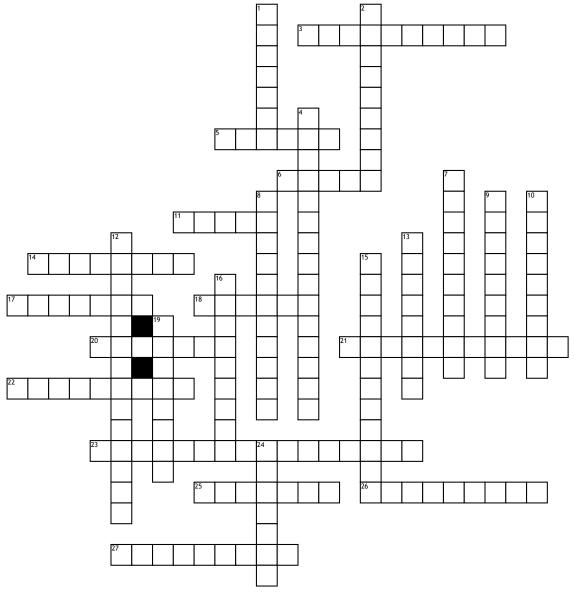
Chapter 2: Principles of Ecology



Across

- **3.** symbiotic relationship in which one organism benefits at the expense of another organism
- 5. anything that takes up space and has mass
- **6.** role, or position, of an organism in its environment
- 11. large group of ecosystems that share the same climate and have similar types of communities
- **14.** chemical substance that living organisms obtain from the environment to carry out life processes and sustain life
- **17.** scientific study of all the interrelationships between organisms and their environment
- **18.** any living factor in an organism's environment
- 20. total mass of living matter at each trophic level
- 21. organism that cannot make its own food and gets its nutrients and energy requirements by feeding on other organisms

- **22.** simplified model that shows a single path for energy flow through an ecosystem
- 23. process in which nitrogen gas is captured and converted into a form plants can use
- **25.** any nonliving factor in an organism's environment, such as soil, water temperature, and light availability
- **26.** symbiotic relationship in which both organisms benefit
- **27.** biological community and all the nonliving factors that affect it

Down

- 1. physical area in which an organism lives
- 2. heterotroph that preys on other heterotrophs
- **4.** process in which fixed nitrogen compounds are converted back into nitrogen gas and returned to the atmosphere
- **7.** group of organisms of the same species that occupy the same geographic place at the same time

- 8. heterotroph that decomposes organic material and returns the nutrients to soil. air . and water, making the nutrients available to other organisms
- 9. heterotroph that eats only plants
- **10.** organism that captures energy from sunlight or inorganic substances to produce its own food
- **12.** exchange of matter through the biosphere involving living organisms, chemical processes, and geological processes
- 13. chemical substance that living organisms obtain from the environmentto carry out li
- **15.** symbiotic relationship in which one organism benefits and the other organism is neither helped nor harmed
- **16.** relatively thin layer of Earth and its atmosphere that supports life
- **19.** heterotroph that consumes both plants and animals
- **24.** model that shows many interconnected food chains and pathways in which energy and matter flow through an ecosystem