Lang Volley's Understanding the Body, Bones, Muscles & Mechanics.

Part 1: Biggest Muscles Used in Volleyball

1. Gluteus Maximus – Butt Muscles

- Main power source for jumping, sprinting, and landing.
- Stabilizes hips and lower back.

2. Quadriceps – Front Thigh

- Straightens the knee during jumping and landing.
- Helps absorb shock on impact.

3. Hamstrings – Back of Thigh

- Drives hip extension and controls deceleration.
- Important for sprinting and injury prevention.

4. Calf Muscles – Gastrocnemius & Soleus

- Push off the ground for jumping. Control ankle landing mechanics.

5. Latissimus Dorsi – Lats

- Large back muscle that drives arm swing.
- Connects upper and lower body for rotational power.

6. Core Muscles – Abs, Obliques, Transverse Abdominis

- Stabilize spine and pelvis during movement.
- Transfer power from lower to upper body.

7. Deltoids – Shoulder Muscles

- Lift and rotate arms. Essential for spiking, blocking, and serving.

8. Rotator Cuff – 4 Small Shoulder Muscles

- Stabilize and protect the shoulder joint.
- Help with precise overhead control and injury prevention.

9. Pectoralis Major – Chest Muscles

- Drive forward arm movement and arm swing.
- Engaged in spiking and serving.

10. Trapezius – Upper Back & Neck

- Controls scapular positioning and posture.
- Helps with shoulder mobility and rotation.

Part 2: Biggest Bones Used in Volleyball:

1. Femur – Thigh Bone

- Longest and strongest bone in the body.
- Supports jumping, running, and landing.

2. Pelvis – Hip Bone

- Connects spine to legs. Transfers core strength to the lower body.

3. Tibia – Shin Bone

- Weight-bearing bone of lower leg.
- Absorbs force during jumping and landing.

4. Humerus – Upper Arm Bone

- Connects shoulder to elbow.
- Drives arm swing in spiking, setting, and serving.

5. Scapula – Shoulder Blade

- Supports and stabilizes the shoulder joint.
- Controls overhead motion and shoulder rhythm.

6. Vertebrae – Spinal Bones

- Supports core posture and upright position.
- Transfers power between upper and lower body.

7. Clavicle – Collarbone

- Connects arms to torso. Supports arm mechanics and shoulder position.