Unit 2 – MEDICAL TERMINOLOGY
Anatomical Terms – Study Guide (Cornell Notes)

ANATOMICAL POSITION
Anatomical position is defined as standing erect, with the palms and feet facing forward. This position is the standard reference point in which all positions, movements, and planes are described.

ANATOMICAL PLANES
Fixed lines of reference along which the body is often divided or sectioned to facilitate viewing of its structure. Studying the body from different views allows one to obtain a three-dimensional perspective.

1. Sagittal / Midsagittal Plane
   1. The plane dividing the body into right and left portions. (Mid = Equal)
2. Frontal / Coronal Plane
   2. The plane dividing the body into front and back portions.
3. Transverse / Horizontal Plane
   3. The plane dividing the body into upper and lower portions.

ANATOMICAL DIRECTIONS
Terms of position and direction describe the position of one body part relative to another, usually along one of the three major body planes.

1. Superior
   1. Refers to a structure being closer to the head or higher than another structure in the body.
2. Inferior
   2. Refers to a structure being closer to the feet or lower than another structure in the body.
3. Anterior
   3. Refers to a structure being more in front than another structure in the body.
4. Posterior
   4. Refers to a structure being more in back than another structure in the body.
5. Medial
   5. Refers to a structure being closer to the midline or median plane of the body than another structure of the body.
6. Lateral
   6. Refers to a structure being farther away from the midline than another structure of the body.
7. Distal
   7. With reference to the extremities only, refers to a structure being further away from the root of the limb than another structure in that limb.
8. Proximal
   8. With reference to the extremities only, refers to a structure being closer to the root of the limb than another structure in that limb.
9. Superficial
   9. Refers to a structure being closer to the surface of the body than another structure.
10. Deep
    10. Refers to a structure being closer to the core of the body than another structure.
11. Ventral
    11. Toward the front/belly.
12. Dorsal
    12. Toward the back.
13. Prone
    13. Lying face down.
14. Supine
    14. Lying face up.
15. Unilateral
    15. Pertaining to one side of the body.
16. Bilateral
    16. Pertaining to both sides of the body.
### ANATOMICAL MOVEMENTS

<table>
<thead>
<tr>
<th>Movement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexion</td>
<td>Bending at a joint or decreasing the angle between two bones.</td>
</tr>
<tr>
<td>Extension</td>
<td>Straightening a joint or increasing the angle between two bones.</td>
</tr>
<tr>
<td>Hyperextension</td>
<td>Extending a joint beyond its normal range of motion.</td>
</tr>
<tr>
<td>Adduction</td>
<td>Moving a body part toward the midline of the body.</td>
</tr>
<tr>
<td>Abduction</td>
<td>Moving a body part away from the midline of the body.</td>
</tr>
<tr>
<td>Pronation</td>
<td>Turning the arm or foot downward (palm or sole of the foot - down).</td>
</tr>
<tr>
<td>Supination</td>
<td>Turning the arm or foot upward (palm or sole of the foot - up).</td>
</tr>
<tr>
<td>Retraction</td>
<td>Moving a part backward.</td>
</tr>
<tr>
<td>Protraction</td>
<td>Moving a part forward.</td>
</tr>
<tr>
<td>Elevation</td>
<td>Raising a part.</td>
</tr>
<tr>
<td>Depression</td>
<td>Lowering a part.</td>
</tr>
<tr>
<td>Rotation</td>
<td>Turning on a single axis.</td>
</tr>
<tr>
<td>Circumduction</td>
<td>Tri-planar, circular motion at the hip or shoulder.</td>
</tr>
<tr>
<td>External Rotation</td>
<td>Rotation of the hip or shoulder away from the midline.</td>
</tr>
<tr>
<td>Internal Rotation</td>
<td>Rotation of the hip or shoulder toward the midline.</td>
</tr>
<tr>
<td>Lateral Flexion</td>
<td>Side-bending left or right</td>
</tr>
<tr>
<td>Inversion</td>
<td>Turning the sole of the foot inward.</td>
</tr>
<tr>
<td>Eversion</td>
<td>Turning the sole of the foot outward.</td>
</tr>
<tr>
<td>Dorsiflexion</td>
<td>Ankle movement bringing the foot toward the shin.</td>
</tr>
<tr>
<td>Plantarflexion</td>
<td>Ankle movement pointing the foot downward.</td>
</tr>
<tr>
<td>Radial Deviation</td>
<td>Movement of the wrist towards the radius or lateral side.</td>
</tr>
<tr>
<td>Ulnar Deviation</td>
<td>Movement of the wrist towards the ulna or medial side.</td>
</tr>
<tr>
<td>Opposition</td>
<td>Movement of the Thumb across the palm of the hand.</td>
</tr>
</tbody>
</table>

### Notes:

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**Practice, Practice, Practice.** Use this style of Cornell notes to review, quiz, and then review again. One of the best ways to review these terms is to teach them to someone else.

__________________________ taught me **Anatomical Planes, Positions, Directions, and Movements**.

1. ________________  
   Parent / Guardian
2. ________________  
   Sibling
3. ________________  
   Another Teacher
4. ________________  
   Friend
5. ________________  
   Classmate
6. ________________  
   Choice