

Digestion Systems Worksheet
Biology 100C

1. What are the four main stages of food processing?

Ingestion, Digestion, Absorption, Elimination

2. In digestion, macromolecules are _____ **broken down into their smallest subunits**_____.

3. Polysaccharides are digested into _____ **monosaccharides**_____.

4. Fats are digested to _____ **glycerol and fatty acids**_____.

5. Proteins are digested to _____ **amino acids**_____.

6. Nucleic acids are digested to _____ **nucleotides**_____.

7. The enzymatic process for digestion is termed _____ **hydrolysis**_____.

8. There is a mechanical component to digestion. Why is it preferable to break food items into smaller pieces?

to increase the surface area upon which enzymes can act

9. Food digestion occurs within compartments. What cytoplasmic compartment is involved in Intracellular Digestion?

the food vacuole

10. What cytoplasmic organelle fuses with the structure identified in #9?

the lysosome

11. What is Extracellular Digestion?

digestion of macromolecules that takes place outside of the cells

12. What is the difference between a Gastrovascular Cavity and a Complete Digestive Tract?

a complete digestive tract has two openings while a gastrovascular cavity has only one opening

13. Name the main segments of the human digestive tract.

oral cavity, esophagus, stomach, small intestine, large intestine