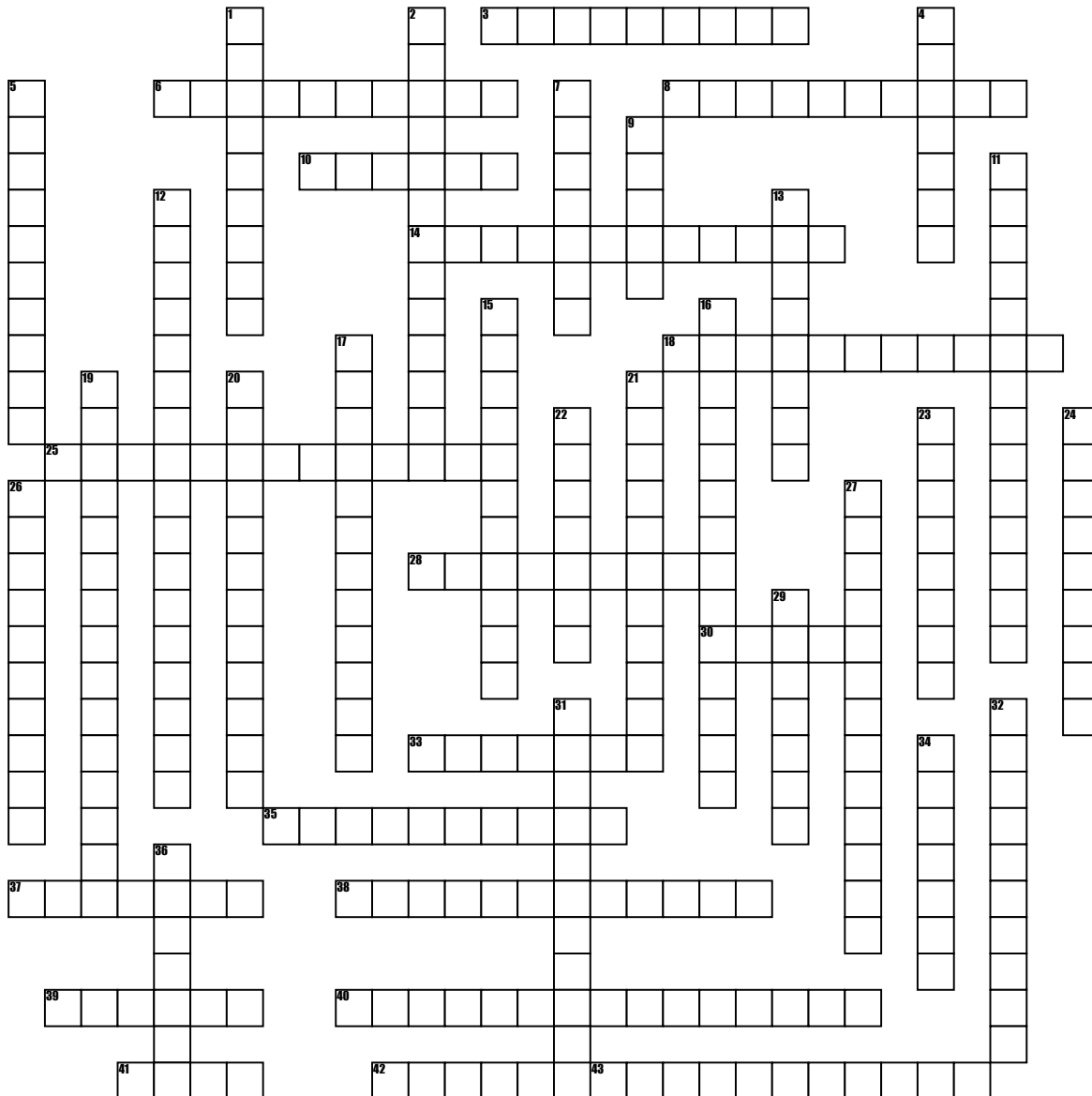


Chapter 1: Earth's Ecosystems

**Across**

3. A biological community of interacting organisms and their physical environment.

6. Refers to the capability of water to neutralize acid.

8. In biology, a population is all the organisms of the same group or species, which live in a particular geographical area, and have the capability of interbreeding.

10. A set of things working together as parts of a mechanism.

14. A leaf of a plant consisting of several or many distinct parts (leaflets) joined to a single stem.

18. A green pigment, present in all green plants and in cyanobacteria, responsible for the absorption of light to provide energy for photosynthesis.

25. Bacteria that obtain their energy through photosynthesis, and are the only photosynthetic prokaryotes able to produce oxygen.

28. A single-celled microscopic animal of a group of phyla of the kingdom Protista, such as an amoeba, flagellate, ciliate, or sporozoan.

30. The organic component of soil, formed by the decomposition of leaves and other plant material by soil microorganisms.

33. Any eukaryotic organism that is not an animal, plant or fungus.

35. An optical instrument used for viewing very small objects, such as mineral samples or animal or plant cells, typically magnified several hundred times.

37. Acidic and basic are two extremes that describe a chemical property chemicals.

38. The transverse osmotic pressure within the cells of a root system that causes sap to rise through a plant stem to the leaves.

39. Are unicellular, although they can form colonies in the shape of filaments or ribbons, fans, zigzags, or stars.

40. Another term for capillarity.

41. The main body or stalk of a plant or shrub, typically rising above ground but occasionally subterranean.

42. A shallow recess, especially one in a wall to display a statue or other ornament.

43. In physiology, respiration is defined as the movement of oxygen from the outside environment to the cells within tissues, and the transport of carbon dioxide in the opposite direction.

Down

1. An organism consisting of a cell or cells in which the genetic material is DNA in the form of chromosomes contained within a distinct nucleus. Eukaryotes include all living organisms other than the eubacteria and archaeobacteria.

2. A nonliving condition or thing, as climate or habitat, that influences or affects an ecosystem and the organisms in it

4. An acid is a molecule or ion capable of donating a hydron, or, alternatively, capable of forming a covalent bond with an electron pair.

5. Another term for pseudopodium.

7. Excellent for lawn care spreads easily for patching bare spots topdressing or new installations.

9. Any of the tubes forming part of the blood circulation system of the body, carrying in most cases oxygen-depleted blood toward the heart.

11. A large group of flagellate eukaryotes that constitute the phylum Dinoflagellata. Most are marine plankton, but they are common in freshwater habitats, as well.

12. A microscope with high magnification and resolution, employing electron beams in place of light and using electron lenses.

13. A straight tapering root growing vertically downward and forming the center from which subsidiary rootlets spring.

15. A type of adventitious root, and they grow from the plant stem or leaf tissues.

16. The process by which green plants and some other organisms use sunlight to synthesize foods from carbon dioxide and water.

17. Any living component that affects the population of another organism, or the environment.

19. A species on which other species in an ecosystem largely depend, such that if it were removed the ecosystem would change drastically.

20. It is usually formed by thin, moderately branching roots growing from the stem.

21. A plastid that contains chlorophyll and in which photosynthesis takes place.

22. The scientific study of interactions among organisms and their environment.

23. A naturally occurring chemical compound, usually of crystalline form and abiotic in origin.

24. A group of people living in the same place or having a particular characteristic in common.

26. A microscopic single-celled organism that has neither a distinct nucleus with a membrane nor other specialized organelles. Prokaryotes include the bacteria and cyanobacteria.

27. The process of water movement through a plant and its evaporation from aerial parts, such as leaves, stems and flowers.

29. Often called amoeboids.

31. A single leaf that is never divided into smaller leaflet units.

32. Also referred to as substratum, refers to the original rock from which something else was formed.

34. The soil lying immediately under the surface soil.

36. The natural home or environment of an animal, plant, or other organism.