

- 1. *Talons* A claw, especially one belonging to a bird of prey.
- 2. *Feathers* One of the soft and light parts of a bird that grows from the skin and covers the body. It also provides insulation and allows them to fly.
- 3. *Fur* The soft thick hair that covers the bodies of certain animals (mammals) such as the bear, cat or fox.
- 4. *Scales* One of the many small, hard, thin plates that cover fish, reptiles, and other animals.
- 5. *Camouflage* The coloration or shape of animals that makes them hard to see against the background.
- 6. **Warning coloration** Bright colors on an animal's body that lets its enemies know of its unpleasant characteristic (poison, sting, scent, etc.).
- 7. *Habitat* The home of an animal or plant.
- 8. *Nest* The place where an animal lays its eggs and takes care of its young.
- 9. *Seed dispersal* The way seeds get from the parent plant to a new place.
- 10. *Seed* A seed is a fertilized ovule containing a plant embryo. Given the appropriate growth conditions, it will become a new plant.
- 11. *Wind dispersal* Blows seeds with the hair-like or wing-like structure to a new place.
- 12. Water dispersal Carries seeds that are able to float on water going downstream.
- 13. *Animal dispersal* Animal's fur or birds' feathers and feet can carry the seeds to other locations. Animals can digest the seeds and eliminate them in another location.



- 1. *Water Cycle* The circulation of the earth's water through all of its stages. The cycle of water goes from the atmosphere to the Earth and back again through the following steps: evaporation, transpiration, condensation, precipitation, percolation, runoff, and accumulation.
- 2. *Watershed* The land area that captures and directs rainwater and snowmelt to a river, lake or ocean.
- 3. *Wetland* An area of land with wet soil, which is rich in life. Marshes and estuaries are examples of wetland habitats.
- 4. *Condensation* The changing of water from a vapor (gas or steam) into a liquid. This occurs when water vapor in the atmosphere rises, cools, contracts, and turns into small water droplets, forming clouds.
- 5. *Precipitation* Water that falls from the sky in the form of rain, snow, hail, or sleet.
- 6. *Percolation* When a liquid slowly passes through something that is considered a filter. Example: when water is absorbed into soil.
- 7. *Accumulation* Gathering area of water including rivers, streams, oceans, and groundwater/aquifers.
- 8. *Transpiration* –The passage of water vapor from the leaves of plants (through stomata) in the atmosphere (air).
- 9. *Habitat* The natural environment of an organism; place that is natural for the life and growth of an organism.
- 10. *Adaptation* A change in behavior, structure, or habitat of a plant or animal that helps it survive.
- 11. *Herbivore* An animal that eats plants. They have flat teeth for grinding the plants.
- 12. *Carnivore* An animal that eats meat. The animals will have sharp teeth for tearing meat off the bone.



- 13. *Omnivore* An animal that eats both plants and meat. They have sharp teeth in front and flat teeth in back.
- 14. *Scavenger* An animal that feeds on dead or decaying organic material.
- 15. *Opportunistic Eater* Eats whatever food is available.
- 16. *Predator* An animal that hunts other animals.
- 17. *Prey* An animal that is hunted by a predator.
- 18. *Diurnal* A creature that is active during the day.
- 19. *Nocturnal* A creature that is active during the night.
- 20. *Crepuscular* A creature that is active during twilight hours dusk and dawn.
- 21. *Camouflage* An adaptation that helps a plant or animal blend in with their surroundings.
- 22. *Echolocation* An adaptation that allows some animals, such as bats and dolphins, to use sound to locate objects.
- 23. Olfactory Nerves The bundle of nerves responsible for an animal's sense of smell.
- 24. Auditory Nerves The bundle of nerves responsible for an animal's sense of hearing.
- 25. **Organism** Any living thing such as a plant or animal.
- 26. *Metamorphosis* A change from an immature stage to an adult stage, sometimes in one or more stages. Example: When a caterpillar becomes a butterfly.
- 27. Life Cycle The series of changes an organism undergoes throughout its lifetime.



- 1. *Resourceful* having the ability to find quick and clever ways to overcome difficulties.
- 2. Serrano Indians a Native American tribe of Southern California.
- 3. *Yuhaviatam* the native language word the Serrano people used to describe themselves, meaning, "People of the Pines."
- 4. *Wiich* acorn porridge: The Serrano Indians would grind acorns into flour and cooked it into a type of porridge.
- 5. *Kiich* dome-shaped shelter that was formed by plant debris, woven plant strands, and mud.
- 6. *Mano* (Spanish for hand) is a ground stone tool used with a *metatae* to process or grind food by hand.
- 7. *Metatae* a large stone with a depression or bowl, used for grinding.
- 8. *Erosion* the gradual degradation or destruction of something due to natural causes such as wind or water, or human activities such as the removal of vegetation.
- 9. *Weathering* the process of breaking down substances such as rock by such forces as water, ice, chemicals, growing plants, and changing temperatures.
- 10. *Deposition* the process in which sediment from erosion and weathering is relocated by forces of nature and relocated to a new place.
- 11. *Average* average value in a set of numbers is the middle value, calculated by dividing the total of all the values by the number of values.
- 12. *Rock Cycle* a cycle in which rocks change from one form to another in the Earth's crust.
- 13. *Igneous Rock* is formed through the cooling and solidification of magma or lava.
- *14. Metamorphic Rock-* is a type of rock which has been changed by extreme heat and pressure.



- 15. Sedimentary Rock-a compressed rock formed from fragments of many other rocks or material, initially deposited by water or air. Many of these rocks have visible layers; such as in the Grand Canyon.
- 16. *Mineral* a solid, inorganic substance of natural occurrence that make up rocks.



1. **Scientific method:** is a method of research in which a problem is identified, relevant data is gathered, a hypothesis is formulated from this data and the hypotheses is empirically tested.

2. **Food Chain** – A community of organisms where one member consumes another in a sort of chain. Example: Caterpillar eats the plant, the frog eats the caterpillar, the snake eats the frog, and the owl eats the snake.

3. Energy Pyramid – The transfer of energy through various food chains.

- 4. **Producer** Plant or organism that can change energy from the L.A.W.S. into food.
- 5. **Consumer** Eats plants and/or animals.
- 6. **Decomposers** An organism that breaks down organic matter through consumption.
- 7. Fungi An organism that does not photosynthesize and that produces spores for reproduction.
- 8. Scavenger Anything that feeds on leftovers from other animals or decaying matter.
- 9. Biotic- A living organism or factor that affects other living organisms.

10. **Abiotic**– Non-living (no life has existed, nor will it exist into the future) factors that affect living organisms.

11. L.A.W.S. of Nature – The four abiotic factors required for all life on Earth: Light, Air, Water, and Soil minerals.

12. **Ph ("potential hydrogen") Test** – measures the concentration of hydrogen ions in a solution to determine its relative acid or base concentration.

13. Invertebrate – Animal without a backbone.

14. Vertebrate – Animal with a backbone.

15. **Indicator Species** - A species of animal such as an invertebrate that can be used to determine the quality of the environment.

16. Food Web – A series of organism interactions through predator and prey activities.



17. Algae - An organism closely resembling plants in the order of protista.

18. Seeds – A seed is a fertilized ovule containing a plant embryo. Given the appropriate growth conditions, it will become a new plant.

19. **Photosynthesis** – The process through which plants use water and carbon dioxide to create their food, grow and release excess oxygen into the air.

20. Germination – The process where a seed sprouts and then grows and develops into a plant.

21. **Seed Dispersal -** The way that seeds move from place to place is called, "seed dispersal."

- 1. Scattering and Rolling Dispersal
- 2. Mechanical Propulsion Dispersal
- 3. Water Dispersal
- 4. Wind Dispersal
- 5. Animal Dispersal

22. Endangered –Species is any type of plant or animal that is in danger of disappearing forever.

23. Extinct – If a species, or type of plant or animal dies out completely, it becomes extinct.

24. Ecology – Is the study of the relationships between living things and their surroundings, or environment.

25. Ecosystem – An ecosystem includes all of the living things (Biotic) in a given area, interacting with each other, and also with their non-living environments (Abiotic).

26. **Preservation** – The activity of protecting something from loss or danger.

27. **Human Impact** - The positive and negative ways in which humans interact with and transform the Earth.



28. Encroachment - To advance beyond proper, established, or usual limits.



1. Navigation – the art or science of plotting, ascertaining, or directing a course.

2. **Compass** – an instrument for determining directions, as by means of a freely rotating magnetized needle that indicates magnetic north.

3. **Topographic Map** – a map that includes the relief features or surface configuration of an area.

4. Altitude (elevation): – The vertical height of an object above sea level.

5. **Contour** – A line drawn on a map connecting points of the same height above sea level.

6. Declination – Degree difference between true north and magnetic north.

7. Inclination – Slope

8. **Latitude** – The angular distance in degrees north or south of the equator to a point on the Earth's surface.

9. **Longitude** – The angular distance in degrees east or west of the prime meridian at Greenwich to a point on the earth's surface.

10. Aquifer - An underground bed of saturated soil or rock that yields significant quantities of water that may be pumped to the surface for use by people, livestock or watering crops.

11. Watershed - The land area from which surface runoff drains into a stream channel, lake, reservoir or other body of water; also called a drainage basin.

12. Potable - Safe to drink

13. Non-Potable - water that is not of drinking quality, but can still be used for other purposes

14. Waterborne disease - Any illness transmitted through ingesting of or contact with water contaminated by disease-causing organisms.

15. Pathogen - a bacterium, virus, or other microorganism that can cause disease.



16. Riparian Area - Land areas directly influenced by a body of water; usually have visible vegetation or other physical characteristics showing this water influence. Stream banks, lake borders and marshes are typical riparian areas.

17. Hydration – The process of providing an adequate amount of liquid to bodily tissues.

18. **Insulation** – A material covering that prevents or reduces the passage, transfer, or leakage of heat.

19. Altitude (elevation): - The vertical height of an object above sea level.

20. **Necessity** - Something that is required for a given task such as wilderness survival, often confused with items that are wanted but not necessary.