

AXIAL SKELETON

Lec. 6

AXIAL SKELETON:

Sternum:

The sternum bone lies in the midline of the anterior chest wall.
It is a flat bone that can be divided into three parts:

- 1**-manubrium sterni,
- 2**-body of the sternum,
- 3**-and xiphoid process.

The manubrium is the upper part of the sternum.

- ❖ The body of the sternum articulates above with the manubrium at the **manubriosternal** joint and below with the xiphoid process at the **xiphisternal** joint.
- ❖ The xiphoid process is a thin plate of cartilage that becomes ossified at its proximal end during adult life.

Sternum:

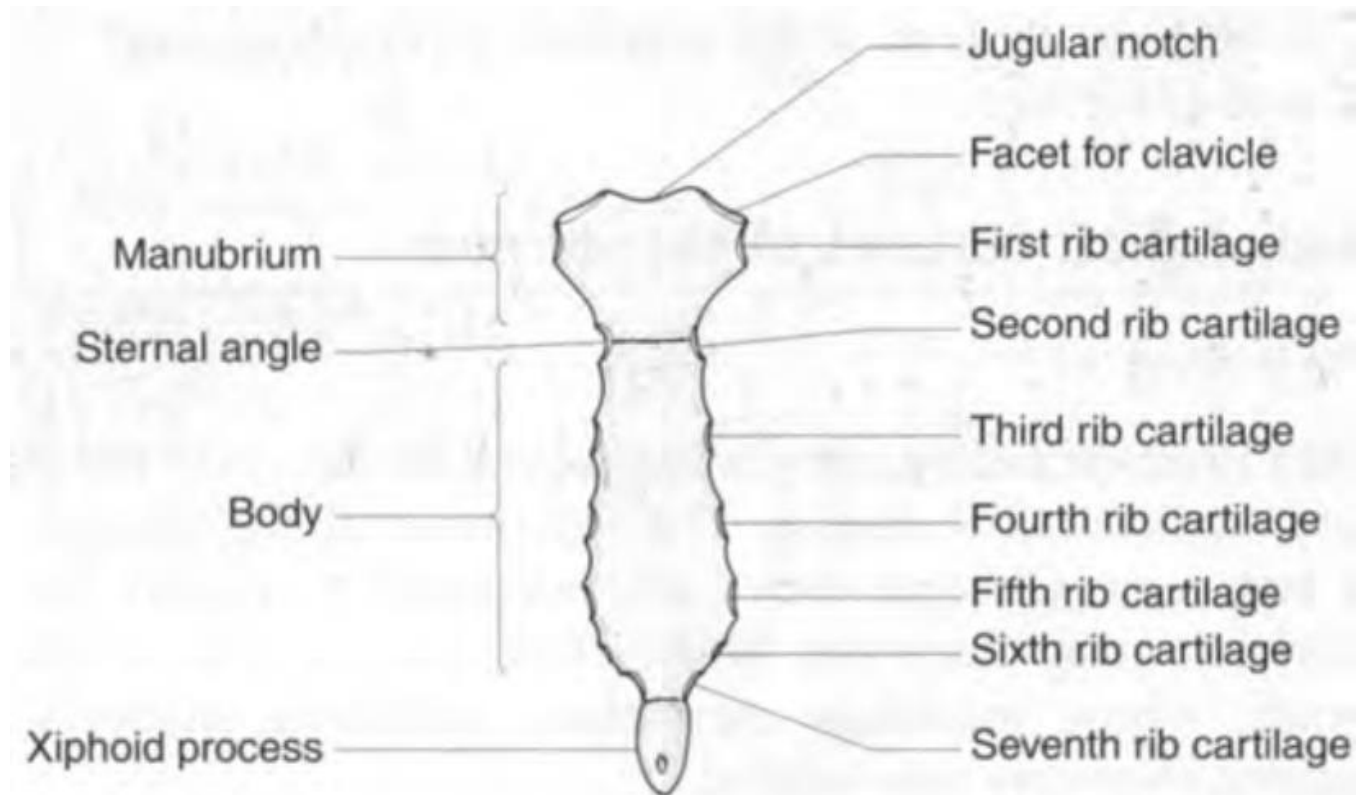


Fig. 4.4 The sternum.

Ribs:

There are **12** pairs of ribs, all of which are attached posteriorly to the thoracic vertebrae .

The ribs are divided into three categories:

1-True ribs

2-False ribs

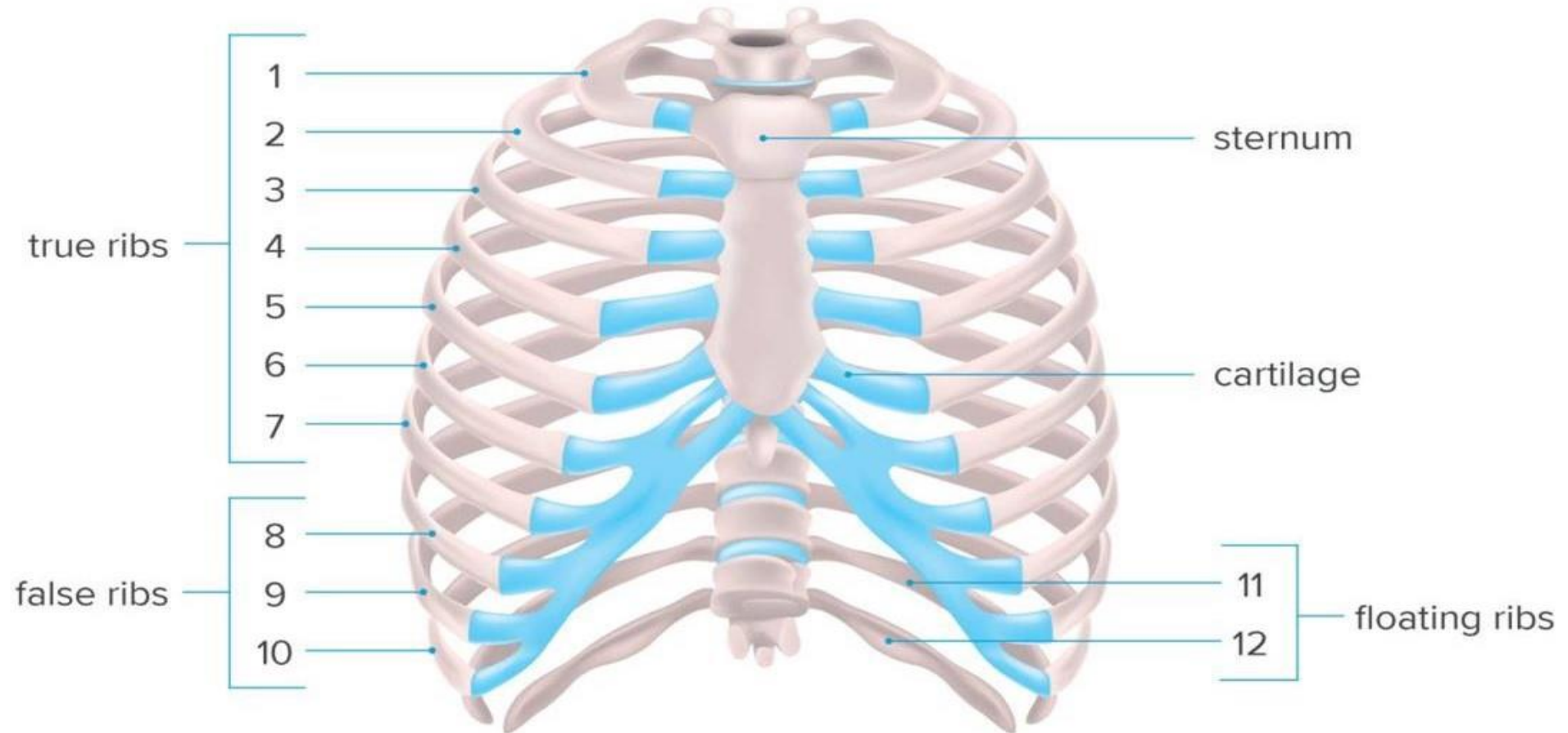
3-Floating ribs

True ribs: The upper seven pairs

False ribs: The 8th, 9th, and 10th pairs of ribs are attached

Floating ribs: The 11th and 12th pairs

Ribs Anatomy



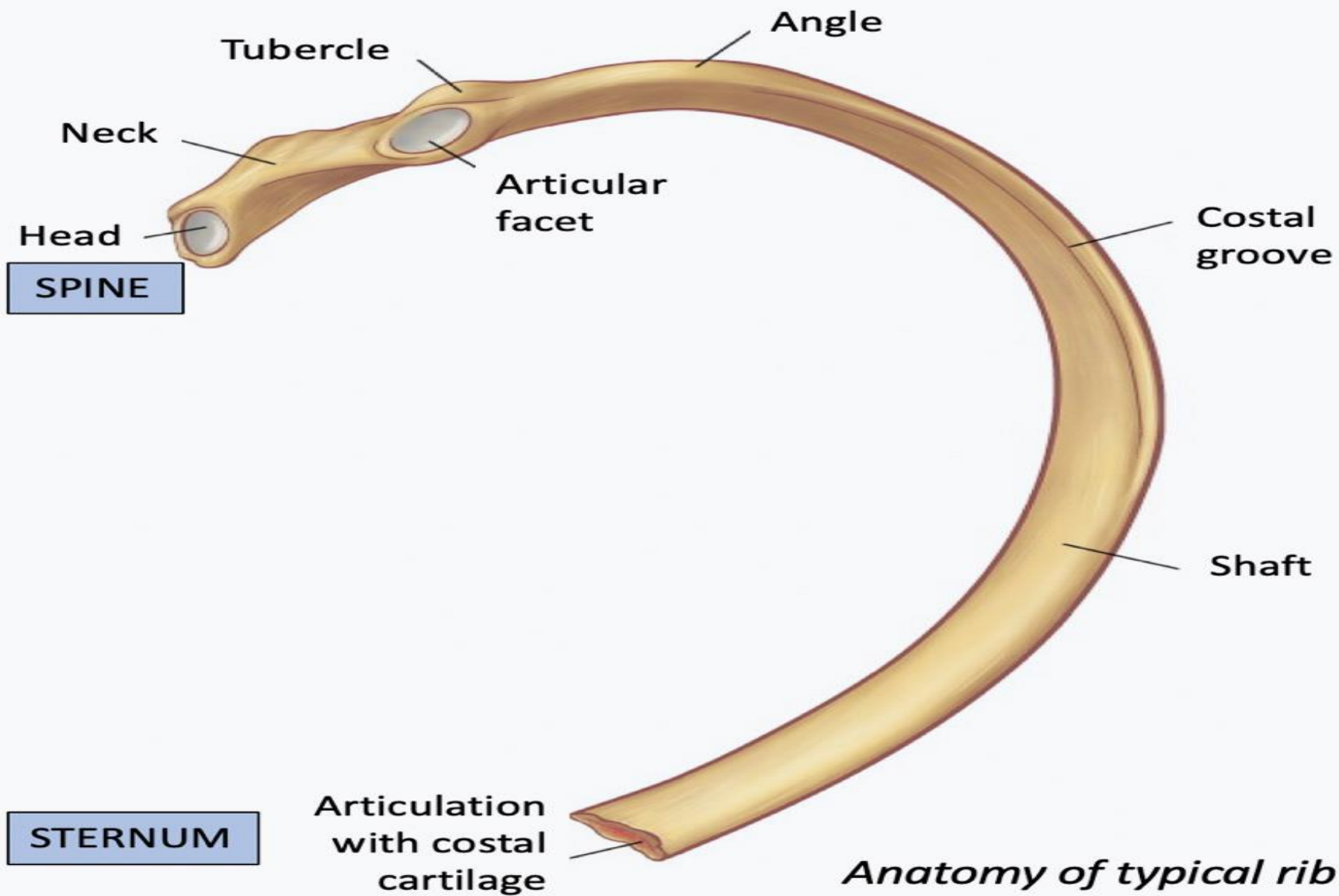
Typical rib:

A rib has a **head**, **neck**, **tubercle**, **shaft**, and **angle**.

These are 3rd to 9th ribs

Atypical rib: including:-

- First rib
- Second rib
- Tenth rib
- Eleventh rib
- Twelve rib



Costal Cartilages:

Costal cartilages: are bars of cartilage connecting the upper seven ribs to the lateral edge of the sternum and the 8th, 9th, and 10th ribs to the cartilage immediately above.

- The cartilages of the 11th and 12th ribs end in the abdominal musculature .

Joints of the Chest Wall:

Joints of the Sternum:

1-the manubrium + the body of the sternum =manibriosternal joint=cartilaginous joint

2- xiphoid process+ body sternum=
xiphisternal joint=cartilaginous joint

Joints of the Ribs +Costal Cartilages= cartilaginous joints.

- THE END