

### ***EOC Review Part 3***

#### ***Cellular Basis of Life***

What does the term “membrane-bound organelles mean?” What cell type are they found in?

What are the three parts of cell theory?

What is the function of the cell membrane?

Complete the table below.

<b>Cell Part</b>	<b>Structure Description</b>	<b>Function</b>
Nucleus		
Cell Membrane		
Cell wall		
Mitochondrion		
Vacuole		
Chloroplast		
Ribosome		
Flagellum		

Which organelles/structures are found only in animal cells?

Which organelles/structures are found only in plant cells?

What organelle is very plentiful in muscle cells in order to provide the energy for movement?

Put the following in order from smallest (1) to largest (4):

Organ systems

Cells

Organs

Tissues

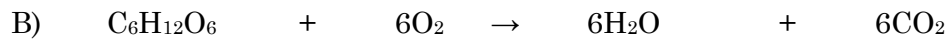
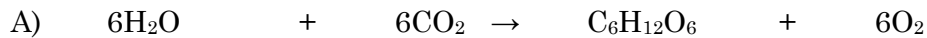
What are the reactants and products for each of these?

Process	Reactant(s)	Product(s)
Photosynthesis		
Aerobic respiration		
Anaerobic respiration		

What are the three steps to aerobic respiration?

Give some examples of what ATP energy is used for.

Label the following molecules in these equations (water, glucose, oxygen, carbon dioxide).



What happens during anaerobic cellular respiration?

Describe the structure and function of enzymes, and explain their importance in biological systems.

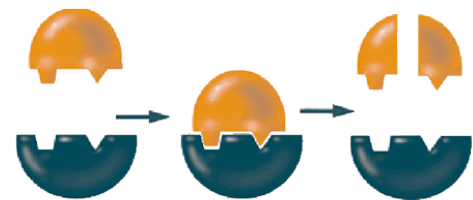
Explain the importance of the shape of an enzyme.

How do extreme pH and temperature extremes affect enzymes? (What is denaturation?)

All (save for a few) enzymes end in what suffix?

Label the picture (right) with the following enzymatic reaction:

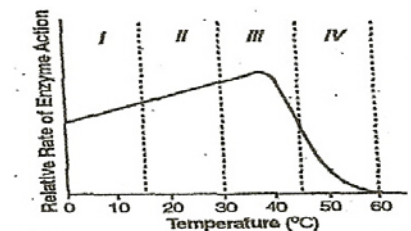
*Substrate, Product(s), Enzyme-substrate complex, Enzyme*



In the first graph, at what temperature does the enzyme work best?

At what temperature does this enzyme start to denature?

How can you tell?



In the second graph, which enzyme (X or Y) would be used in acidic conditions, and how can you tell?

