The SCAPULA

- The scapula is the posterior bone of the shoulder girdle.
- Type: A flat bone that forms through cartilaginous ossification.

Anatomical position:

1. It rests on the posterolateral chest wall. It covers the back of ribs 2 to 7.
2. The medial border runs parallel to the vertebral column. It lies 5 cm from the spines.
3. Its surfaces rest in a plane halfway between front-back and side-to-side.
4. The coracoid process juts forward and slightly outward. It sits below the link between the lateral quarter and medial half of the scapula.

GENERAL FEATURES OF THE SCAPULA

The scapula has these main parts:

1. 2 surfaces: anterior and posterior.
2. 3 borders: superior, medial, and lateral.
3. 3 angles: superior, inferior, and lateral.
4. 3 fossae: subscapular, supraspinous, and infraspinous.
5. 3 processes: spine, acromion, and coracoid.
6. 3 notches: suprascapular, spinoglenoid, and circumflex scapular.
7. 3 tubercles: supraglenoid, infraglenoid, and tubercle of the spine.

SURFACES OF THE SCAPULA

1. Costal surface (anterior or ventral):
   a. Slightly concave. Forms the subscapular fossa.
   b. Faces forward and toward the midline.
2. Dorsal (posterior) surface:
   a. Faces backward and outward.
   b. Spine attachment divides it. Small supraspinous fossa lies above the spine. Large infraspinous fossa sits below.

Borders of the Scapula

Superior border: Shortest and sharpest border. It runs from the superior angle to the root of the coracoid process. A suprascapular notch sits near the coracoid root.

Medial (vertebral) border: Longest border. It runs parallel to the vertebral spines. The border stretches from the superior angle above to the inferior angle below. An obtuse angle forms opposite the spine root.

Lateral (axillary) border: Thickest border. It attaches muscles and acts as a fulcrum for scapula rotation. The border goes from the lateral angle (glenoid cavity) to the inferior angle. A flat area on the dorsal side holds muscle attachments.

Angles of the Scapula

Superior angle: Nearly a right angle. It sits opposite the 2nd rib. Forms the spot where superior and medial borders meet.

Inferior angle: Acute angle. It lies opposite the 7th rib. Junction of the lateral and medial borders.

Lateral angle: Enlarged to form the scapula head and neck. Lies between superior and lateral borders. The head holds a pear-shaped glenoid cavity. This cavity joins with the humerus head. The glenoid cavity widens below and narrows above. Its edge attaches to the glenoid labrum, a fibrocartilaginous lip.

Fossae of the Scapula

1. Subscapular fossa
   This forms the shallow front side of the scapula.
   It has several ridges that run side to side.
2. Supraspinous fossa
   This covers the back side above the spine.
   It also includes the top side of the spine.
3. Infraspinous fossa
   This covers the back side below the spine.
   It also includes the bottom side of the spine.

Processes of the Scapula

1. Spine of the scapula
   This is a shelf-like ridge on the upper back side.
   The shape is triangular. It has three borders and two surfaces.
   a) Anterior border: It meets the back side of the scapula along a level line.

b) Posterior free border: Known as the crest of the spine. You can feel it under the skin. The crest has an upper lip and lower lip. A rough tubercle sits in the middle near the medial end.

c) Lateral border: This free edge helps form the spinoglenoid notch.

d) Upper surface: It forms part of the supraspinous fossa.

e) Lower surface: It forms part of the infraspinous fossa.

2. Acromion

   This is the lateral end of the spine.

   It points forward and up a bit. It hangs over the glenoid cavity.

   It has a tip at the front end. Plus upper and lower surfaces. And lateral and medial borders.

   The lateral border links to the lower lip of the spine crest.

   The medial border links to the upper lip of the spine crest.

   It has an oval flat spot to join the clavicle.

3. Coracoid process

   This points forward and a bit sideways from the upper neck of the scapula.

   It has a tip. Plus upper and lower surfaces. And medial and lateral borders.

NOTCHES OF THE SCAPULA

1. Suprascapular notch. It sits at the end of the superior border. This spot lies near the root of the coracoid process. The suprascapular ligament turns it into a foramen. The suprascapular nerve passes through the foramen. The suprascapular vessels travel above the ligament.

2. Spinoglenoid notch. It forms between the lateral free border of the spine and the glenoid cavity. This notch lets the suprascapular nerve and vessels move from the supraspinous fossa to the infraspinous fossa.
3. Circumflex scapular notch. This groove runs along the dorsal side of the lateral border. The circumflex scapular artery creates it.

TUBERCLES OF THE SCAPULA

1. Supraglenoid tubercle. It is a small rough bump above the glenoid cavity.
2. Infraglenoid tubercle. This rough triangular spot sits just below the glenoid cavity.
3. Tubercle of the crest of the spine. It forms a triangular rough projection from the lower lip of the spine's crest.

FUNCTIONS OF THE SCAPULA

1. It sends the weight of the upper limb to the clavicle.
2. It offers a broad area for muscle attachments.

ARTICULATIONS OF THE SCAPULA

1. The acromion process joins the lateral end of the clavicle. They form the acromioclavicular joint.
2. The glenoid cavity meets the head of the humerus. They create the shoulder joint.