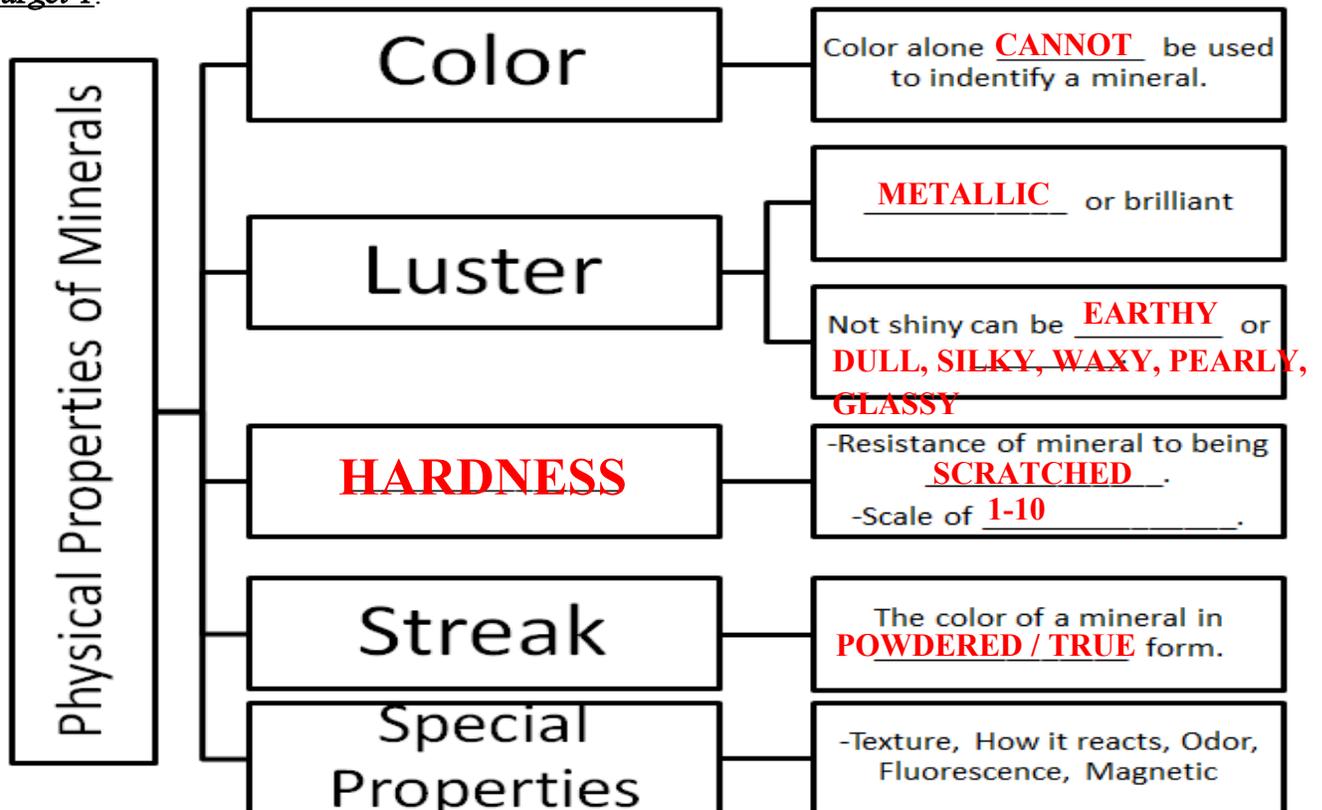
Rocks and Minerals Learning Targets



Target	With Help	On My Own	Teach It
1. I know that hardness, color, luster, and streak are physical properties of minerals.			
2. I can use the Mohs' Hardness Scale to predict the hardness of a mineral.			
3. I can use the physical properties hardness, color, luster, and streak to identify specific minerals.			
4. I can test the physical properties of minerals.			
5. I can describe how a metamorphic rock is formed.			
6. I can describe how an igneous rock is formed.			
7. I can describe how a sedimentary rock is formed.			
8. Using the rock cycle I can correctly predict what processes will produce each type of rock.			

Study your vocabulary flashcards for this unit.

Target 1:



Target 2:

-Purpose of Mohs' Hardness scale is to test whether one mineral will **SCRATCH** another.

-Range of Mohs' Hardness Scale: **1 - 10**

-Softest mineral on scale: **TALC** Hardest mineral on scale: **DIAMOND**

-If you have an unknown mineral with a hardness of 5, circle all the minerals in the chart that it will NOT scratch. **It will not scratch these minerals because these minerals are harder than the unknown mineral.**

Mineral	Hardness
topaz	8
calcite	3
galena	2.5
quartz	7
feldspar	6

Targets 3 & 4:

Mineral	Hardness	Color	Streak	Luster	Density	Other
Calcite	3.0	clear, white, pink	white	glassy	2.7	fizzes in acid
Corundum	9.0	white, brown, red	white	glassy	4.0	
Gold	2.5-3.0	bright yellow	golden yellow	metallic	19.0	
Gypsum	2.0	clear, white, gray	white	glassy to pearly	2.32	
Halite	2.5	clear, white	white	glassy	2.2	fluorescent
Magnetite	6.0	black	black	metallic	5.2	magnetic
Pyrite	6.0-6.5	bright gold, gold	green to brown-black	metallic	5.0	
Quartz	7.0	clear, white, pink	white	glassy	2.6	does not fizz in acid

-Which is the hardest mineral listed on this chart? **CORUNDUM** Softest? **GYPSUM**

-You have a sample of gold and a sample of pyrite. If you have no way to test density, how might you tell the minerals apart? **YOU COULD TEST THE STREAK OR THE HARDNESS**

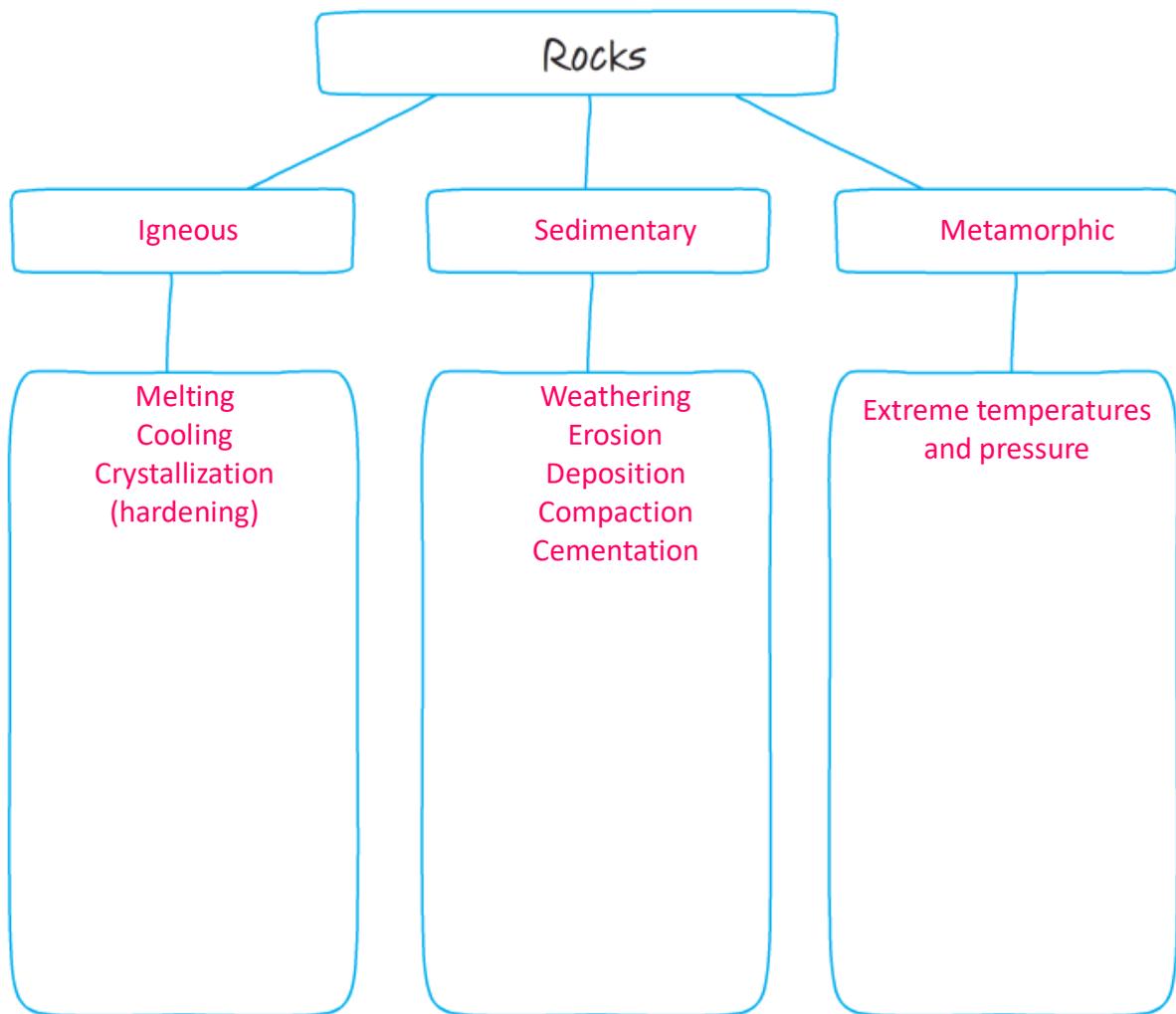
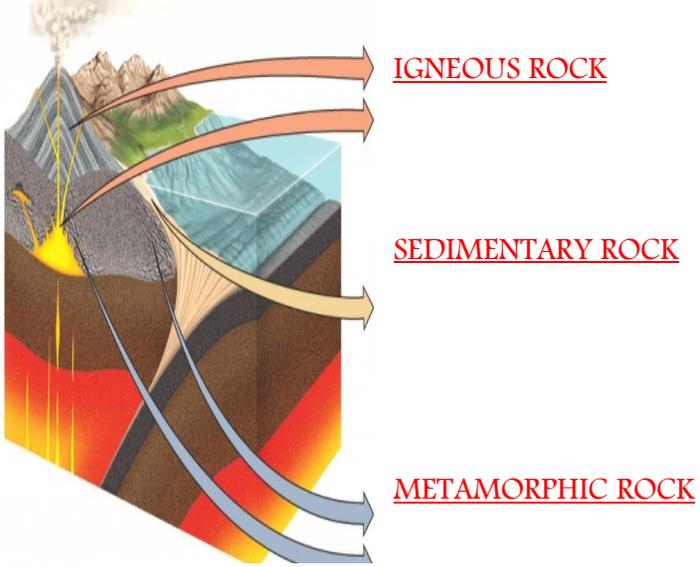
-You have a sample of calcite and a sample of quartz. What test can you perform to tell the minerals apart? **YOU COULD TEST THE HARDNESS AND IF IT REACTS IN ACID**

-You have a sample of magnetite and a sample of pyrite. What test(s) can you perform to tell the minerals apart? **YOU COULD TEST THE STREAK AND IF EACH IS MAGNETIC**

-Which five minerals have similar lusters? **CALCITE, CORUNDUM, GYPSUM, HALITE, QUARTZ**

Targets 5, 6, and 7: (Fill in blanks under “Type of rock...”)

3 Major Types of Rock



Target 8:

Identify the type of rock:

A: **IGNEOUS ROCK**

B: **METAMORPHIC ROCK**

C: **SEDIMENTARY ROCK**

Identify the processes:

1: **COOLING**

2: **MELTING**

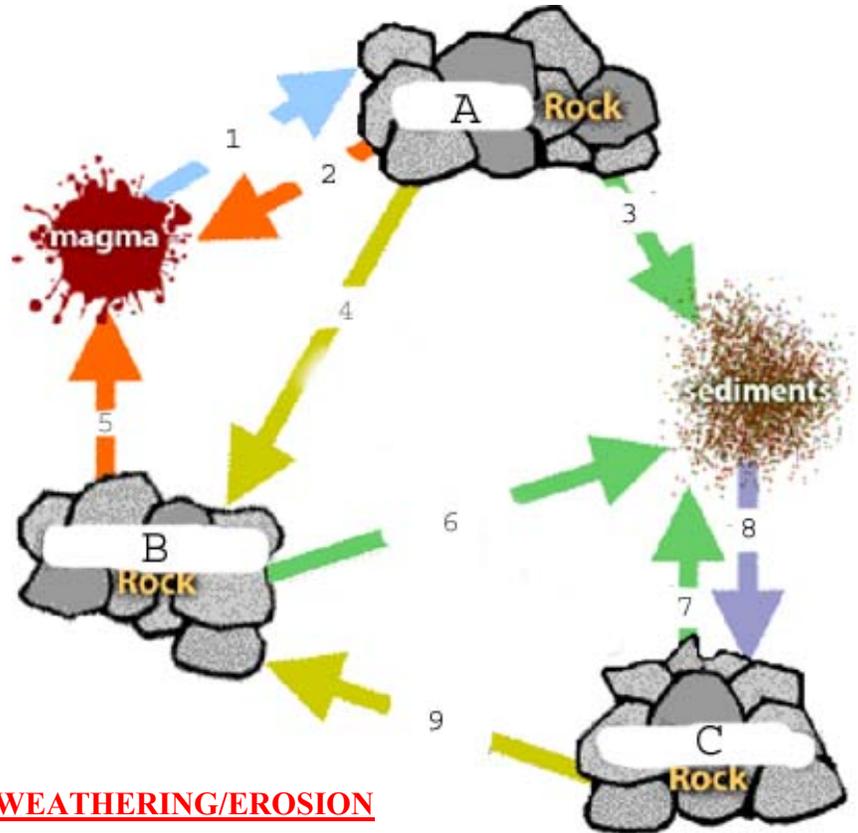
3: **WEATHERING/EROSION**

4: **HEAT AND PRESSURE**

5: **MELTING**

6: **WEATHERING/EROSION** 7: **WEATHERING/EROSION**

8: **COMPACTION/CEMENTATION** 9: **HEAT AND PRESSURE**



Rocks and Minerals

Chapter 8, pages 301 – 345 and pages 94-96

Create flashcards for these vocabulary terms. Some definitions have been given to you below.

Pages 94-96

Mineral – a naturally occurring, inorganic solid with a definite chemical composition and an orderly arrangement of atoms

Luster

Mohs' Hardness Scale

Hardness

Streak

Color – one of the property of minerals that you can observe with the unaided eye

Section 8.1

rock

magma

lava

sediment

rock cycle

Section 8.2

igneous rock – rock formed from magma or lava that has been cooled and hardened

extrusive rock – igneous rocks that form as lava cools and hardens on the surface of earth

2 examples of extrusive rock – page 315 and 317

intrusive rock – igneous rocks that form as magma cools and hardens underground

2 examples of intrusive rock – page 317

Section 8.3

sedimentary rock – rock formed from deposition, compaction and cementation of sediments

deposition – the laying down (or depositing) of sediments

compaction

cementation

clastic rock (give definition and an example)

chemical rock (give definition and an example)

biochemical rock (give definition and an example)

Section 8.4

metamorphic rock – rock formed from extreme temperature and pressure deep inside earth

foliated rocks (give definition and an example)

nonfoliated rock (give definition and an example)