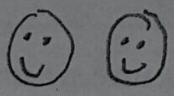
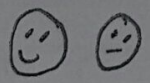
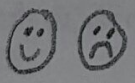
Name: Answer Key Date: 2.3

Study Guide–Symbiosis

Pages 30–32

MAIN IDEAS–Use the space below to make notes on the main ideas of this section.

Symbiosis is a close relationship between two species.	can benefit, be unaffected or harmed by the relationship
Symbiotic relationships include **mutualism, commensalism,** and **parasitism.**	3 types of symbiosis
In **mutualism,** both species obtain some benefit.	 both are helped
In **commensalism,** one species obtains some benefit; the other seems to be unaffected.	 one helped other unaffected
In **parasitism,** one species, the **parasite,** obtains some benefit and the other species, the **host,** is harmed.	 one helped other harmed
Parasites cause disease but also have a positive role in ecosystems—they control populations.	the one help in parasitism
Parasites' characteristics help them use their **hosts.**	the one harmed

VOCABULARY–Use the space below to write each definition in your own words.

symbiosis	a close relationship between 2 species
mutualism	both organisms are helped
commensalism	one organism benefits, one unaffected
parasitism	one organism benefits the other harmed
host	the organisms that is harmed
parasite	the organism that is helped

2.3 Name: _____ Date: _____

Study Guide (continued)

QUESTIONS

1. A sea lamprey attaches itself to the surface of a fish and absorbs nutrients from the fish. What type of symbiotic relationship exists between these two species?

parasitism

2. A barnacle can attach itself to the lower trunk of a tree growing out of water. The trunk holds the barnacle in place, but the barnacle does not harm the tree. What type of symbiotic relationship exists between these two species?

commensalism

3. *Lactobacillus* bacteria live inside a human's digestive system, getting nutrients and breaking down nutrients into smaller molecules. What type of symbiotic relationship exists between these two species?

mutualism

4. How is the relationship between fleas and a dog similar to the one between a family and its dairy cow?

The dog & cow are losing nautriants in the relationships

5. For each example, tell whether the relationship might be symbiotic and why.

(a) butterfly and flowering plant

mutualism b/c the butterfly gets food & the plant gets pollen

(b) deer and tick

parasitism; the tick gets food the deer is harmed by losing

(c) fly-catching spider and the horses in a barn

(d) insect-eating bat and the people in a town

Name _____

Cycles In Nature Study Guide

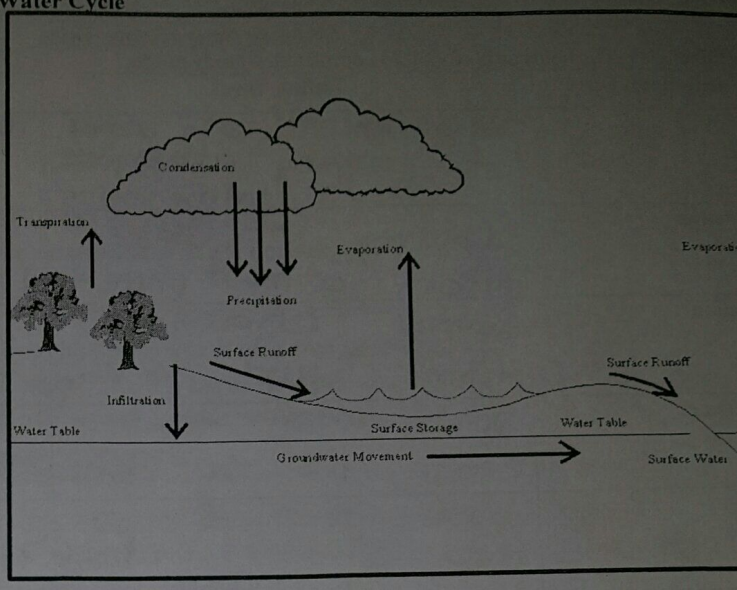
Directions: Use your notes or textbook to complete the study guide.

Vocabulary Term	Define Term	Written or picture example
Water cycle	movement of water b/w ocean, atmosphere land + living thing	
precipitation	falling of water from atmosphere to land	
evaporation	water changing from liquid to vapor	
Ground water	precipitation that seeps into the ground + stored in spaces b/w rocks	
runoff	water that flows into streams, rivers + lakes	
transpiration	water released into environment of plants + animals	
condensation	water vapor cools + turns to liquid	
Carbon cycle	exchange of carbon b/w environment + living things	
photosynthesis	plants use carbon to make sugar	
respiration	release of carbon dioxide back to the environment	
decomposition	break down of substances into smaller molecules	
combustion	process of burning a substance	
nitrogen cycle	movement of nitrogen b/w environment + living things	
nitrogen fixation	bacteria in soil change nitrogen into forms that plants use	

1. What makes the water cycle work? In other words, what drives the water cycle? Explain.

water from oceans, lakes etc. evaporates then condenses into clouds. The clouds precipate the water back to the land.

Water Cycle



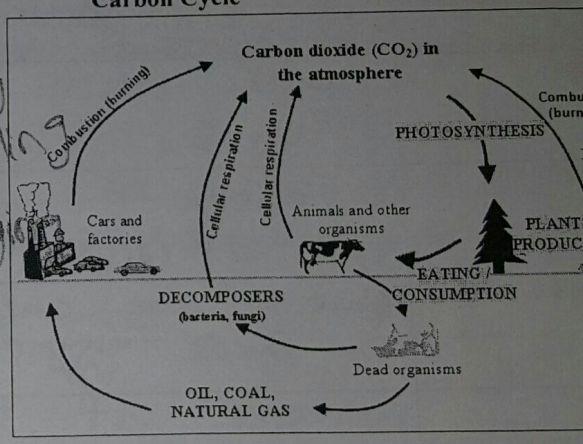
2. What are the 3 main ways that carbon gets put back into the atmosphere? Explain.

Combustion - burning

Respiration - exhaling

Decomposition - decay

Carbon Cycle



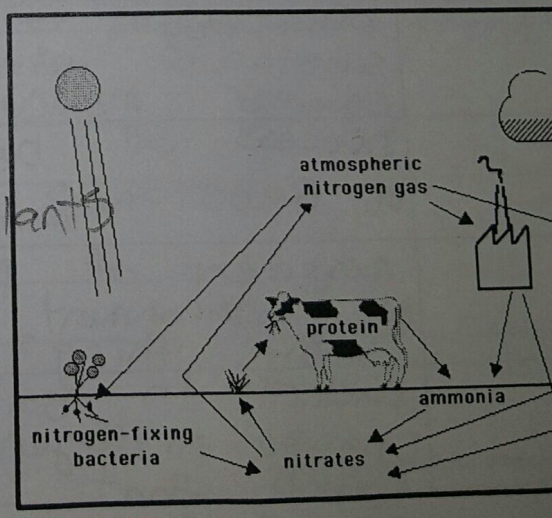
3. What is the main way that carbon gets into living things (plants)?

plants take in CO_2 from the air using photosynthesis

4. What drives the nitrogen cycle? In other words, what makes the nitrogen cycle work?

Bacteria turns nitrogen into form that plants use then animals eat plants

Nitrogen Cycle



5. What is another way that nitrogen can be fixed?

by bacteria in soil + lighting