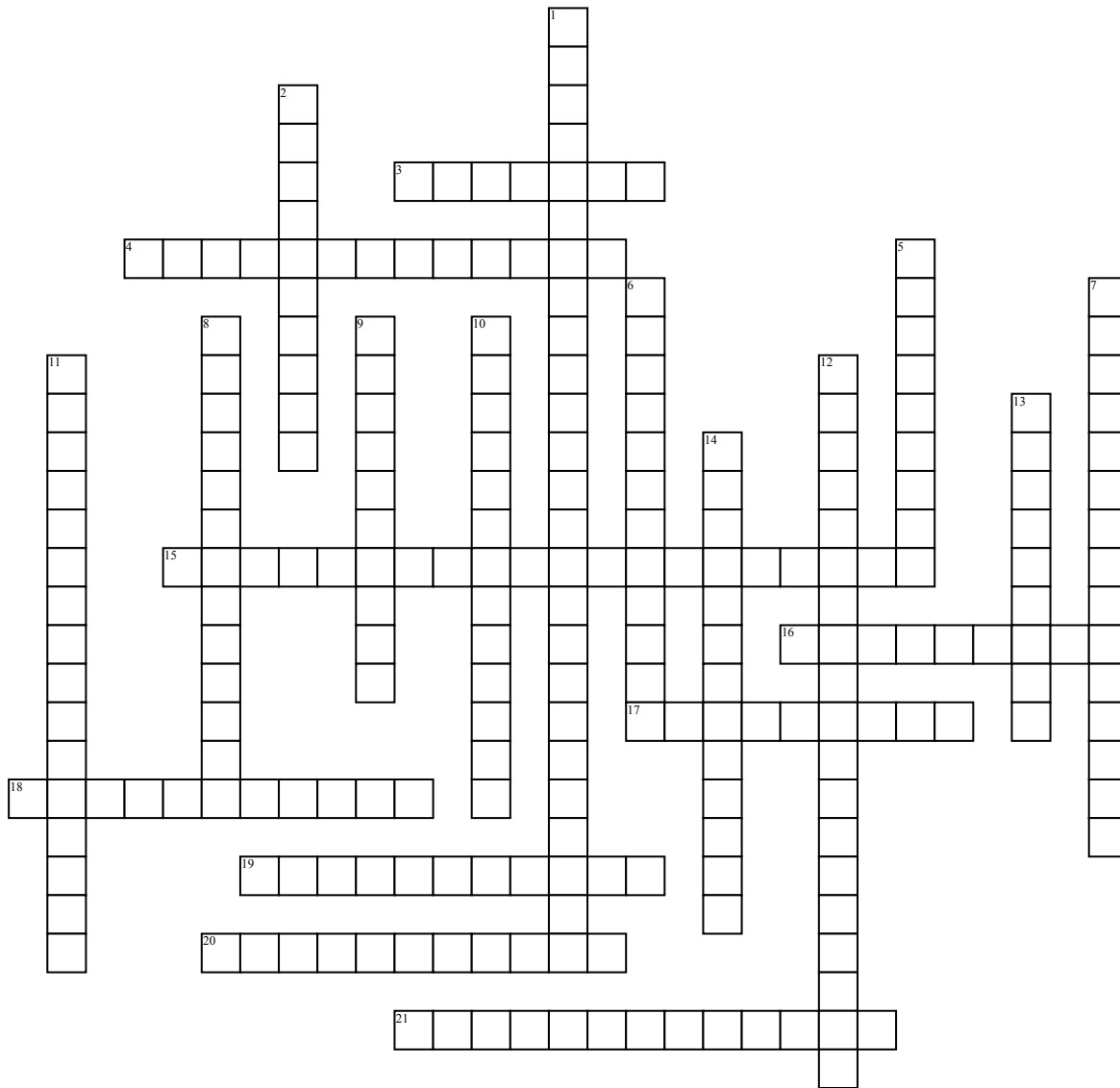


# Unit 1B Ecosystem and Matter Cycling



## Across

3. 19) a body of permeable rock that can contain or transmit groundwater.

4. 16) the process where plants absorb water through the roots and then give off water vapor through pores in their leaves.

15. 3) a pathway by which a chemical substance moves through both the biotic components of Earth.

16. 5) organisms in an ecosystem that produce biomass from inorganic compounds.

17. 2) a substance that provides nourishment

18. 4) the process in which carbon travels from the atmosphere into organisms and the Earth and then back into the atmosphere.

19. 20) water held underground in the soil or in pores and crevices in rock.

20. 13) all the waters on the earth's surface, such as lakes and seas, and sometimes including water over the earth's surface, such as clouds.

21. 17) rain, snow, sleet, or hail that falls to the ground.

## Down

1. 1) the principle that matter cannot be created or destroyed.

2. 15) the envelope of gases surrounding the earth or another planet

5. 6) organisms of an ecological food chain that receive energy by consuming other organisms.

6. 18) water that collects as droplets on a cold surface when humid air is in contact with it.

7. 9) The phosphorus cycle is the biogeochemical cycle that describes the movement of phosphorus through the lithosphere, hydrosphere, and biosphere

8. 10) excessive richness of nutrients in a lake or other body of water, frequently due to runoff from the land, which causes a dense growth of plant life and death of animal life from lack of oxygen.

9. organism, especially a soil bacterium, fungus, or invertebrate, that decomposes organic material.

10. 11) The nitrogen cycle is the biogeochemical cycle by which nitrogen is converted into various chemical forms as it circulates among the atmosphere, terrestrial, and marine ecosystems.

11. 12) the chemical processes by which atmospheric nitrogen is assimilated into organic compounds, especially by certain microorganisms as part of the nitrogen cycle.

12. 8) a set of metabolic reactions and processes that take place in the cells of organisms to convert biochemical energy from nutrients into adenosine triphosphate (ATP), and then release waste products.

13. 14) the regions of the surface, atmosphere, and hydrosphere occupied by living organisms.

14. 16) the process of turning from liquid into vapor.