THE CARBON CYCLE
VOCABULARY

Carbon: An abundant element that combines with oxygen and hydrogen to form the organic compounds that make up organisms.

Carbon Cycle: The flow of carbon in the form of carbon dioxide molecules between the earth's surface and atmosphere.

Consumers: Organisms, primarily animals, that get their food from producers. They feed on green plants or on other animals that eat plants.

Decomposers: A specific type of consumer that feeds on dead plant or animal matter. Examples are bacteria and fungi.

Fossil Fuels: The carbon-rich matter from plants and animals that has been trapped in the earth's crust and can be burned to release energy. Examples are coal, gas, and oil.

Greenhouse Effect: The trapping of reflected heat from the sun by the earth's atmosphere, especially carbon dioxide. An increase in the amount of carbon dioxide may result in a warming of the earth.

Photosynthesis: The food-making process of the natural world.

Producers: Green plants that produce food by photosynthesis.

Respiration: The breakdown of food with the release of energy and carbon dioxide. It takes place in all living things.

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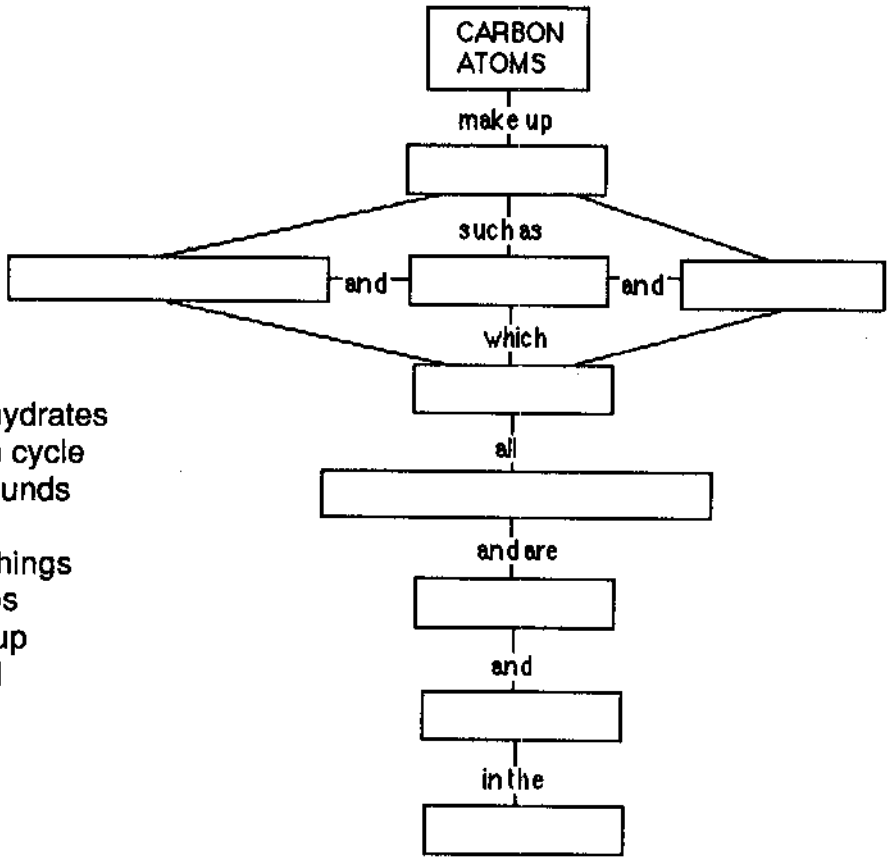
THE CARBON CYCLE
CARBON ATOMS - CONCEPT MAP

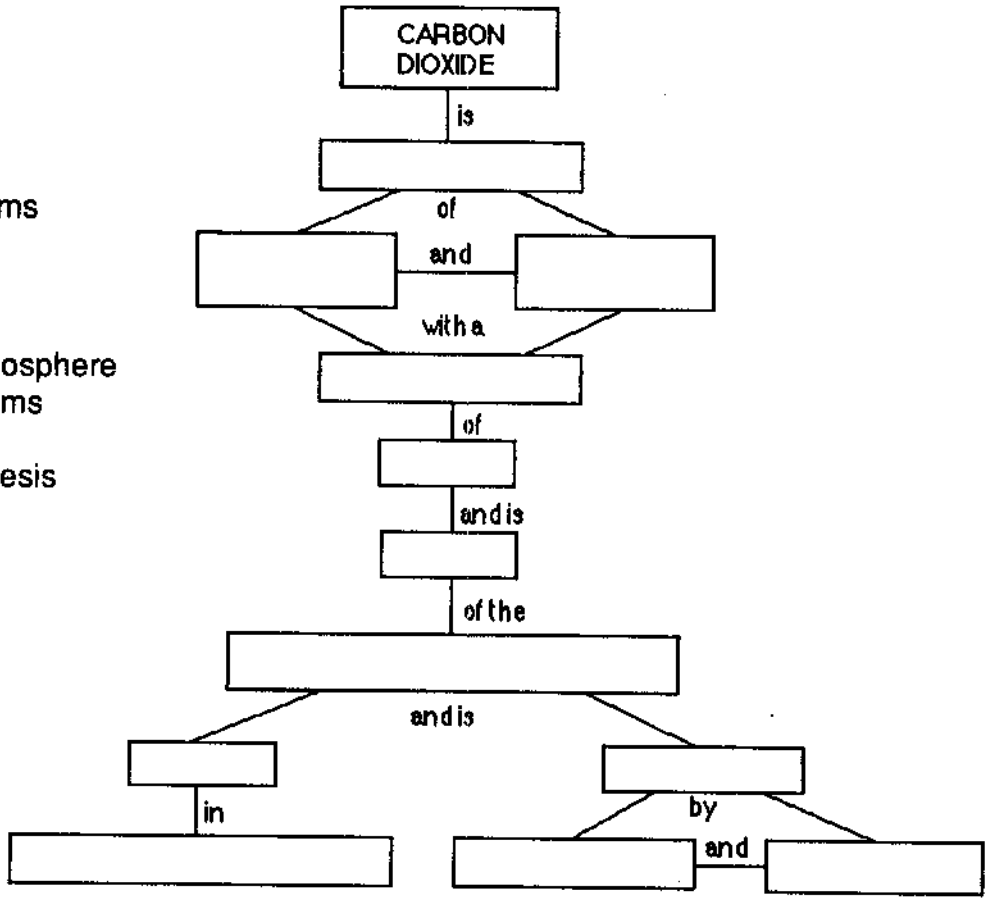


carbohydrates
carbon cycle
compounds
fats
living things
proteins
make up
reused
used

Name_____

THE CARBON CYCLE
CARBON DIOXIDE - CONCEPT MAP

burning
carbon atoms
CO_2
composed
formula
earth's atmosphere
oxygen atoms
part
photosynthesis
released
respiration
used



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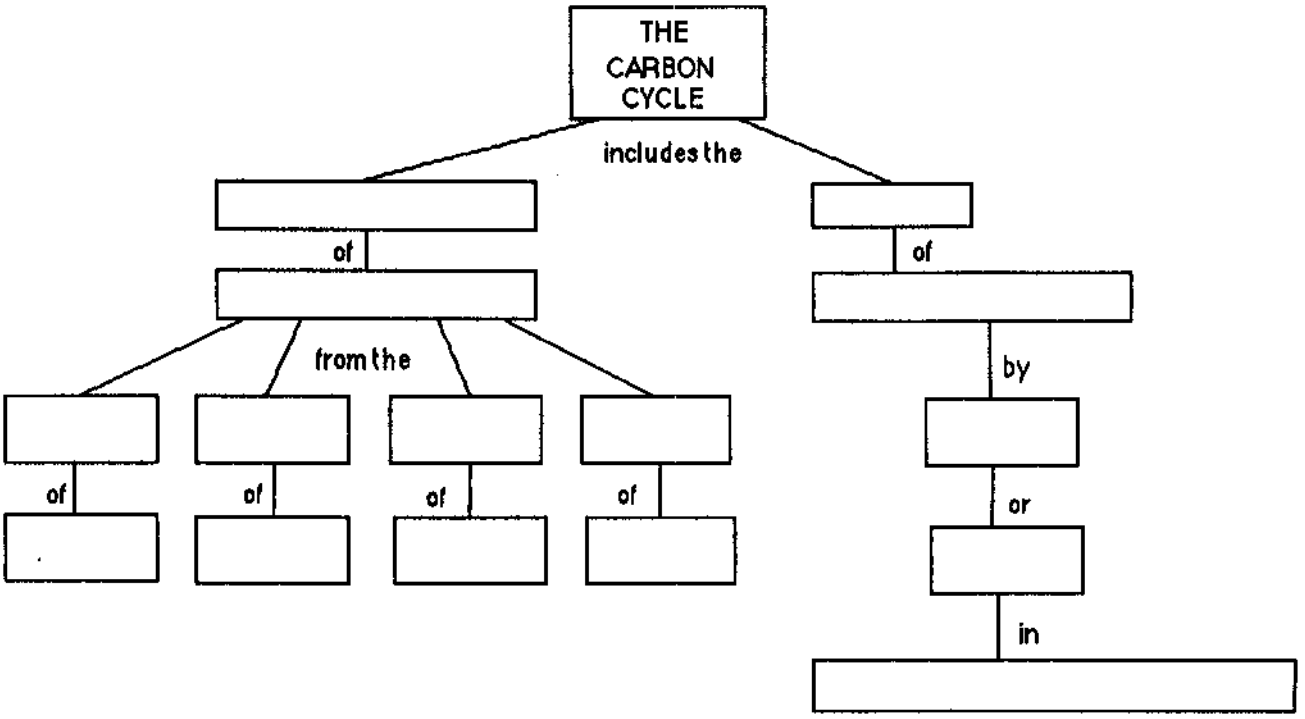
THE CARBON CYCLE

THE CARBON CYCLE - CONCEPT MAP



burning
carbon dioxide (2)
eruptions
fossil fuels
green plants
limestone
organisms
photosynthesis
producers
release
respiration
use
volcanoes
weathering

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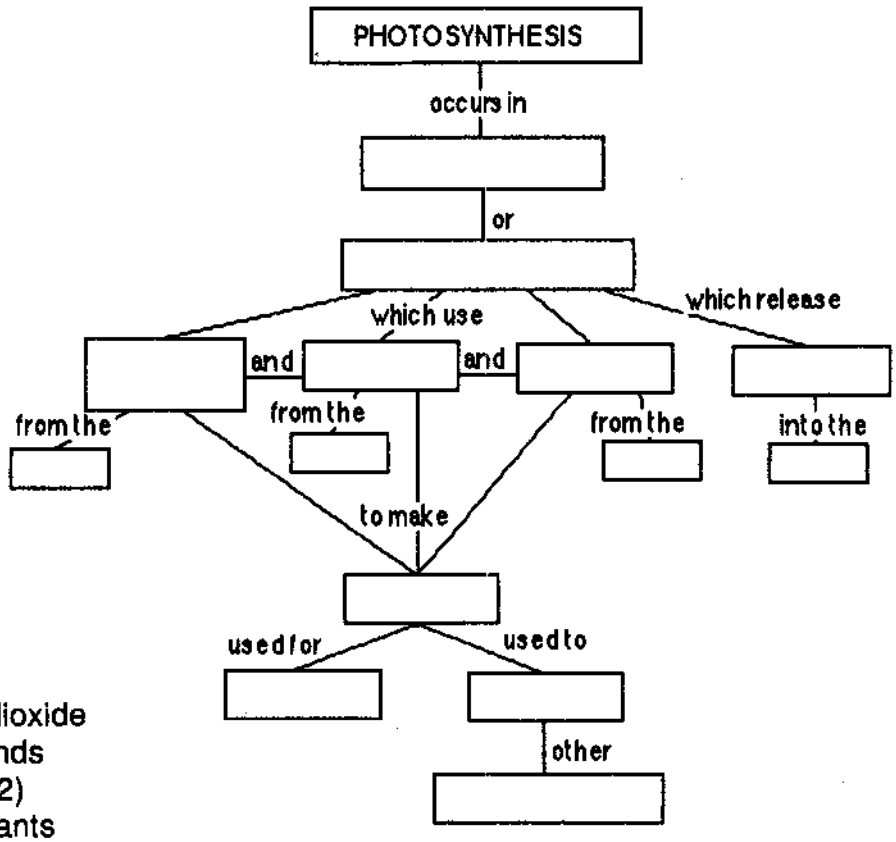
THE CARBON CYCLE
PHOTOSYNTHESIS - CONCEPT MAP



air (2)
carbon dioxide
compounds
energy (2)
green plants
make
oxygen
producers
soil
sugar
sun
water

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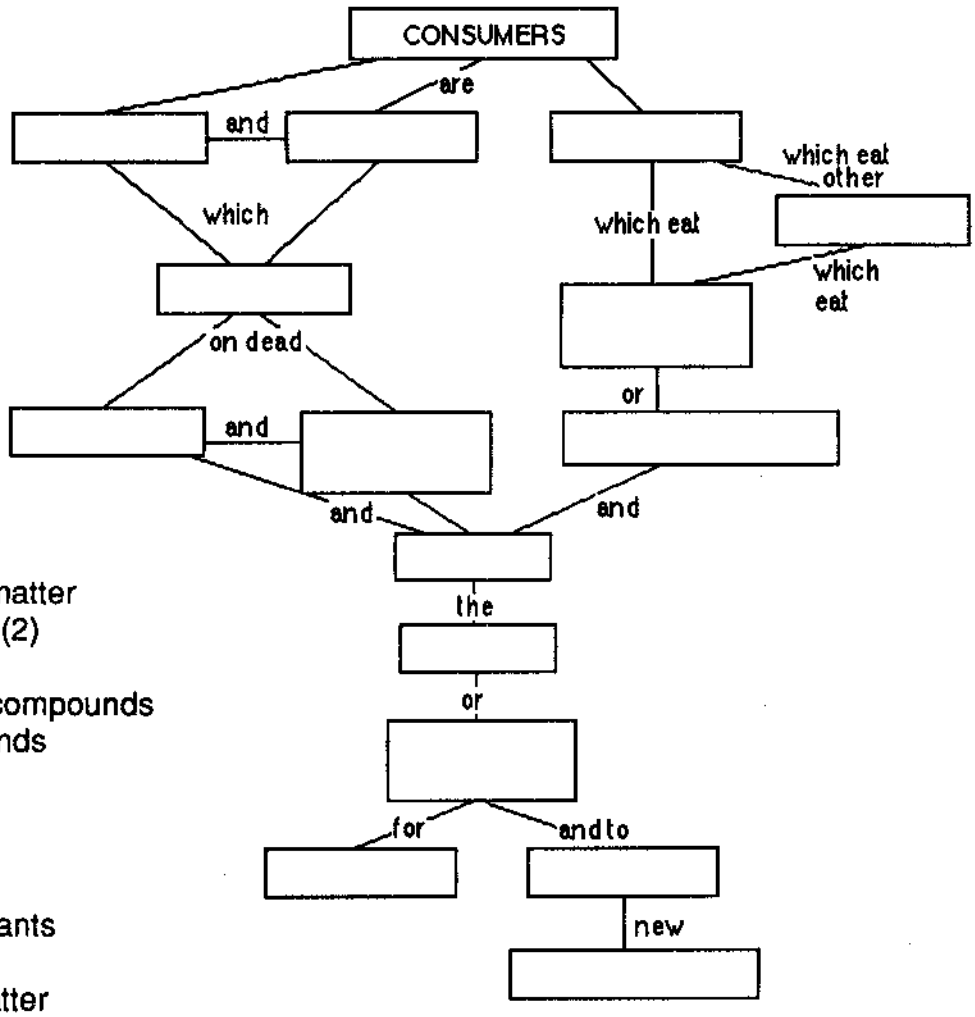
THE CARBON CYCLE

CONSUMERS - CONCEPT MAP



animal matter
animals (2)
bacteria
carbon compounds
compounds
energy
feed
food
fungi
green plants
make
plant matter
producers
use

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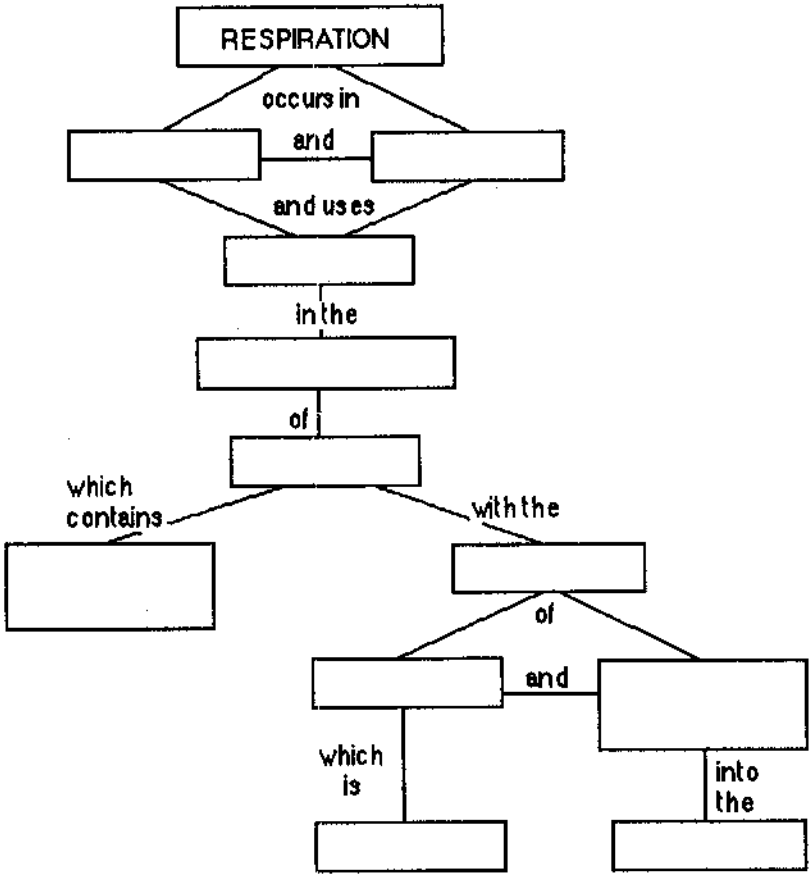
THE CARBON CYCLE

RESPIRATION - CONCEPT MAP



air
animals
breakdown
carbon compounds
carbon dioxide
energy
food
oxygen
plants
release
used

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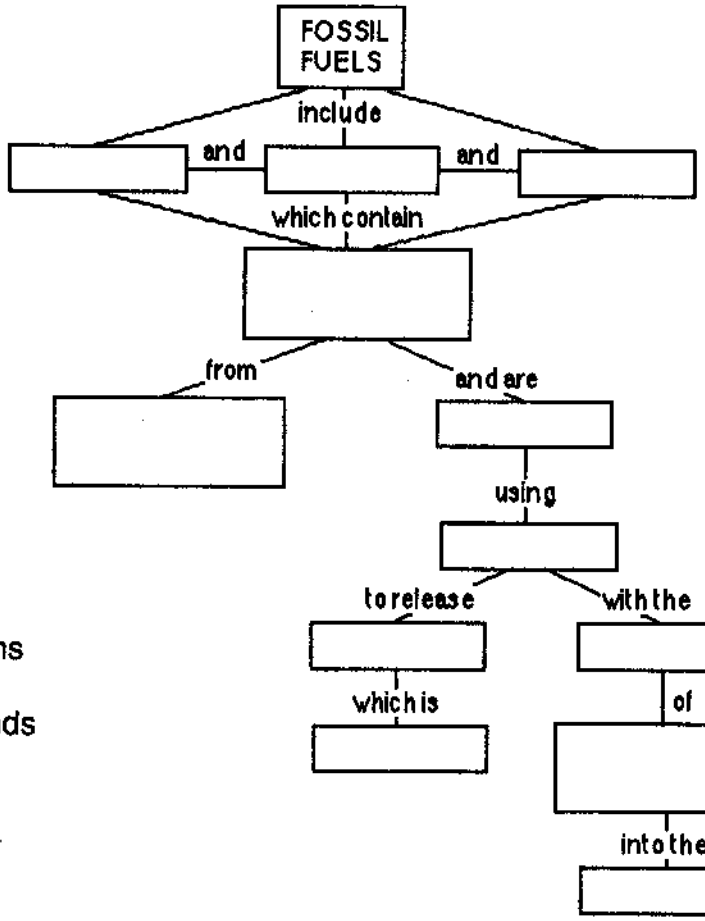
THE CARBON CYCLE

FOSSIL FUELS - CONCEPT MAP



air
ancient organisms
burned
carbon compounds
carbon dioxide
coal
energy
gas
oil
oxygen
release
used

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THE CARBON CYCLE
QUIZ/DISCUSSION QUESTIONS

1. Photosynthesis and respiration are two processes in the carbon cycle. Compare them in regard to gases used and released, compounds formed and broken down, and energy used and released.

2. What role do producers play in the carbon cycle?

3. What role do consumers play in the carbon cycle?

4. What role do decomposers play in the carbon cycle?

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