

Animal Anatomy and Physiology

1. Enumerate through illustration and describe each Level of Organization
 - Cytoplasmic - differences within the cell
 - Cellular - multicellular (specialization) or colonial (all individual cells can produce)]
 - Tissue - cells aggregate with similar functions
 - Organ - tissues aggregate to form specialized function (dominant tissue generally present)
 - System - organs operate together, 11 different organ systems in animals

2. In terms of bilateral symmetry: differentiate frontal, sagittal and transverse planes.

Sagittal Plane: Cuts the body into left and right halves. Forward and backward movements.

Coronal (or Frontal Plane): Cuts the body into front and back halves. Side-to-side movements.

Transverse Plane: Cuts the body into top and bottom halves. Twisting movements.

3. Identify each name when referring to location - anterior, posterior, ventral, medial, lateral, distal and proximal.

4. What are the different tissues? Illustrate and describe each.

- a) Epithelial tissue - cover internal or external surfaces function in protection, secretion and absorption.
- b) Connective tissue - function for support, transport, binding, connection of other tissues.
- c) Muscle tissue - specialized of contraction made of muscle fibers
- d) Nervous tissue - send and receive stimuli from one organ to another