

# Mid Term Vocabulary Review

1. Hypothesis – Your guess that you are testing with an experiment.
2. Experimental group – The group that is trying something new to test the hypothesis.
3. Control Group – The “normal” group. You compare other groups to this group.

## DONE BY ALL LIVING THINGS (4-8)

4. Reproduction – Not done by every living thing.
5. Metabolism – Activities in cells that use energy.
6. Homeostasis – Keeping the conditions inside your body the way that they are supposed to be. (Keeping your body temperature the same)
7. Response to environment – You react to changes in the world. (Flinching at a loud noise)
8. Growth & Development – Living things get bigger and change in their lifetime (going through puberty)
9. Proton – Protons have a positive charge. Located in an atoms nucleus.
10. Neutron – Neutrons have no charge. Located in an atoms nucleus.
11. Valence electrons – Electrons in the outer orbit. Atoms want 8.

12. Mass number – (# neutrons + protons)
13. Inorganic molecule – not made with carbon
14. Organic molecule – made with carbon (most of what life is made of)
15. Covalent bond – bond formed by sharing electrons (Co-operate)
16. Hypertonic – environment is too salty, sucks water out of cells
17. Hypotonic - environment is too watery, water flows into cells
18. ATP – form of energy cells can use, 1 sugar = 36 ATP
19. Monomer – basic building block of molecules like protein, carbs, lipids and nucleic acids.
20. Polymer – large molecules formed by stringing many monomers together.
21. Polarity – molecules with uneven electrical charges (like a magnet has a north and south pole) Water is polar.
22. Cohesion – water sticks to water
23. Adhesion - water sticks to other molecules

These two (cohesion and adhesion) is what lets water flow through organisms (blood, tree sap).

24. PH – 1 = most acidic, 7 = neutral, 14 = most basic
25. Organelle – The small structures inside of cells (mitochondria, chloroplasts, golgi body, etc.)
26. DNA – The full set of instructions in a cell. You have one copy.  
(The instruction manual)
27. RNA – The instructions for making one type of protein.  
(Photocopies of just one page)
28. Enzyme – Enzymes speed up reactions. Enzymes are specific.  
One enzyme does one job. (One key fits one lock).
29. Equilibrium – Balance, equal. When the number of molecules inside the cell and outside the cell are equal.
30. Photosynthesis – Turning water and carbon dioxide into sugar using the energy from sunlight.

A two-step process:

1. Light dependent reaction (depends on light)
  2. Light independent reaction (does not need light)
31. Diffusion – molecules move from an area of high concentration (a lot) to an area of low concentration (a little).
32. Eukaryote – (you) Cells with organelles
33. Prokaryote – Cells without organelles (bacteria)

34. Light dependent reactions – Plants collect the energy in sunlight.  
The first step of Photosynthesis.
35. Cellular respiration – Breaking down sugar to release energy for cells.
36. Aerobic respiration – Breaking down sugar using oxygen. (Most organisms do this)
37. Anaerobic respiration – Breaking down sugar without oxygen.  
(Mostly bacteria)
38. Autotroph – Organisms that make sugar for themselves. (Does photosynthesis → plants)
39. Heterotroph – Organisms that have to eat another thing to get the sugar they need. (humans, animals)
40. Light Independent Reactions – The second step of photosynthesis.  
When plants use the collected energy to make sugar (do not need light for this step).