

# General Biology –Chapter 2 Review

## Mary Stangler Center for Academic Success

*This review is meant to highlight basic concepts from Chapter 2. It does not cover all concepts presented by your instructor. Refer back to your notes, unit objectives, labs, handouts, etc. to further prepare for your exam.*

1. Define and fill in the table:

a. Atom –

Subatomic Particle	Charge	Location	Molecular weight
Proton			
Neutron			
Electron			

2. Draw a phosphorus atom including the correct number of protons, neutrons and electrons.

3. Define the following:

a. Atomic mass:

b. Isotope:

c. Ion:

4. Differentiate between a molecule and a compound.

5. Define and list the differences between ionic, covalent, and hydrogen bonds. Rank them in order of increasing bond strength.

6. Discuss properties of water that make it the most essential molecule of life.

7. Define an acid and a base. Give an example of pH for a strong acid and a strong base.

8. What is a buffer?

Fill in the blank/ True or False

9. If an atom contains 11 protons and 12 neutrons its atomic number will be \_\_\_\_\_.

10. A covalent bond is when two atoms \_\_\_\_\_ electrons.

11. If an atom gains an electron it forms a \_\_\_\_\_ charged ion.

12. N<sub>2</sub> is an example of a compound. True or False?

13. A(n) \_\_\_\_\_ is formed when oppositely charged ions are attracted to each other.

14. Water sticks to itself because of \_\_\_\_\_ bonds.

15. A substance with a high pH value is considered to be acidic. True or False?