

## CHAPTER SEVEN

### Content Review

1. Facial bones form the bones of the face and protect the entrances to the digestive and respiratory systems. Cranial bones form the rounded cranium that completely surrounds and encloses the brain.
2. Sutures are immovable fibrous joints that form boundaries between cranial bones. In children, sutures allow the cranium to grow and expand. They typically fuse in our adult years after skull growth is complete. Premature fusion can cause abnormal head shape.
3. The parietal, temporal, and sphenoid bones, and the first cervical vertebra (the atlas) articulate with the occipital bone.
4. The seven bones that form the orbit are the frontal and sphenoid bones that form the roof of the orbit; the maxilla and palatine bones that form the floor of the orbit; the lacrimal and ethmoid bones that form the medial wall of the orbit; and the zygomatic, sphenoid, and frontal bones that form the lateral wall of the orbit. The sphenoid also forms the posterior wall of the orbit.
5. The middle cranial fossa ranges from the lesser wings of the sphenoid anteriorly to the anterior part of the petrous region of the temporal bone posteriorly.
6. The cribriform foramina in the ethmoid bone provide passageways for the olfactory nerves from the nasal cavity into the cranial cavity on their way to the brain.
7. The paranasal sinuses are cavities in the frontal, ethmoid, sphenoid, and maxillae bones. Their mucous lining helps humidify and warm inhaled air. Additionally, these cavities help lighten the skull and provide resonance to the voice.
8. The first cervical vertebra, the atlas, lacks a spinous process and a vertebral body. It has depressed, oval superior articular facets that articulate with the occipital condyles of the occipital bone (the atlanto-occipital joint) and permit nodding the head “yes.” The second cervical vertebra, the axis, has a prominent odontoid process (the fused body of the atlas). It rests in the articular facet of the atlas and is held in place by a transverse ligament. The movement at this joint (the atlanto-axial joint) permits shaking the head “no.”
9. The lumbar region is most at risk for disc herniation because of relatively great mobility and increased weight on the discs on this region.
10. Ribs are elongated, curved, flattened bones that originate on or between thoracic vertebrae and usually end in the wall of the thoracic cavity. The first seven pairs of ribs, the true ribs, connect individually to the sternum by costal cartilage. Rib pairs 8-12 are called false ribs because they do not connect directly to the sternum. The pairs of ribs 8-10 have costal cartilages that connect to the costal cartilage of rib pair 7. The last two pairs of false ribs, rib pairs 11 and 12, are called floating ribs because they have no connection to the sternum.