

1. What are the two main forms of Carbon?

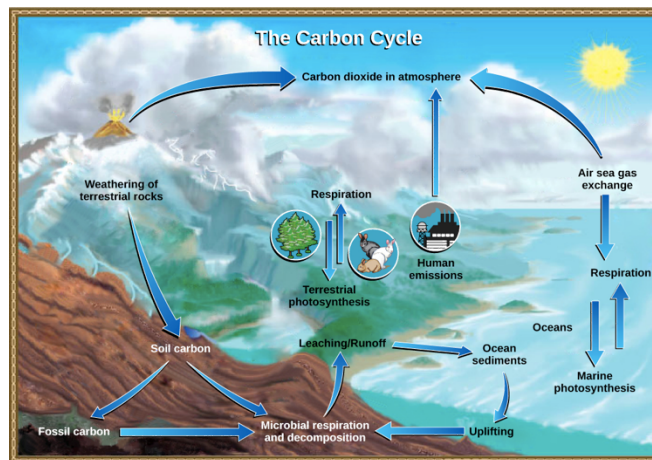
**Organic & Inorganic**

2. Scientists projected that fossil fuel linked CO<sub>2</sub> concentrations in the atmosphere would reach 37.1 Billion metric tons by the end of 2018.

What were pre-industrial levels, if the 2018 concentration are 45% higher.

**25.58 Billion Metric Tons**

3. Draw a diagram of the carbon cycle with as much detail as to where carbon may end up at any point in this cycle.



4. Make a list of 3 Natural and human based climate influencers:

Natural

**Forest Fires**  
**Volcanoes**  
**Asteroid event**

Human Based

**Industry & Vehicle Emissions**  
**Deforestation**  
**Industrial Farming**

5. Provide a definition of each of the following terms:

**Carbon Cycle:**

The Cycle of Carbon in the earth's ecosystems in which carbon dioxide is fixed by photosynthetic organisms to form organic nutrients and is ultimately restored to the inorganic state (as by respiration, protoplasmic decay, or combustion)

**Climate Change:**

Significant and long-lasting change in the Earth's climate and weather patterns

**Greenhouse Gas (GHG):**

Any of various gaseous compounds (such as carbon dioxide or methane) that absorb infrared radiation, trap heat in the atmosphere, and contribute to the greenhouse effect

**Photosynthesis:**

Synthesis of chemical compounds with the aid of radiant energy and especially light ; formation of carbohydrates from carbon dioxide and a source of hydrogen (such as water) in the chlorophyll-containing cells (as of green plants) exposed to light