

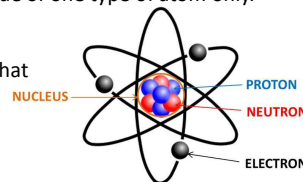
### Rock Cycle Foldable

- Get out your notebook and your foldable.
- Notes will be taken inside your foldable.

### Rock Vocabulary

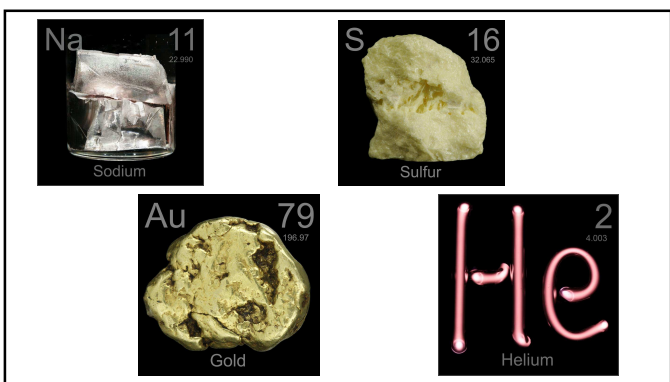
- Rock Vocab cards should already be completed, there are teacher notes on my website.
- **Element:** unique substance made of one type of atom only.

- **Atom:** smallest unit of matter that retains unique properties.



Periodic Table of the Elements

1 H 1.008	2 He 4.003																	3 Li 6.941	4 Be 9.012											5 B 10.811	6 C 12.011	7 N 14.007	8 O 15.999	9 F 18.998	10 Ne 20.180
11 Na 22.990	12 Mg 24.305											13 Al 26.982	14 Si 28.086	15 P 30.974	16 S 32.065	17 Cl 35.453	18 Ar 39.948																		
19 K 39.098	20 Ca 40.078	21 Sc 44.956	22 Ti 47.88	23 V 50.942	24 Cr 52.004	25 Mn 54.938	26 Fe 55.845	27 Co 58.933	28 Ni 58.693	29 Cu 63.546	30 Zn 65.38	31 Ga 69.723	32 Ge 72.63	33 As 74.922	34 Se 78.96	35 Br 79.904	36 Kr 83.80																		
37 Rb 85.468	38 Sr 87.62	39 Y 88.906	40 Zr 91.224	41 Nb 92.906	42 Mo 95.94	43 Tc 98.906	44 Ru 101.07	45 Rh 101.07	46 Pd 106.36	47 Ag 107.868	48 Cd 112.411	49 In 114.818	50 Sn 118.710	51 Sb 121.757	52 Te 127.6	53 I 126.905	54 Xe 131.29																		
55 Cs 132.905	56 Ba 137.327	57 La 138.905	58 Ce 140.12	59 Pr 140.908	60 Nd 144.24	61 Pm 144.913	62 Sm 150.36	63 Eu 151.964	64 Gd 157.25	65 Tb 158.925	66 Dy 162.50	67 Ho 164.930	68 Er 167.259	69 Tm 168.930	70 Yb 173.054	71 Lu 174.967																			
87 Fr [223]	88 Ra [226]	89 Ac [227]	90 Th [232]	91 Pa [231]	92 U [238]	93 Np [237]	94 Pu [244]	95 Am [243]	96 Cm [247]	97 Bk [247]	98 Cf [251]	99 Es [252]	100 Fm [257]	101 Md [258]	102 No [259]	103 Lr [260]																			



- **Mineral:** a solid, inorganic, crystalline, naturally occurring, unique substance. Can be an element or a compound.
- **Compound:** a unique substance made of two or more elements.

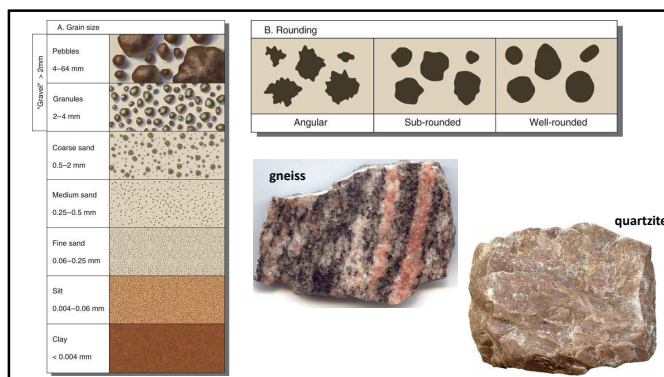
- **Rock:** a solid mixture of two or more minerals (or other substances).
- **Mixture:** made of two or more substances that are not chemically combined and can be separated.

**Mixture Examples:**

- Rocks (mix of different minerals)
- Air (mix of different gases)
- Mud (mix of water, dirt)
- Cement (mix of sand, gravel, water)
- Many more!

## Rock Cycle

- **Rock Cycle:** slow cycle that builds, destroys and changes rocks
- Rocks are classified (grouped) by color, texture, & mineral composition (ingredients)
- **Texture:** Look and feel of a rock's surface because of its grains (size, shape, pattern)
- **Grains:** small particles or minerals or rocks

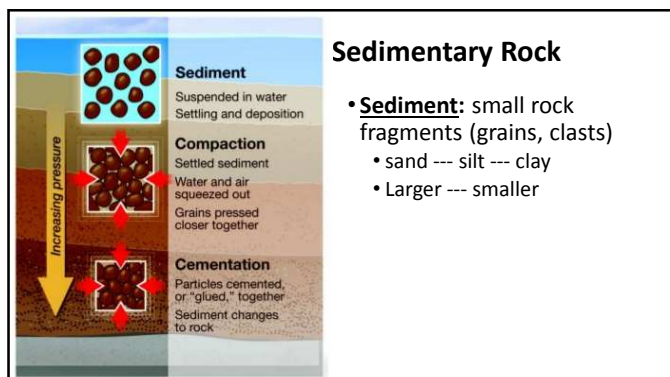


## Igneous Rock

- **Origin/Texture:**
  - **Intrusive (plutonic):** rocks formed in mantle from slowly cooling magma, have larger (coarse-grained) crystals
  - **Extrusive (volcanic):** rocks formed on surface from quickly cooling lava, have smaller (fine-grained) crystals
- **Color:** color of igneous rocks are clues to mineral composition
  - Felsic: light-colored rocks, high silica content
  - Mafic: dark-colored rocks, low silica content

## Igneous Rock


- Common igneous rocks:
  - granite (used for building material)
  - pumice (abrasive)
  - obsidian (ancient tools/weapons)



## Sedimentary Rock


- Sedimentary rocks formed by a series of processes:
  - **Erosion:** water, wind, and ice loosen and carry away sediment
  - **Deposition:** sediment settles out of water, wind, ice in layers
  - **Lithification:** (turn to stone)
    - **Compaction:** pressing of sediments by weight of many layers
    - **Cementation:** dissolved minerals glue particles of sediment together

- **Clastic Rock:** rock fragments squeezed together




Conglomerate

- **Organic Rock:** rock made from plant and animal remains



Coal

- **Chemical Rock:** when dissolved minerals crystallize from water



Halite (rock salt)

### Sedimentary Rocks

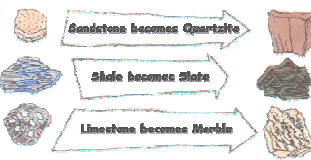
- Common sedimentary rocks:
  - Sandstone (building material)
  - Limestone (building material)
  - Flint (stone tools/weapons)






### Metamorphic Rock

- Metamorphic rocks formed by other rocks undergoing intense heat and pressure (metamorphism).




- **Foliated Rocks:** rocks with grains arranged in layers or bands



gneiss

- **Nonfoliated Rocks:** rocks with grains arranged randomly



quartzite

