

# Week 8: Skeletal System

GE 345 Physiology/Kinesiology

Name

## ***Movement and Stability***

The skeletal system is the body’s framework, providing structure and articulating levers. Movement and position may be described relative to our bodies or a specific joint. When you squat, the motion takes place in the frontal plane. However, the hips, knees and ankles flex and extend (in the sagittal plane) to create the motion..

## ***Today’s Activity***

1. **Kobi Says** (aka: Do as I Say, Not as I Do)

I will call out movements (such as flex your right shoulder!) while moving my own limbs. My goal is to trick you into doing the wrong thing by not always doing what I say. If I catch you doing the wrong thing, you’re out. Last one in gets a prize.

2. **Joint Movements:** Indicate which movements are possible in the following joints.

Joint	Movements		
Metacarpophalangeal (finger to palm)	<input type="checkbox"/> Flexion & Extension <input type="checkbox"/> Abduction & Adduction	<input type="checkbox"/> Rotation <input type="checkbox"/> Circumduction	<input type="checkbox"/> Hyperextension
Carpometacarpal (thumb)	<input type="checkbox"/> Flexion & Extension <input type="checkbox"/> Abduction & Adduction	<input type="checkbox"/> Rotation <input type="checkbox"/> Circumduction	<input type="checkbox"/> Hyperextension
Metacarpophalangeal (thumb)	<input type="checkbox"/> Flexion & Extension <input type="checkbox"/> Abduction & Adduction	<input type="checkbox"/> Rotation <input type="checkbox"/> Circumduction	<input type="checkbox"/> Hyperextension
Wrist (palm to lower arm)	<input type="checkbox"/> Flexion & Extension <input type="checkbox"/> Abduction & Adduction	<input type="checkbox"/> Rotation <input type="checkbox"/> Circumduction	<input type="checkbox"/> Hyperextension
Elbow	<input type="checkbox"/> Flexion & Extension <input type="checkbox"/> Abduction & Adduction	<input type="checkbox"/> Rotation <input type="checkbox"/> Circumduction	<input type="checkbox"/> Hyperextension
Radio-Ulnar	<input type="checkbox"/> Flexion & Extension <input type="checkbox"/> Abduction & Adduction	<input type="checkbox"/> Rotation <input type="checkbox"/> Circumduction	<input type="checkbox"/> Hyperextension
Shoulder (gleno-humeral)	<input type="checkbox"/> Flexion & Extension <input type="checkbox"/> Abduction & Adduction	<input type="checkbox"/> Rotation <input type="checkbox"/> Circumduction	<input type="checkbox"/> Hyperextension
Intervertebral	<input type="checkbox"/> Flexion & Extension <input type="checkbox"/> Abduction & Adduction	<input type="checkbox"/> Rotation <input type="checkbox"/> Circumduction	<input type="checkbox"/> Hyperextension
Hip	<input type="checkbox"/> Flexion & Extension <input type="checkbox"/> Abduction & Adduction	<input type="checkbox"/> Rotation <input type="checkbox"/> Circumduction	<input type="checkbox"/> Hyperextension
Knee	<input type="checkbox"/> Flexion & Extension <input type="checkbox"/> Abduction & Adduction	<input type="checkbox"/> Rotation <input type="checkbox"/> Circumduction	<input type="checkbox"/> Hyperextension

### ***Due Next Class***

Name three (3) factors affecting both the stability and range of motion of a joint. Describe or illustrate in detail how these factors influence stability and ROM.

From a mechanical standpoint, why is it easier for us to stand and walk on our legs rather than our hands?