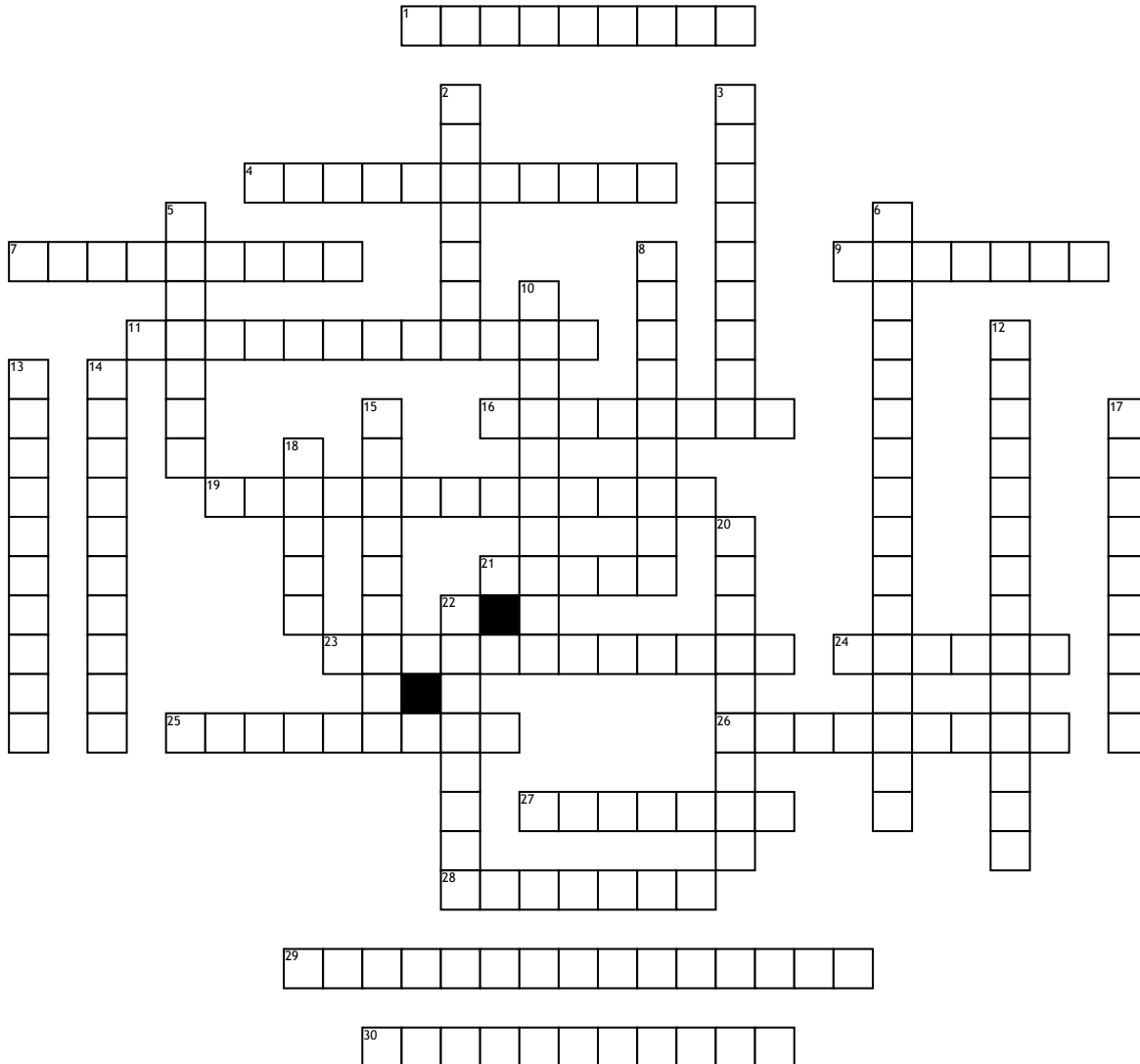


Chapter 2: Principles of Ecology



Across

1. relatively thin layer of Earth and its atmosphere that supports life
4. organism that cannot make its own food and gets its nutrients and energy requirements by feeding on other organisms
7. symbiotic relationship in which both organisms benefit
9. total mass of living matter at each trophic level
11. any living factor in an organisms environment
16. chemical substance that living organisms obtain from the environment to carry out life processes and sustain life
19. any nonliving factor in an organism's environment, such as soil, water temperature, and light availability
21. role, or position, of an organism in its environment
23. symbiotic relationship in which one organism benefits and the other organism is neither helped nor harmed

24. anything that takes up space and has mass
25. simplified model that shows a single path for energy flow through an ecosystem
26. close mutualistic, parasitic, or commensal association between two or more species that live together
27. model that shows many interconnected food chains and pathways in which energy and matter flow through an ecosystem
28. scientific study of all the interrelationships between organisms and their environment
29. process in which fixed nitrogen compounds are converted back into nitrogen gas and returned to the atmosphere
30. heterotroph that decomposes organic material and returns the nutrients to soil, air, and water, making the nutrients available to other organisms

Down

2. each step in a food chain or food web
3. act of one organism feeding on another organism
5. physical area in which an organism lives

6. process in which nitrogen gas is captured and converted into a form plants can use
8. heterotroph that eats only plants
10. group of organisms of the same species that occupy the same geographic place at the same time
12. _____ cycle; exchange of matter through the biosphere involving living organisms, chemical processes, and geological processes
13. _____ community; all the interacting populations of different species that live in the same geographic location at the same time
14. symbiotic relationship in which one organism benefits at the expense of another organism
15. organism that captures energy from sunlight or inorganic substances to produce its own food
17. heterotroph that preys on other heterotrophs
18. large group of ecosystems that share the same climate and have similar types of communities
20. biological community and all the nonliving factors that affect it
22. heterotroph that consumes both plants and animals