- 1. **Photosynthesis** process where plants use energy from sunlight to make food from CO₂ and H₂O
- 2. Chlorophyll- green pigment in chloroplasts that captures energy from sunlight
- 3. <u>Chloroplast</u>- organelles in plant cell that contain chlorophyll
- 4. **Producer** organism that makes its own food
- 5. <u>Cuticle</u>- waxy coating on the surface of plants to keep them from drying out
- 6. Cell wall- sturdy outside shell of a plant cell that is made mostly of fiber
- 7. **Sporophyte** stage in a plant life cycle when spores are made
- 8. <u>Gametophyte</u>- stage in a plant life cycle where male gametophytes produce sperm and female gametophytes produce eggs
- 9. <u>Non vascular plant</u>- has no special tissues for moving food or water. They move by diffusion only Examples: moss, liverwort, hornwort
- 10. <u>Diffusion</u>- when a substance moves (seeps) from an area of high concentration to an area of low concentration
- 11. **Vascular plant** has special tissues for moving food or water (xylem and phloem)
- 12. **Rhizoid** root-like structure in nonvascular plants
- 13. **Rhizome** underground stem that can produce new plants in new locations
- 14. **Spore** a single cell that can develop into a plant (like a seed)
- 15. **Pollen** granule made by a flower that contains sperm
- 16. <u>Cotyledon</u>- stored food in a seed that is used by the young plant
- 17. **Seed coat** protective coating of a seed
- 18. **Gymnosperm** seed making plant that does not make flowers or fruit but instead wraps seeds in cones
- 19. **Angiosperm** seed making plant that makes flowers and wraps seeds in fruit
- 20. **Pollination** the point in time where pollen gets stuck to the stigma
- 21. <u>Monocot</u>- angiosperm that has one cotyledon, leaves with parallel veins, scattered vascular tissue, and flower petals in 3s.
- 22. <u>Dicot</u>- angiosperm that have two cotyledons, leaves with branching veins, vascular tissue in a ring, and flower petals in 4s or 5s.
- 23. **Xylem** vascular tissue that transports water and minerals
- 24. **Phloem** vascular tissue that transports food molecules
- 25. Root cap- protects the tip of a root and secretes a slimy substance so the root can move through soil easier
- 26. **Fibrous root system-** branched roots (usually monocots)
- 27. **Tap root system** one main root (usually dicots and gymnosperms)
- 28. **Herbaceous stem-** soft and flexible stem
- 29. Woody stem- rigid stem
- 30. **Epidermis** outside layer of cells on a plant
- 31. Palisade layer- densely packed layer of cells in the leaf with many chloroplasts
- 32. Spongy layer- lightly packed layer of cells in the leaf that allow gases to move about freely
- 33. **Sepal** leaves at the base of a flower that protect it when it is still a bud
- 34. **Petal** colored flat portion of a flower that attracts pollinators
- 35. **Pistil** female reproductive structure in a flower
- 36. **Stigma** the top sticky part
- 37. **Style** the stalk-like middle part
- 38. **Ovary** the bottom part that holds eggs
- 39. **Stamen** male reproductive structure in a flower
- 40. **Anther** the top part with pollen in it
- 41. **Filament** the stalk-like middle part
- 42. Ovule- contains the egg
- 43. **Nitrogen** a mineral found in soil, taken up by the roots, and used in a plant to make proteins
- 44. **Tissue** many cells performing the same function
- 45. **Organ** many tissues working together
- 46. **System** many organs working together