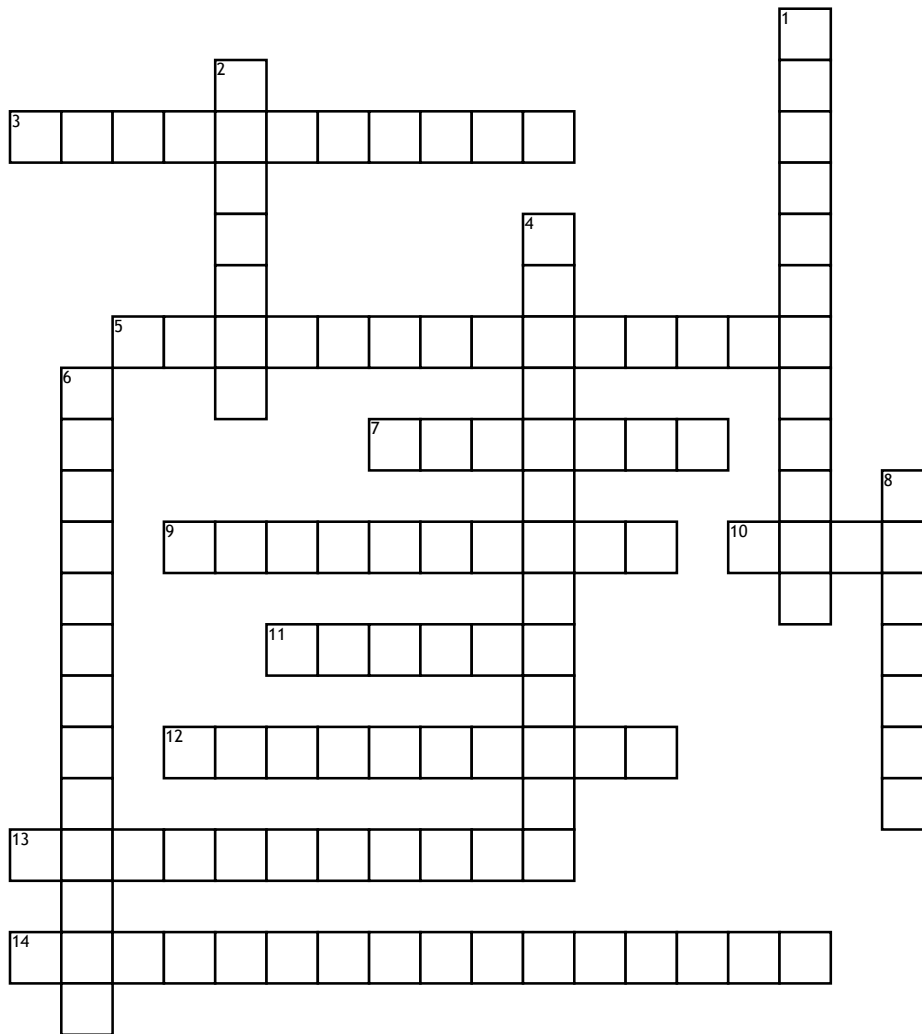


Name: _____

cycling of matter and energy



Across

3. the process of turning from liquid into vapor.
5. the synthesis of organic compounds by bacteria or other living organisms using energy derived from reactions involving inorganic chemicals, typically in the absence of sunlight.
7. physical rather than biological; not derived from living organisms.
9. the envelope of gases surrounding the earth or another planet.
10. the upper layer of earth in which plants grow, a black or dark brown material typically consisting of a mixture of organic remains, clay, and rock particles.
11. relating to or resulting from living things, especially in their ecological relations.

12. the cycle of processes by which water circulates between the earth's oceans, atmosphere, and land, involving precipitation as rain and snow, drainage in streams and rivers, and return to the atmosphere by evaporation and transpiration.
13. the series of processes by which carbon compounds are interconverted in the environment, chiefly involving the incorporation of carbon dioxide into living tissue by photosynthesis and its return to the atmosphere through respiration, the decay of dead organisms, and the burning of fossil fuels.
14. the chemical processes by which atmospheric nitrogen is assimilated into organic compounds, especially by certain microorganisms as part of the nitrogen cycle.

Down

1. water that collects as droplets on a cold surface when humid air is in contact with it.
2. a system of interlocking and interdependent food chain
4. the series of processes by which nitrogen and its compounds are interconverted in the environment and in living organisms, including nitrogen fixation and decomposition.
6. An energy pyramid is a graphical model of energy flow in a community. The different levels represent different groups of organisms that might compose a food.
8. the weather conditions prevailing in an area in general or over a long period.

Word Bank

- | | | | |
|-------------------|----------------|----------------|--------------|
| climate | chemosynthesis | nitrogen cycle | condensation |
| energy pyramid | abiotic | food web | soil |
| evaporation | atmosphere | biotic | carbon cycle |
| nitrogen fixation | water cycle | | |