Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class Number \_\_\_\_\_\_\_\_\_\_\_ Class Period \_\_\_\_\_\_\_\_\_\_

Carbon Cycle Webquest

Click on each button of the Carbon Cycle.

Read the information and answer the questions.

**Atmosphere**

1. What form is most carbon found in in the atmosphere? ­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Vegetation**

1. Land plants take up \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of all carbon dioxide that enters the atmosphere.

**Soil and Organic Matter**

1. List 2 places that carbon is found in the soil. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Coal, Oil, Gas**

1. Carbon has been locked up in fossil fuels, built from…

a. oil

b. once living things

c. gas storage

**Sediments and Sedimentary Rock**

1. Which two types of rocks contain huge amounts of carbon? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Ocean Surface**

1. Where does the exchange of CO2 happen between the ocean and the atmosphere? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Deep Ocean**

1. Where does most of the carbon entering the ocean end up? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Burning Fossil Fuels**

1. When CO2 is released into the atmosphere byproducts are formed. What are these byproducts?

**Respiration**

1. How do plants and animals release CO2 into the atmosphere?
2. photosynthesis
3. energy pathways
4. respiration

**Burning**

1. What two actions release CO2 from trees? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Photosynthesis**

1. Plants take CO2 from the atmosphere during…
2. photosynthesis
3. energy pathways
4. respiration

**Decay**

1. Do decomposers put CO2 into the atmosphere or remove CO2 from the atmosphere? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Carbon Dioxide Exchange**

1. How much more carbon is there in the ocean than in the atmosphere? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Phytoplankton**

1. Which microscopic plants are taking carbon from the water and using it to build parts of their bodies?
2. List two things that can happen as phytoplankton mature.

1.

2.

**Sinking Sediment**

1. When phytoplankton die do they take carbon out of the system for a short **or** long period of time? \_\_\_\_\_\_\_\_\_

**Deep Circulation**

1. Explain why carbon found in the ocean might not return to the surface for hundreds of years.

**Rock Formation**

1. What is the result of carbon that is trapped in sediments? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Weathering and Run-Off**

1. What is the process of dissolving minerals from rocks called? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Where do these sediments eventually end up? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_