

ACT Science Vocabulary: Important Tips

Note: The ACT Science vocabulary list below includes words that the ACT test expects you to know and typically will not define them for you. The ACT exam does not test more specific terminology, such as "male-to-female body mass ratio", and often defines these more specific terms in the text or table and figure notes in the passages.

ACT Science Vocabulary: Practice Set #1

1. **absolute zero:** lowest-possible temperature, approximately -273 degrees
2. **acceleration:** the rate of change of velocity
3. **acid:** compound with a pH less than 7
4. **alloy:** a substance composed of two or more metals (synonym: **amalgam**)
5. **aerobic respiration:** The breakdown of glucose in the body of an animal to supply muscles with oxygen
6. **alkalinity:** Having a pH greater than 7 (contrast with basic, which meaning having PH less than 7)
7. **antigen:** A substance such as a toxin or enzyme that is capable of eliciting an immune response
8. **asteroids:** Small celestial bodies that revolve around the sun
9. **barometer:** an instrument used to measure atmospheric pressure
10. **biomass:** Total mass of all living matter within a given area
11. **boiling point:** the temperature at which additional thermal energy causes a substance to change from liquid to vapor
12. **carbohydrate:** an organic compound like sugar or starch that contains carbon, hydrogen, and oxygen at a ratio 1:2:1; also the main source of energy for humans
13. **carcinogen:** cancer-causing agent
14. **catalyst:** a substance that speeds up a chemical reaction without being changed by the reaction
15. **chlorophyll:** the main pigment in plants that captures light energy during photosynthesis
16. **compound:** a substance composed of two or more chemically bonded elements
17. **compressibility:** The ease at which pressure can alter the volume of matter

18. **conductor**: a material that allows heat or electricity to flow through it with minimal resistance
19. **control**: a sample in which no variables are tested, thus serving as a basis for comparison
20. **control variable**: a variable that stays constant in an experiment, allowing the effect of another variable to be measured
21. **diffusion time**: The time that it takes for material to spread from one area to another
22. **ecological succession**: a sequence of changes in the plant or animal life of a region or habitat
23. **ecology**: The field of science that concentrates on relationships between organism and their environments
24. **electron**: a negatively charged fundamental atomic particle
25. **emulsion**: A state in which one liquid is suspended in another because the liquids will not dissolve in one another

ACT Science Vocabulary: Practice Set #2

1. **erosion**: wearing away, typically by running water or wind
2. **evaporation**: the changing of liquid into gas
3. **equilibrium**: a state of balance
4. **experimental Variables**: Elements of an experiment that are changed (distinguished from constants), which are held the same in order to produce significant results
5. **fahrenheit**: A temperature scale in which the boiling point of water is 212 degrees and the freezing point is 32 degrees
6. **fermentation**: The chemical process of breaking down an organic substance into simpler substances, such as a fermentation of sugar to alcohol
7. **friction**: the force resistant to motion
8. **habitat**: the area of the ecosystem where a plant or animal naturally lives
9. **herbivore**: an animal that eats only plants
10. **hormone**: a chemical substance secreted by a gland of the body that affects change on other parts of the body
11. **humidity**: the amount of water vapor in the air

12. **Hydrogen bonding:** The chemical bonding of hydrogen atom with another electronegative atom
13. **Indigenous:** Native to or naturally existing in a certain area
14. **Intracellular:** Fluid in cells
15. **infrared radiation:** electromagnetic waves whose wavelength is longer than that of visible light
16. **insulator:** a substance that blocks the flow of heat or electricity
17. **ion:** a molecule or atom that has become charged by either gaining or losing an electron
18. **isotope:** a type of element with the same number of protons per atom but different number of neutrons
19. **kinetic energy:** the energy of an object in motion
20. **lipid:** An oily or waxy organic compound that cannot be dissolved in water
21. **lithosphere: A substance (such as air) that possesses the quality of indefinite expansion**
22. **manometer**
23. **melting point:** the temperature at which a substance changes from solid to liquid state
24. **molecular weight:** The weight of all the atoms in a molecule
25. **neutron:** an atomic particle that has no charge

Note: While vocabulary is important, **learning how to approach the Science section and manage your time well is equally important.**

ACT Science: Practice Set #3

1. **organic matter:** Matter that is derived from living or formerly living organisms
2. **osmosis:** the movement of liquid through a membrane
3. **parasite:** an organism that invades another organism and feed off that organism
4. **pH:** a scale from 1-14; represents the acidity or alkalinity of a solution; low values are acidic, 7 is neutral, high values is alkaline
5. **photosynthesis:** the process in which plants use the sun's energy to convert carbon dioxide and water into glucose
6. **pigmentation:** coloration

7. **protein:** A compound that consist of amino acids and plays various structural, mechanical and nutritional roles within the organism
8. **proton:** a positively charged atomic particle
9. **radioactive decay:** A natural process by which an atom of a radioactive isotope spontaneously decays into another element
10. **specific gravity:** The ratio of the weight of one substance to the weight of another substance
11. **starch:** a complex carbohydrate found in many vegetables
12. **ultraviolet radiation:** electromagnetic waves with wavelength shorter than that of visible light
13. **vapor:** the gaseous for of liquid
14. **velocity:** speed of motion
15. **viscosity:** a liquid resistant to flow
16. **wavelength:** the distance between repeating crests of a wave

Make Flashcards

Important: Don't just read over the ACT Science Vocabulary list below. Get out a pen and create a flashcard for each term that you are not familiar with.

Also, remember, the ACT Science does not expect you to know the exact definition as much as the general concept and the context the terms is used in the passages. So, grab a pencil and start creating those flashcards!

Note: The makers of the ACT do not expect you to know very specific science terminology, and the test makers frequently define specific scientific terms. **If you see an unfamiliar term in the question, check to see if the term is defined in the text paragraphs.**

For more information see Prep Scholar website

Karen H. Reeves
Edmund Burke Academy

