

Unit 1 – Biochemistry

I can describe the pH scale and give examples of substances that are acidic and basic

What is pH? _____

Label the pH Scale with acids, bases, and neutral. Draw arrow to indicate the increasing strength.

0 1 2 3 4 5 6 7 8 9 10 11 13 14

Examples:

Acid

Bases

Neutral

What is a buffer? _____

I can define organic and inorganic in terms of biochemistry and give examples of each.

Organic

Inorganic

Organic	Inorganic

I can list the four biological molecule groups and give examples of each. (Including monomers & polymers)

- 1.
- 2.
- 3.
- 4.

I can describe and identify (visually) the structure of carbohydrates, proteins, lipids, and nucleic acids.

I can explain and identify the function of the four (4) biological molecules.

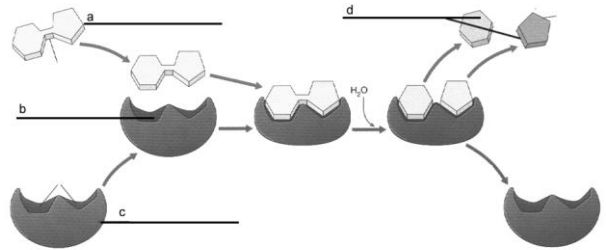
- 1.
- 2.
- 3.
- 4.

I can diagram and label the structures of an enzyme and explains its function.

Enzyme:

Catalyst:

Label the diagram below: *Enzyme, Product, Active Site, Substrate*



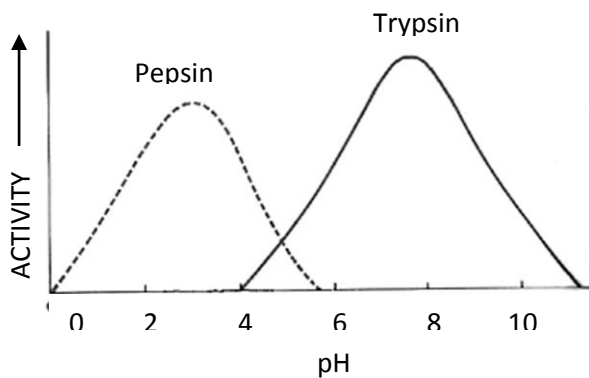
I can identify an unknown substance and which biological molecule group it belongs to using indicators.

Indicator	Macromolecule	Initial Color	Positive Change

I can explain what it means for enzymes to function best at optimum levels.

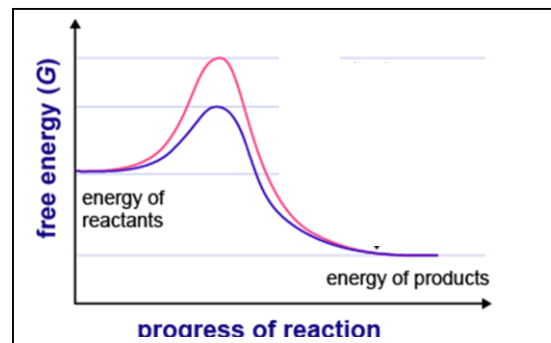
Factors that affect enzyme catalyst are: _____ and _____

Define denature:



At what pH do both enzymes have activity? _____

What is the optimum pH for Trypsin? _____



What is activation energy?

What do enzymes do to activation energy?