

CHAPTER ONE

Content Review

1. Cytology is the study of single body cells and their internal structures. Histology is the study of tissues.
2. The characteristics common to all living things are organization, metabolism, growth and development, responsiveness, regulation, and reproduction.
3. The levels of organization in a living thing, from the simplest to the most complex are: chemical → cell → tissue → organ → organ system → organismal.
4. The major organ systems are the integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems.
5. The anatomic position is a specific body position in which the individual stands upright with the feet parallel and flat on the floor. The head is level, with the eyes looking forward. The arms are at the sides of the body with the palms facing forward and the thumbs pointing away from the body.
6. Superior means the head or upper end; inferior means the tail or lower end.
7. Forearm=*antebrachial*; wrist=*carpal*; chest=*thoracic*; armpit=*axillary*; thigh=*femoral*; foot=*pedal*.
8. The cranial cavity houses the brain, and the vertebral cavity houses the spinal cord.
9. Serous membranes line both the thoracic and abdominopelvic cavities. They are composed of two distinct layers: a parietal layer that lines the internal surface of the body wall, and a visceral layer that covers the external surface of organs (viscera) within the cavity. The fluid produced by cells in these membranes reduces the friction created by the movement of body organs and helps them move smoothly against each other and the body wall.
10. Best suited for examining soft tissues are sonography, CT, DSA, MRI, DSR, and PET. Best suited for examining hard tissues is radiography.