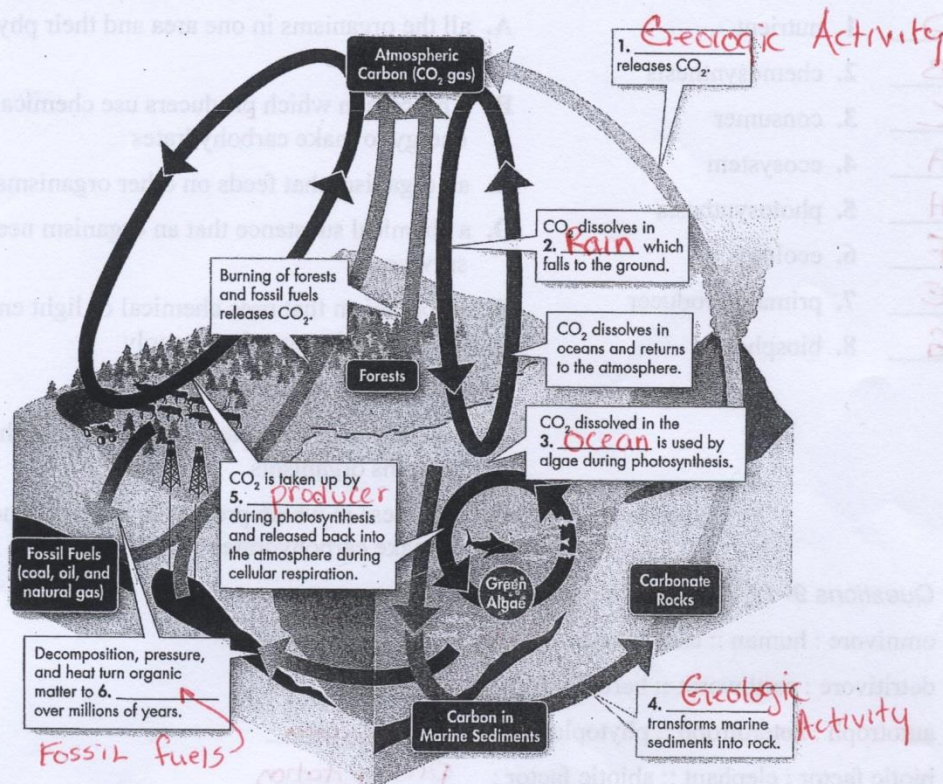


3.4 The Carbon Cycle

Visual Quiz

The diagram below shows the major processes involved in the carbon cycle. Label the diagram with the following terms: *producers, fossil fuels, rainwater, oceans, and geological activity*.



7. What organisms remove carbon from the atmosphere? What organisms release carbon into the atmosphere?

(A) Autotrophs

(B) Heterotrophs & Autotrophs

8. How are fossil fuels made?

decomposition of organisms → extreme heat & pressure from Earth press organic matter into fossil fuels

9. How does geological activity contribute to the carbon cycle?

Actions such as Volcanic eruptions release massive amounts of stored carbon into the atmosphere in the form of CO_2

10. What happens to the carbon in an organism's body after it dies?

Recycled!

Name Key Class _____ Date _____

Chapter Vocabulary Review

Match the term with its definition.

Term	Definition
<u>D</u> 1. nutrient	A. all the organisms in one area and their physical environment
<u>B</u> 2. chemosynthesis	B. a process in which producers use chemical energy to make carbohydrates
<u>C</u> 3. consumer	C. an organism that feeds on other organisms
<u>A</u> 4. ecosystem	D. a chemical substance that an organism needs to survive
<u>H</u> 5. photosynthesis	E. an organism that uses chemical or light energy to produce its own food supply
<u>F</u> 6. ecology	F. the study of the biosphere
<u>E</u> 7. primary producer	G. the portion of Earth and its atmosphere that contains organisms
<u>G</u> 8. biosphere	H. a process in which producers use light energy to make carbohydrates

For Questions 9–12, complete the analogies.

9. omnivore : human :: carnivore : Lion

10. detritivore : earthworm :: herbivore : cow

11. autotroph : heterotroph :: phytoplankton : Zooplankton

12. biotic factor : elephant :: abiotic factor : Precipitation

13. What is the difference between a food chain and a food web?

Food chain = Series of steps in which organisms transfer energy by eating & being eaten.

Food web = network of several interacting food chains

Complete each statement by writing the correct word or words.

14. There are several hundred squirrels living in an oak forest. The squirrels make up a(n) population.

15. Fungi and some kinds of bacteria are decomposers that obtain nutrients by chemically breaking down organic matter.

16. Ecologists measure biomass in grams of organic matter per unit area.

17. In a process known as denitrification, some types of soil bacteria obtain energy by converting nitrates into nitrogen gas.