

Biochemistry Enzymes

2.2

9/21-

Enzyme 9/26

1. Make Observations about the celery
2. Lab Discussion

Biology Enzyme 9/21

1. List the unique properties of water. Include a brief description of each.
2. Draw the following chart on a clean sheet of paper.
Label the paper Properties of Water Lab

Observation	Qualitative Observations	Quantitative Observations
0 Hours (Wed)		
24 Hours (Thurs)		
48 Hours (Fri)		
96 Hours (Mon)		

3. Below the table skip a couple lines.
4. Label the next section- The climbing property of water.

(Notes) **Water moves to tops of trees due to capillary action combines with root pressure and **evaporation** from the stomata (openings) in the leaves.**

5. Answer question- How fast do you think water would climb a strip of absorbent paper about 1.5cm wide?
About one cm per ___minutes.

6. Note the time the paper was placed in the water.
7. How does the ink change?
8. How long did it take the water to climb to the top?
9. What was the rate of water flow up the paper? _____cm/min
10. Label the next section DENSITY OF WATER
11. Observe and record observations of what solid oil does in liquid oil.
12. Observe and record observations of what solid water does in liquid water.
13. Label the next section Water the Universal Solvent -- leave room.

Enzyme 9/22

1. Make Observations about celery.
2. Draw a picture illustrating how the polar water molecule forms hydrogen bonds.
3. How do polar molecules differ from nonpolar molecules? How does this affect their interactions?
4. What determines whether a compound dissolves in water? Examples of things that should dissolve in water.

Enzyme 9/26

1. Make Observations about your celery.
2. What allowed the water to stay on the penny for so many drops?
3. Explain the difference between cohesion and adhesion. Why is each important in biology?
4. What type of molecules will dissolve in polar solvents?
5. What is a solution? What are the two parts?

Enzyme 10/6 * Starter Collection

1. What are the unique properties of water?
2. Explain the difference between cohesion and adhesion.
3. What type of molecule is water? How does this affect how it interacts with other substances?

Graphing Practice 10/7

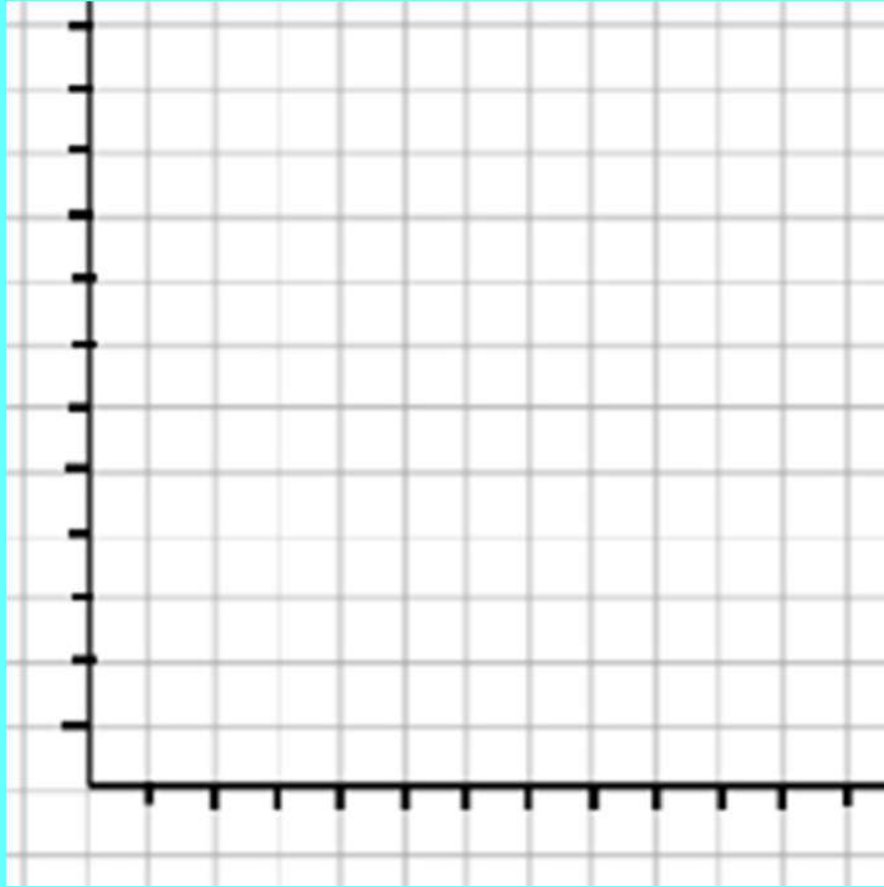
1. What axes is the independent variable graphed on?
Dependent variable?

- For each experiment described below write the independent and dependent variables on the appropriate axes. Include units when appropriate.

2. A ball is dropped from several distances above the floor in meters and the height it bounces is then measured in centimeters.

3. A candle was burned under glass jars of different volumes (in mL) to see if the volume of the jar affects the length of time (in seconds) the candle burns.

4. A fisherman used fishing lines of several different gauges (test pounds) and recorded the number of fish caught on each gauge.

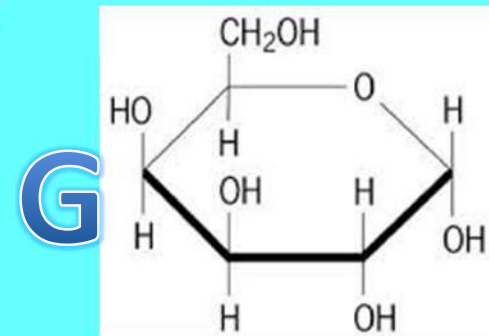
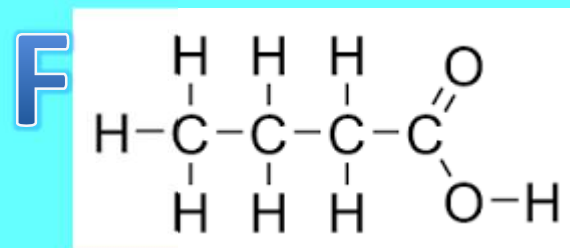
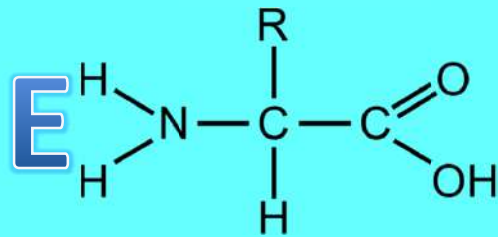
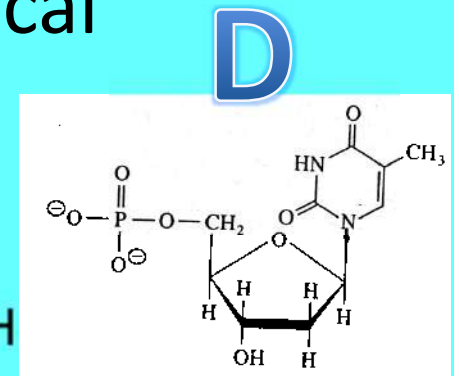
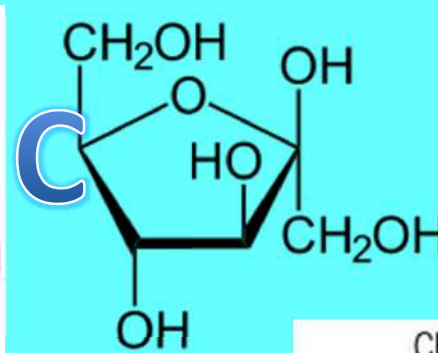
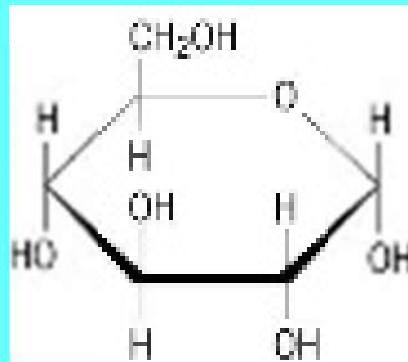
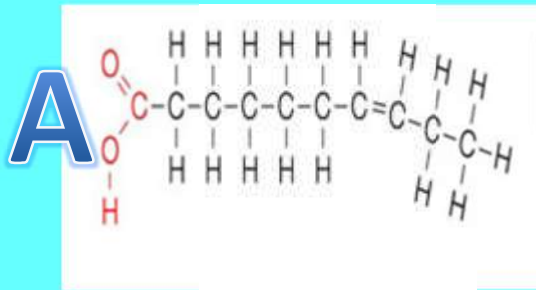


Enzyme 10/13

1. What is the name to describe compounds containing carbon?
2. How many valence electrons does Carbon have? What does this mean for how carbon bonds.
3. What are the 4 biomolecules?
4. What is a monomer?
5. What does it mean to be an isomer?

Enzyme 10/17

1. What are the four biomolecules? What is the name of the monomer for each?
2. Identify each of the following chemical structures.



For the quiz tomorrow:

You will have to:

List 4 biomolecules and their monomers

Identify monomer structures

Draw some monomers structure

Know how many different amino acids there are

Know 2 types of Nucleic Acids

Know difference between unsaturated and saturated fatty acids.

Enzyme 10/19

1. When multiple monomers are linked together they form a _____.
2. What type of bonds link amino acids?
3. What is the chemical makeup of water?

Enzyme 10/20 - Review

1. What are the 2 major types of bonds? Compare and contrast both. Give an example for each.
2. What are the unique properties of water? Define/explain each.
3. Compare and Contrast acids and bases. Give an example of each.
4. What are the 4 biomolecules and their monomers?
5. What is an atom? Draw a diagram of an atom labeled with its parts.
6. Draw a diagram of the composition of matter using matter, atoms, pure substances, mixtures, elements, compounds, homogeneous mixture, heterogeneous mixture.
7. What is an ion and how is it formed?