

# The Axial Skeleton

## 7-1

### The 80 bones of the head and trunk make up the axial skeleton

**Axial skeleton**) forms the longitudinal axis of the body (*skull, thoracic cage, and vertebrae*). It has 80 bones making about 40% of the bones in the body. The joints allow minimal movement, but are very strong and reinforced with ligaments.

- **The skull** (8 cranial and 14 facial)
- **bones associated with the skull** (6 auditory ossicles and the hyoid bone)
- **the vertebral column** (24 vertebrae, the sacrum, and the coccyx)
- **the thoracic cage** (the sternum and 24 ribs)

## 7-2

### The skull is composed of 8 cranial bones and 14 facial bones

The **skull** contains 22 bones. 7 additional bones are associated with the skull; 6 auditory ossicles involved with hearing, and the hyoid bone that supports the voicebox.

**Sinuses**) air-filled chambers. They have 3 functions.....

1. lessen the weight of bone
2. the mucus membrane lining them produce mucus that moistens and cleans the air in and adjacent to the sinuses
3. they serve as resonating chambers in speech production

**Sutures**) immovable fused bone connected by dense fibrous connective tissue.

#### The 4 major sutures: examine images of skull:

1. **Lambdoid suture**- arches across the posterior surface of the skull, connecting the occipital bone with 2 parietal bones, *1 or more sutural bones may be present along this suture*
2. **Coronal suture**- attaches the front bone to the parietal bones of either side (the occipital, parietal, and frontal bones form the **calvaria or skullcap**)
3. **Sagittal suture**- extends from the lambdoid suture to the coronal suture, between the parietal bones.
4. **Squamous suture**- on each side of the skull joins the temporal bone and the parietal bone of that side