

1. Throwing a baseball overhead
 - a. Biceps brachii
 - i. Action: Flexes forearm at elbow joint, supinates forearm at radioulnar joints, and flexes arm at shoulder joint.
 - ii. Innervation: Musculocutaneous nerve.
 - b. Deltoid
 - i. Action: Lateral fibers abduct arm at shoulder joint; anterior fibers flex and medially rotate arm at shoulder joint; posterior fibers extend and laterally rotate arm at shoulder joint.
 - ii. Innervation: Axillary Nerve
2. Kicking a ball
 - a. Biceps femoris
 - i. Action: Flexes leg at knee joint and extends thigh at hip joint.
 - ii. Innervation: Tibial and fibular nerves from sciatic nerve
 - b. Quadriceps Femoris
 - i. Action: All four heads extend leg at knee joint; rectus femoris muscle acting alone also flexes thigh at hip joint.
 - ii. Innervation: Femoral Nerve
3. Doing sit-ups
 - a. Transversus Abdominis
 - i. Action: Compresses abdomen.
 - ii. Innervation: Thoracic spinal nerves T8–T12, iliohypogastric nerve, and ilioinguinal nerve.
 - b. Rectus Abdominis
 - i. Flexes vertebral column, especially lumbar portion, and compresses abdomen to aid in defecation, urination, forced exhalation, and childbirth. RMA: Flexes pelvis on the vertebral column.
 - ii. Innervation: Thoracic spinal nerves T7–T12
4. Breathing
 - a. Diaphragm
 - i. Action: Contraction of diaphragm causes it to flatten and increases vertical dimension of thoracic cavity, resulting in inhalation; relaxation of diaphragm causes it to move superiorly and decreases vertical dimension of thoracic cavity, resulting in exhalation.
 - ii. Innervation: Phrenic nerve, which contains axons from cervical spinal nerves (C3–C5).
 - b. External intercostals
 - i. Contraction elevates ribs and increases anteroposterior and lateral dimensions of thoracic cavity, resulting in inhalation; relaxation depresses ribs and decreases anteroposterior and lateral dimensions of thoracic cavity, resulting in exhalation.

ii. Innervation: Thoracic spinal nerves T2–T12.

References:

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