

- 1. adaptable:** able to change or be changed in order to fit or work better in some situation or for some purpose
- 2. annual ring:** the increment of wood added during a single growth period, which is usually one year
- 3. canopy:** something that hangs or spreads out over an area
- 4. carnivore:** something that eats meat
- 5. chloroplast:** a cell organelle that produces energy through photosynthesis
- 6. coniferous:** a bush or tree (such as a pine) that produces cones and that usually has leaves that are green all year
- 7. cultivate:** to grow and care for
- 8. deciduous:** shedding its leaves annually
- 9. early wood:** the part of the wood in a growth ring of a tree that is produced earlier in the growing season; also known as spring wood
- 10. ecosystem:** everything that exists in a particular environment, including living things, such as plants and animals, and things that are not living, such as rocks, soil, sunlight, and water
- 11. elliptical:** shaped like a flattened circle
- 12. enzyme:** a chemical substance in animals and plants that helps to cause natural processes (such as digestion)
- 13. evergreen:** trees or bushes that are always green and have leaves year-round
- 14. fire-adapted species:** a species of plant that has developed traits that help them survive wildfire or to utilize resources created by wildfire
- 15. gas exchange:** the diffusion of gases from an area of higher concentration to an area of lower concentration, especially the exchange of oxygen and carbon dioxide between an organism and its environment
- 16. glucose:** a type of sugar that is found in plants and fruits
- 17. hardwood:** a tree that produces wood that is heavy and hard
- 18. herbaceous:** of, relating to, or having the characteristics of an herb
- 19. impermeable:** not allowing something (such as a liquid or gas) to pass through
- 20. late wood:** the part of the wood in a growth ring of a tree that is produced later in the growing season; also known as summer or autumn wood. The cells of late wood are smaller and have thicker cell walls than those produced earlier in the season
- 21. lobe:** a curved or rounded part of something (such as a leaf)
- 22. needle:** a leaf that is shaped like a very thin stick
- 23. pendulous:** hanging down and swinging freely
- 24. perennial:** living for several years or for many years
- 25. physiological process:** the ways in which organ systems, organs, tissues, cells, and biomolecules work together to accomplish the complex goal of sustaining life
- 26. pollinator:** anything that helps carry pollen from the male part of the flower (stamen) to the female part of the same or another flower (stigma)
- 27. primary growth:** growth in plants, especially an increase in length, that results from cell division at the tips of roots and stems
- 28. pulp:** a soft material that is made mostly from wood and is used in making paper
- 29. respiration:** a process that involves using the sugars produced during photosynthesis plus oxygen to produce energy for plant growth
- 30. root hair:** thin hairlike outgrowth of a cell just behind the tip; absorbs nutrients from the soil

- 31. sap:** a watery juice inside a plant that carries the plant's food
- 32. secondary growth:** growth that results from cell division that causes the stems and roots of a plant to thicken
- 33. stomata:** cell structures in the epidermis of tree leaves and needles that are involved in the exchange of carbon dioxide and water between plants and the atmosphere
- 34. surface root:** roots growing at or slightly above the soil surface
- 35. taproot:** a large, central, and dominant root that grows vertically downward
- 36. timber:** trees that are grown in order to produce wood
- 37. timber volume:** a measurement used to represent the amount of usable wood in a forest; also known as wood or cord volume
- 38. topography:** the features in an area of land
- 39. transpiration:** the process of water movement through a plant and its evaporation from aerial parts, such as leaves, stems and flowers
- 40. vapor:** a substance that is in the form of a gas or that consists of very small drops or particles mixed with the air
- 41. whorl:** an arrangement of leaves, petals, etc., that forms a circle around a stem
- 42. wood biomass:** any timber-derived product (softwood or hardwood) capable of being converted to energy
- 43. xylem vessel:** a compound tissue in vascular plants that helps provide support and that conducts water and nutrients upward from the roots