THE CARBON CYCLE!!

ATMOSPHERIC CO₂ → ORGANICALLY BOUND CARBON IN TERRESTRIAL BIOMASS

#1 = #4 =

#2 = #5 =

#3 = #6 =

AQUATIC CO₂ → ORGANICALLY BOUND CARBON IN AQUATIC BIOMASS

CARBONIC ACID (H₂CO₃)

CARBONATES (CO₃²⁻) and BICARBONATES (HCO₃⁻)

CARBON BASED SEDIMENTS

SEDIMENTARY ROCK (LIMESTONE / DOLOMITE)

HYDROCARBONS (FOSSIL FUELS LIKE COAL, OIL)
FORMS THAT CARBON COMES IN THE CARBON CYCLE

- $\text{CO}_2 = \text{_______________________________} --$ found in the atmosphere or dissolves into water
- $\text{CO}_3 = \text{_______________________________} --$ found in water or in the shells of aquatic creatures (like coral or clams)
- $\text{HCO}_3 = \text{_______________________________} --$ found in water or in the shells of aquatic creatures (like coral or clams)
- $\text{H}_2\text{CO}_3 = \text{_______________________________} --$ found in the water and is formed when $\text{CO}_2$ interacts with $\text{H}_2\text{O}$
- Organically Bound Carbon in Biomass – this is the carbon found in the bodies of living or recently dead creatures
  - Much of biomass is made of or uses food/sugar. The primary sugar involved in food use and production is glucose =

- Sediments/Rock – if the rock is derived from the fossilization of shelled aquatic creatures, like limestone or dolomite, then the rock or sediment is carbon-based
- Fossil Fuels – since coal and oil are actually derived from fossilized plants and aquatic animals, they house various types of carbon (usually referred to hydrocarbons)

TERRESTRIAL SINKS/RESERVOIRS OF CARBON  AQUATIC SINKS/RESERVOIRS OF CARBON

HUMAN INFLUENCES ON THE CARBON CYCLE