

Physical Training Guidelines

The *Naval Special Warfare Physical Training Guide* (NSW PTG) exists to provide guidance regarding physical preparation for NSW-NSO programs such as BUD/S or BCT. The PTG provides a specific program for preparing for the Physical Screening Test (PST) along with more general fitness advice to promote endurance, strength, and resistance to injury once a candidate has received a contract. This *Physical Training Guide Supplement* provides additional guidance for developing a strength program. Key points:

- Keep it simple
- Use proper technique (get coaching from qualified sources if necessary)
- Develop the whole body, especially the parts known to be vulnerable to injury

This illustrated guide provides details regarding which areas of the body should be targeted for training. There are examples of exercises that target these areas, but recognize this is not meant to be a definitive list and many other exercises may be used if they target the proper areas. For more detailed discussion of concepts such as sets, reps, frequency of training, split routines, etc. – please consult SEALSWCC.com:

<https://www.sealswcc.com/forums/forum/fitness/strength-training/149-strength-training-start-here>

Another excellent resource that includes a wide variety of exercises appropriate for this program is the Navy Operational Fueling & Fitness System (NOFFS):

<http://www.navyfitness.org/fitness/noffs/>



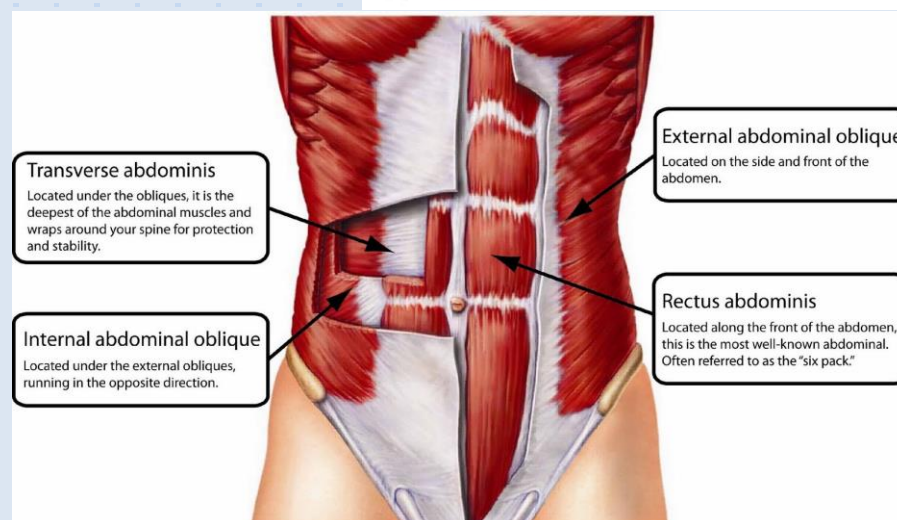
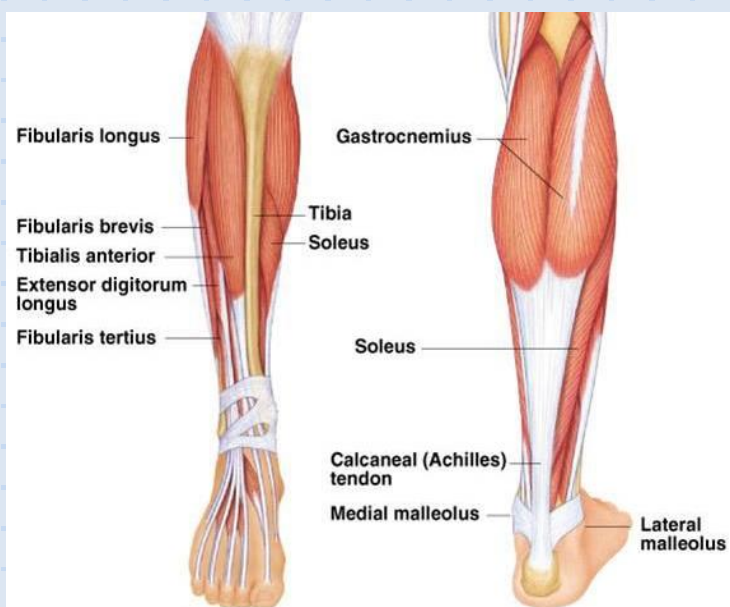
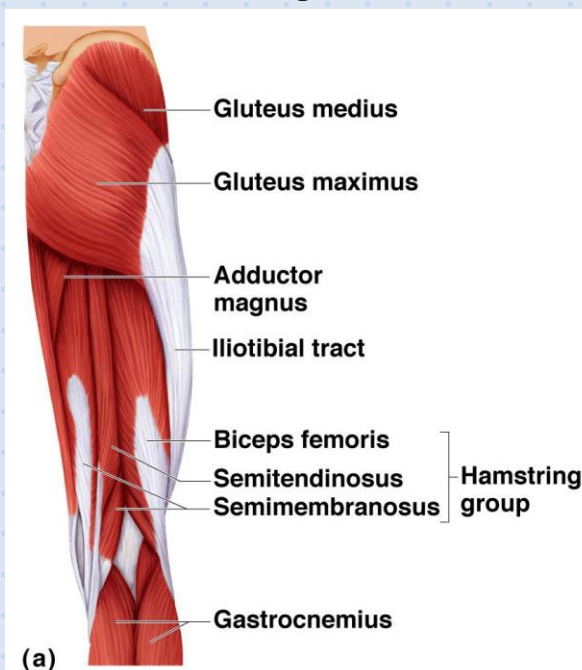
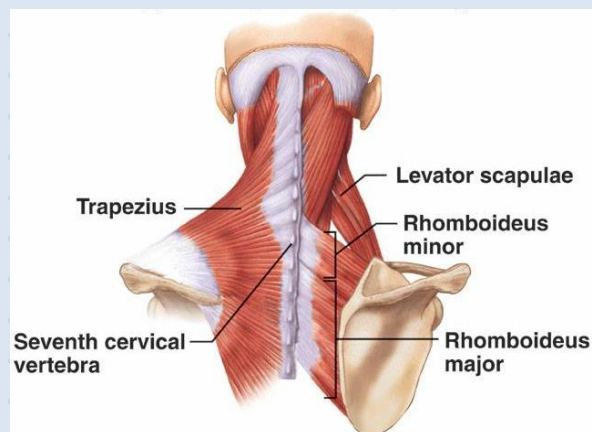
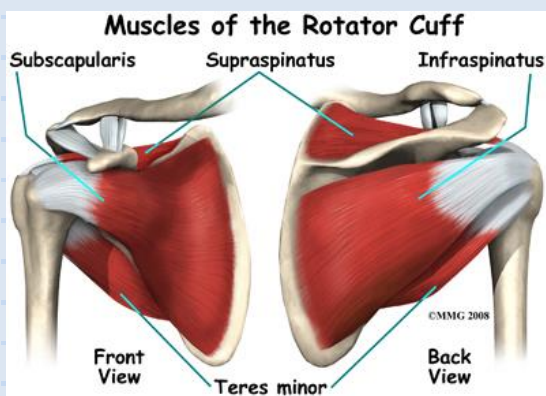
How To Create a Workout:

- Choose exercises for the upper body, trunk, and lower body
- Choose exercises that create movement in all three planes
- Choose exercises that create balance (push-pull; right-left; front-back)
- Movements should be controlled through a full Range of Motion using proper technique
- Emphasize negative (eccentric) contractions
- Use multiple variations of each basic movement (e.g., outward push, downward pull)
- For the trunk, use a variety of static as well as dynamic exercises
- Be sure to include exercises for the vulnerable or underdeveloped areas
- Mix up the order of exercises (but alternate push-pull)

Movement Categories			Resistance Sources (Examples)	
			Body Weight	Other (External)
UPPER	1 Overhead Push	↑	pike push-ups	bar, DB, KB, machine (also lateral or front raise w/ DB)
	2 Overhead Pull	↓	pull-ups, rope climbs	pull-ups w/ vest, lat pulldown machine
	3 Chest Press	→	push-ups, clapping push-ups	bar, DB, KB, machine, push-ups w/ vest (also incline/decline)
	4 Row Pull	←	horizontal pull-ups (on dip bars)	bar, DB, KB, machine
	5 Downward Push	↓	dips	triceps pushdown or kickback, weighted dips, ring dips
	6 Upward Pull	↑	chin-ups	upright row, curl, shrug
	7 Rotator Cuff	↻	n/a	DB, cable, elastic band
	8 Mid/lower traps		arm haulers	DB, cable, elastic band
TRUNK	9 Flexion		sit-ups, crunches, reverse crunches, knees-to-elbows, leg lever hold	inclined sit-up, BOSU, stability ball, machine
	10 Extension		Superman, front plank	RDL, platform, machine
	11 Rotation		leg wipers, Russian twist, scissors, bird dog, scorpion	cable wood chopper, medicine ball toss
	12 Lateral		side plank	single arm push or pull w/ DB or KB (hold torso stable)
LOWER	13 Hip Ext		vertical jumps, broad jumps	squat, leg press, dead lift, KB swing, box jump
	14 Hip Flex		sit-ups, flutter kicks, good morning darlings	elastic band, cable, machine
	15 Hip ABD		side plank, agility/COD, carioca, side hops (1- or 2-leg)	elastic band, cable, machine
	16 Knee Ext		vertical jumps, squats, lunges	machine, squat, leg press, weighted lunge, box jump, dead lift
	17 Knee Flex		bridges, manual resistance (provided by partner)	machine, elastic band, cable
	18 Ankle Ext		vertical jumps, broad jumps	weighted heel raise, box jump
	19 Ankle Flex		heel walks	elastic band, machine, weighted heel walk
	20 Foot ABD/ADD		balance, agility/COD, 1-leg side hops	elastic band, cable

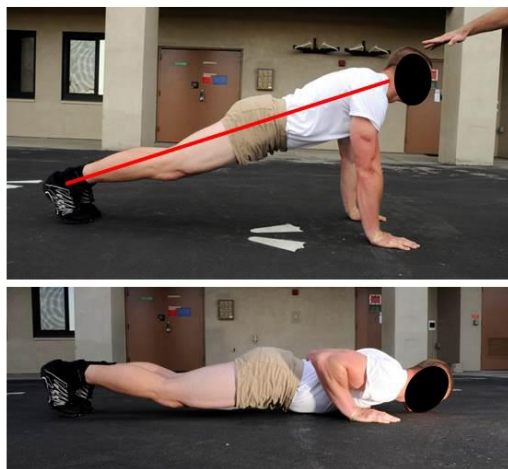
Problem Areas: Weak & Underdeveloped

Rotator cuff, mid/lower traps, rhomboids, posterior & medial glutes, hamstrings, tibialis anterior, torso rotators



Push-Up, Side View

- Category: upper body push away
- Back straight; straight line from heels through knees, hips, shoulders
- At top: elbows locked out and shoulders fully protracted
- At bottom: chin, chest barely touch ground to achieve full ROM, but body weight remains on hands and feet
- Elbows move next to body, not flared out away from body



Push-Up, Front View

- Hands directly under shoulders, not wider
- Fingers forward, not inward (to direct elbows next to body, not flared away)
- Feet close together (narrower than hips)



Clapping Push-Up

- Category: upper body push away
- Same criteria as regular push-up regarding back, shoulder, hand positions
- Push upward explosively and clap hands firmly together
- As hands return to ground, be sure to immediately bend elbows to absorb impact



Pike Push-Up, Side View

- Category: upper body push overhead
- Hips/trunk flexed (pike position)
- Create resistance to simulate an overhead press
- At top: elbows locked out and shoulders fully protracted
- At bottom: neck carefully extended; gently touch forehead to ground to create full ROM
- Attempt to keep elbows near body, not flared away



Pike Push-Up, Front View

- Hands directly under shoulders, not wider
- Fingers forward, not inward (to direct elbows next to body, not flared away)
- Feet comfortably spaced for balance (not too wide)



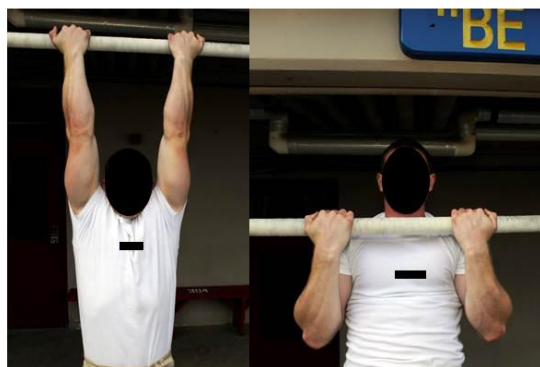
Pull-Up

- **Category: upper body pull overhead**
- Hands comfortably spaced, approximately shoulder width
- At bottom: arms at full extension and completely relaxed
- At top: chin entirely above bar
- Do not swing or kip



Chin-Up

- **Category: upper body pull upward**
- Similar movement as a biceps curl
- Hands comfortably spaced, approximately shoulder width
- At bottom: arms at full extension and completely relaxed
- At top: chin entirely above bar
- Do not swing or kip



Horizontal Pull-Up

- **Category: upper body pull towards**
- Hands comfortably spaced, approximately shoulder width
- Back should remain straight at all times (don't arch back or sit towards ground)
- At bottom: arms fully extended and relaxed
- At top: chest contacts bar while drawing shoulder blades back
- Place feet away from bar so body is approaching horizontal, not vertical
- A lower bar or elevated feet create a better effect



Dip (Side View)

- **Category:** upper body push downward
- At bottom: armpits above hands, upper arm parallel to ground
- At top: arms straight with elbows locked out
- Keep head up and torso vertical at all times



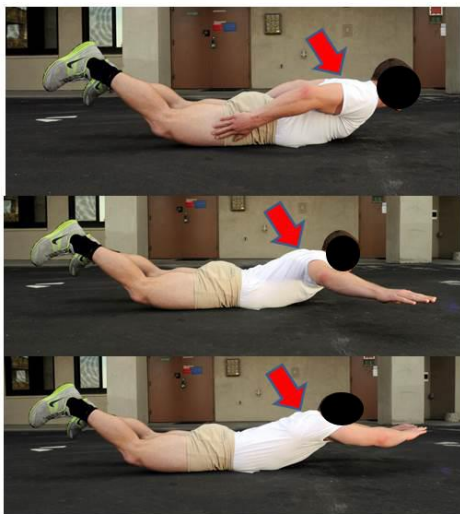
Dip (Front View)

- Keep elbows over bars
- At top: shoulders depressed/head elevated as much as possible (see picture at lower right)



Arm Hauler

- **Categories:** upper body posterior shoulder; torso static extension
- Lift chest and legs off ground
- Move arms back and forth from directly at sides to straight out in front of torso
- Sweep arms parallel to ground without touching to keep tension on posterior shoulders



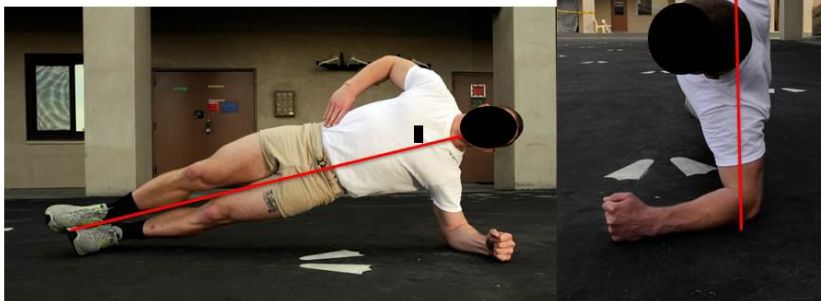
Front Plank

- **Category:** torso static extension
- Forearms comfortably placed to support body weight
- Shoulders protracted (pushed forward)
- Feet close together (no wider than hips)
- Keep back straight at all times
- Keep a straight line through heels, knees, hips, spine, and shoulders
- Do not let the buttocks push into the air or sag towards the ground



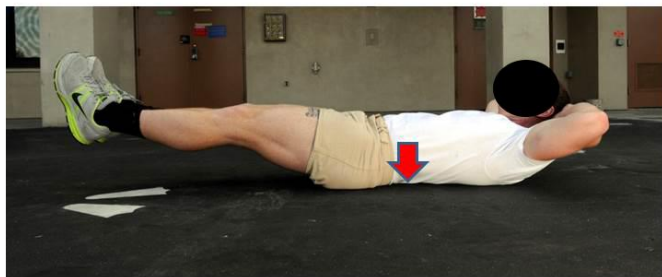
Side Plank

- **Category:** torso static lateral flexion
- Forearm comfortably placed to support body weight
- Front view: hips off ground with midline straight from feet to neck
- Top view: line of chest/shoulders is perpendicular to ground
- Hips remain between feet and shoulders; do not let buttocks push out behind torso
- Right side plank mirrors the left side



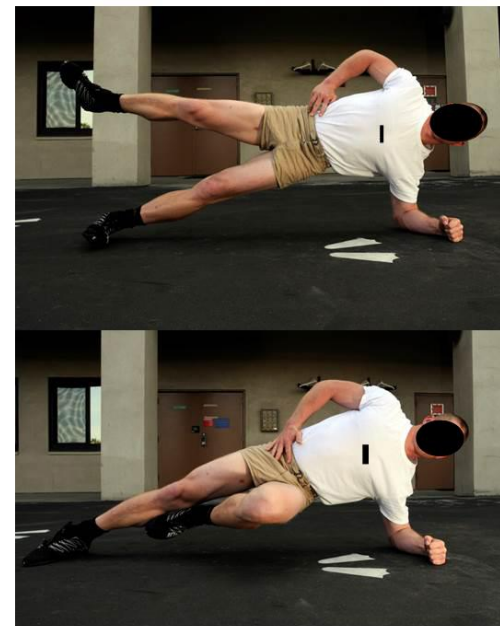
Leg Lever Hold

- **Category:** torso static flexion
- Legs straight and together, with feet 6-8" off ground (not higher)
- Pelvis in neutral position – keep small of back in contact with ground; think of drawing the navel down towards the ground
- Tailbone will be pointed away from ground and protected by buttocks, so it should not be necessary to place hands under buttocks
- Keep hands behind head with neck in comfortable position (up or down)



Side Plank (Advanced)

- **Categories:** torso static lateral flexion; lower body hip abduction/adduction
- Straight midline and perpendicular chest/shoulders (same as basic side plank)
- More challenging than basic side plank to stabilize midline, and also provides resistance to lateral and medial hip



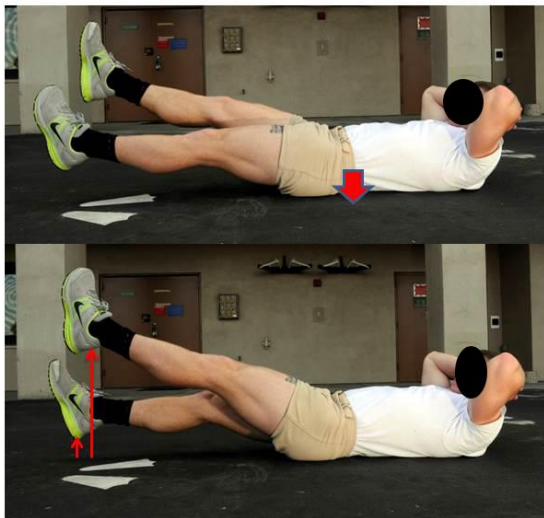
Reverse Crunch

- **Category:** torso dynamic flexion
- Starting position is leg lever hold
- Lift hips off ground and bring knees in contact with elbows
- Do not move chest or torso; do not move elbows towards knees
- Return to leg lever hold position with legs straight and feet slightly off the ground
- Attempt to complete all reps without letting the feet touch the ground



Flutter Kick

- **Categories:** torso static flexion; lower body hip flexion
- Starting position is leg lever hold
- Focus on keeping pelvis neutral with small of back against the ground
- Keeping legs straight, alternate raising and lowering right and left feet
- Do not let feet touch ground, and only raise feet 12-18" above ground – keep constant tension on hip flexors



Single Leg Bridge

- **Categories:** lower body partial hip extension & knee flexion (works glutes & hamstrings); torso static extension & rotation
- Support leg placed so tibia is perpendicular to ground
- Opposite leg straight, angled approximately 45 degrees
- Thighs together and parallel
- Drive hips/buttocks off ground
- Create a straight line through knee, hip, spine, and shoulder
- Keep hips even off ground (do not roll towards unsupported side)
- Arms across chest so that shoulders are base of support



Bird Dog

- **Category:** torso static rotation
- One arm and opposite leg raised parallel to ground
- Arm straight forward, leg straight back
- Create a long, flat profile
- Keep torso stable with other arm and leg



Bird Dog (Advanced)

- Move arm and leg simultaneously back and forth in a 45 degree arc
- Keep arm and leg in a plane parallel to the ground
- Keep torso completely stable and motionless



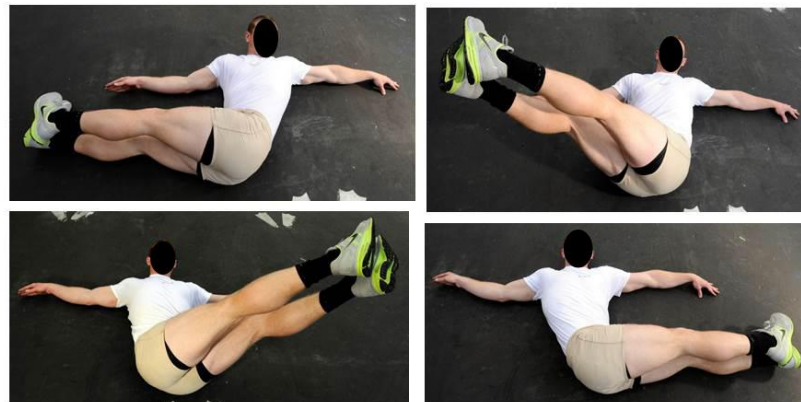
Wiper (Side View)

- **Category:** torso dynamic rotation
- Back and shoulder blades remain in contact with the ground at all times
- Legs straight and together at all times
- Hips at 90 degrees at all times



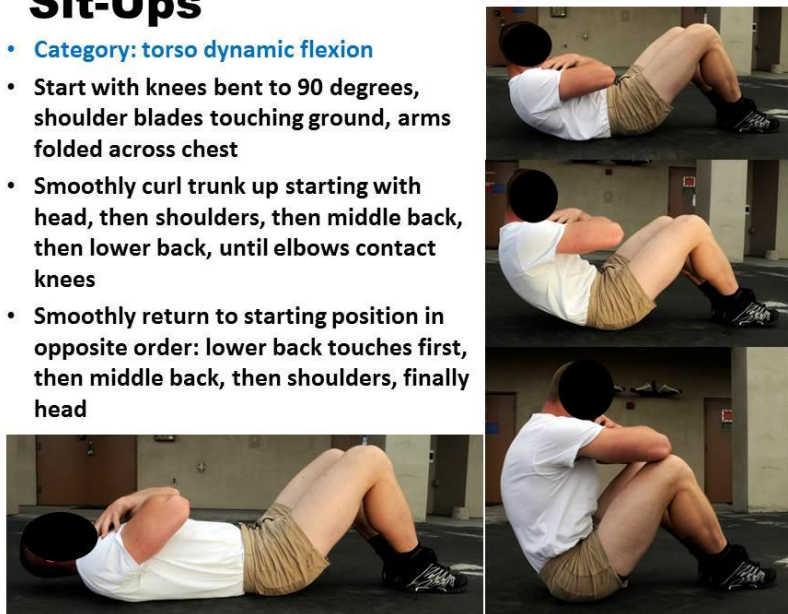
Wiper (Front View)

- Use muscles of torso to move legs back and forth in a 180 degree arc
- Keep tempo controlled so the torso moves the legs (momentum of legs does not move torso)



Sit-Ups

- **Category:** torso dynamic flexion
- Start with knees bent to 90 degrees, shoulder blades touching ground, arms folded across chest
- Smoothly curl trunk up starting with head, then shoulders, then middle back, then lower back, until elbows contact knees
- Smoothly return to starting position in opposite order: lower back touches first, then middle back, then shoulders, finally head



Scorpion

- **Category:** torso dynamic rotation
- Start in prone position with legs together
- Rotate lower torso and hips to swing one leg across body, touching heel to ground
- Return to starting position and swing other leg across body to other side
- Do not raise chest from ground



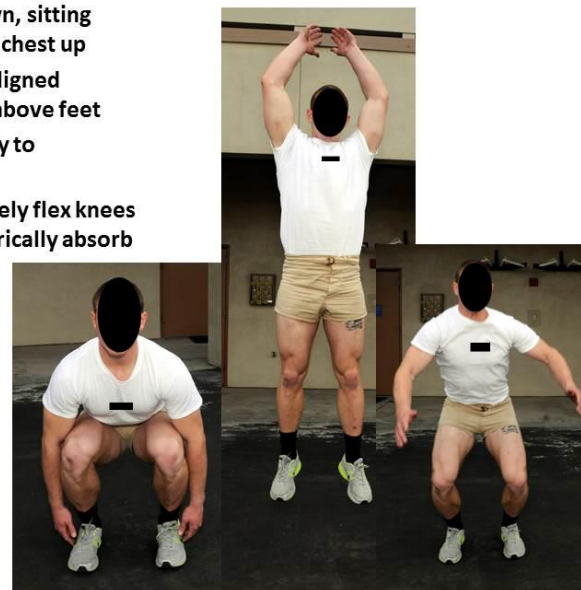
Superman

- **Category:** torso dynamic extension
- Start prone with legs together and arms extended above head
- Lift feet off ground while keeping legs straight
- Lift chest and arms off ground



- **Category:** hip, knee, ankle extension
- Begin with buttocks down, sitting back on heels, head and chest up
- Feet are hip width and aligned forward, and knees are above feet
- Jump upward explosively to maximum height
- Upon landing, immediately flex knees and use quads to eccentrically absorb impact
- Knees aligned between feet & hips; don't let knees bow out or knock together
- With control, return to starting position

Vertical Jump



- **Category:** hip, knee, ankle extension
- Initial foot placement same as vertical jump
- Use arm swing and countermovement
- Jump forward explosively to maximum distance
- Upon landing, immediately flex knees and use quads to eccentrically absorb impact
- Land with control and balance, without shuffling feet or touching hands to ground
- After brief pause, jump again; repeat for desired number of reps

Broad Jump



Lateral Hop

- **Category:** lateral hip & ankle
- Begin with feet close together (hip width or less)
- Keeping feet together, jump as far as possible to one side
- Land with control, pause briefly, and jump back to the other side
- Repeat for desired number of reps



Forward Hop (One Leg)

- **Category:** hip & knee extension; ankle extension & lateral
- Begin balanced on one foot
- Using one leg, jump forward as far as possible while landing secure on the same foot
- Pause briefly with balance before jumping again
- After completing desired reps, do same with other leg



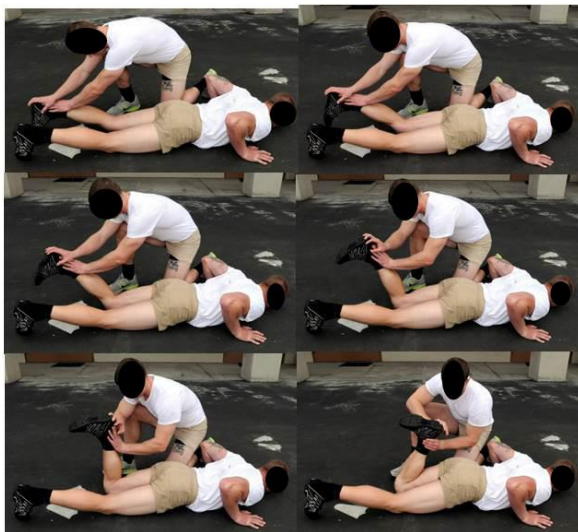
Lateral Hop (One Leg)

- **Category:** lateral hip & ankle
- Begin balanced on one foot
- Leap to the side as far as possible while landing secure on the opposite foot
- Pause briefly with balance before leaping back in the other direction
- Alternate leaping side to side from one foot to the other, maintaining balance when landing, for desired number of reps



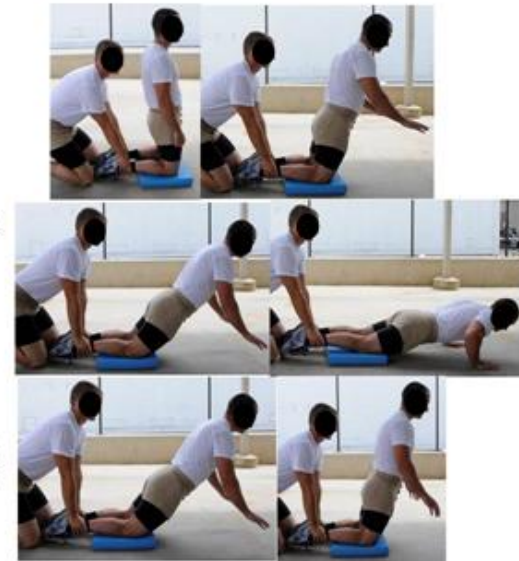
Manual Hamstring Curl

- **Category:** Knee Flexion
- Partner provides resistance in both directions (concentric and eccentric)
- Move through full ROM, with leg straight at the bottom and heel as close to buttocks as possible at top
- Keep toes pointed towards ground; keep both thighs together
- Partner adjusts resistance so leg moves up and down smoothly in a normal cadence without pausing
- Partner provides enough resistance to make effort difficult, but able to keep moving up and down



Nordic Hamstring Curls

- **Category:** knee flexion (hamstrings)
- Feet secured
- Begin with torso erect; keep back straight at all times
- Fall forward, using hamstrings to slow descent as much as possible, using hands to absorb impact at very end
- Push off ground with hands, and use hamstrings to pull torso erect
- Goal is to maximize contribution of hamstrings and catch/push with hands as little as possible



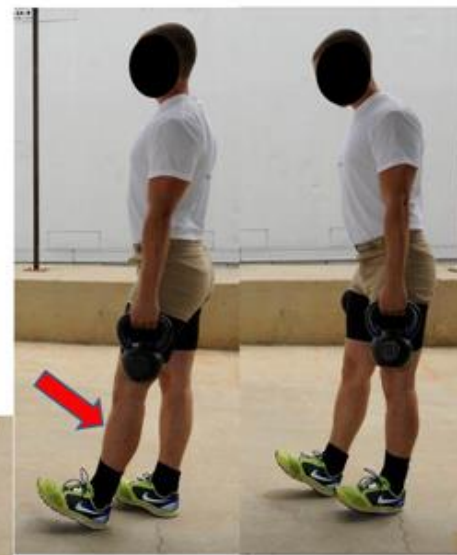
Single Leg Balance

- **Category:** lateral foot/ankle
- Fold arms across chest, draw heel of one foot up to knee of opposite leg
- Maintain balance on one leg with no movement for as long as possible
- Begin with eyes open. As balance improves (stable for 45 seconds or more), try to maintain balance with eyes closed
- Progress from hard floor to unstable surface



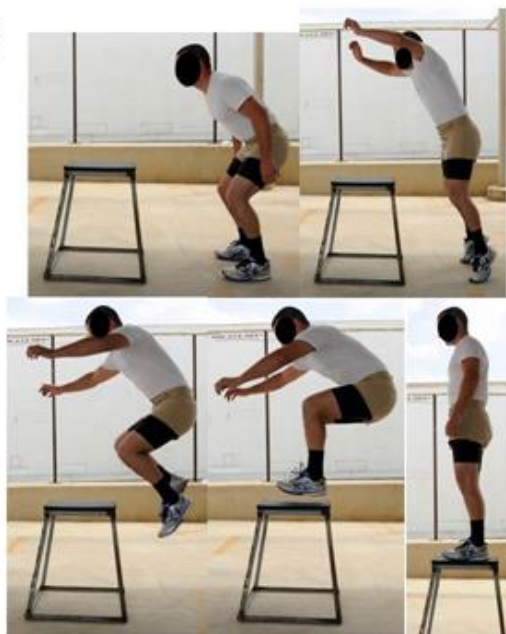
Heel Walk

- **Category:** ankle flexion (dorsiflexion)
- Walk entirely on heels, with toes pulled upward (dorsiflexed) as far as possible
- Keep tension on *tibialis anterior*
- Walk with a medium tempo and take medium steps (not a speed walk)
- Carry weight (farmer's walk) if desired



Box Jump

- **Category:** hip, knee, ankle extension
- Choose appropriate box height (challenging but attainable)
- Begin with feet under hips and toes forward
- Squat down (counter movement) before jumping upward explosively
- Land with both feet entirely on top of box. Pause briefly with legs fully extended
- Jump off backward, away from box



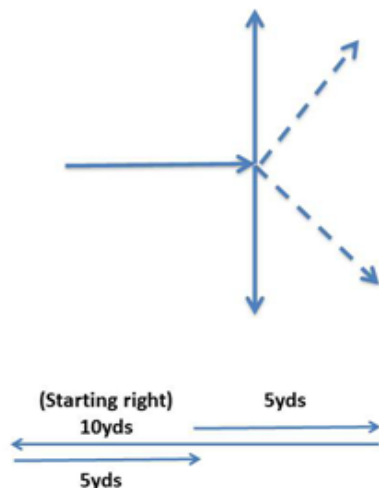
Box Jump

- **Landing technique** is critical: begin bending knees at first contact, bend knees sufficiently to absorb impact, and try to keep knees aligned between ankles and hips



Sprints/Agility

- **Category:** hamstrings; lateral hip/ankle
- Warm up thoroughly. To avoid injury, do not perform sprints when fatigued
- All-out effort on each rep (top speed)
- Distance: approx. 40-60yds each rep
- Reps: approx. 4-6 total (or until unable to maintain top speed)
- Generous recovery between reps
- Use Change of Direction (COD): cut left or right, 45° or 90°; do 5-10-5yds (start left or start right; touch hand to ground when changing direction)
- Variations: start from prone position; sprint forward then backward; sprint forward then lateral shuffle or carioca left or right



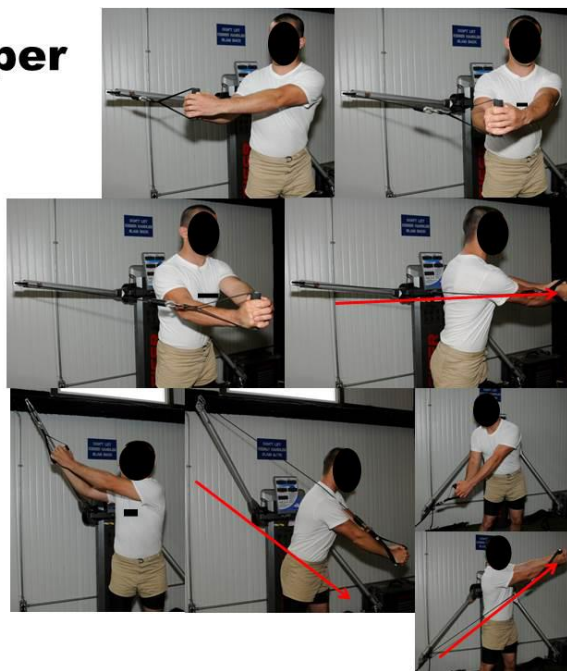
Russian Twist

- **Category:** torso rotation
- Lie back about 45° with knees bent
- Hold a weight (a plate or med ball) for extra resistance
- Rotate torso to one side and touch the ground; rotate to other side and touch the ground; alternate
- Keep hands directly in front of chest. Torso must rotate to bring hands to ground. Do not swing the arms from side to side without rotating torso



Wood Chopper

- **Category:** torso rotation
- Stand next to a cable weight machine; grab handle with arms extended
- Keep legs, hips, arms still
- Rotate torso through full range of motion (approx. 180°); return to starting position
- Complete desired number of reps, then reverse position to rotate in the opposite direction
- Variations: move hands across, down, or up



Med Ball Toss

- **Category:** torso rotation
- Stand with back to wall, holding a medicine ball
- Throw forcefully to one side; catch ball as it bounces back
- Complete desired reps before throwing to other side; or, alternate throws to each side



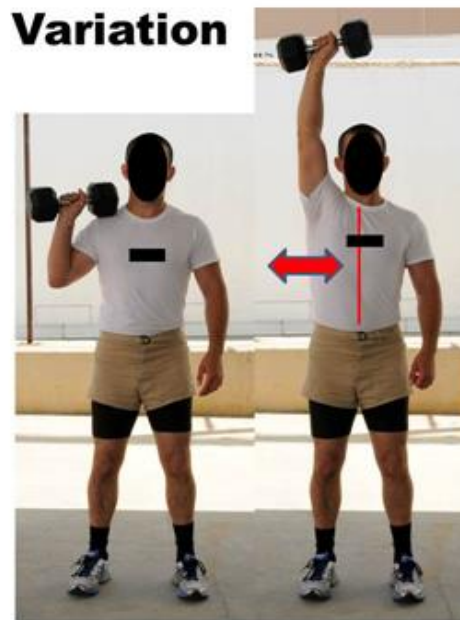
Shoulder Press

- **Category:** overhead push
- Keep back stable (with support if necessary)
- Begin with dumbbells at shoulder level; push dumbbells directly overhead until arms are fully extended
- Pause briefly at top; with control, lower dumbbells back to shoulder level
- May perform while seated, kneeling, or standing – but keep back stable, without collapse of lumbar spine
- May use other resistance (such as barbell or kettle bells)



Shoulder Press Variation

- **Category:** overhead push; torso lateral stability
- Use one dumbbell, one arm
- Stand with dumbbell at shoulder level
- Press dumbbell overhead until arm is fully extended; pause briefly before lowering with control back to shoulder level
- Keep torso erect and spine stable as weight is lifted; resist forces creating a lateral pull
- Keep opposite hand empty (no counter-weight)
- Complete reps with one arm; shift weight to other side and complete the same number of reps



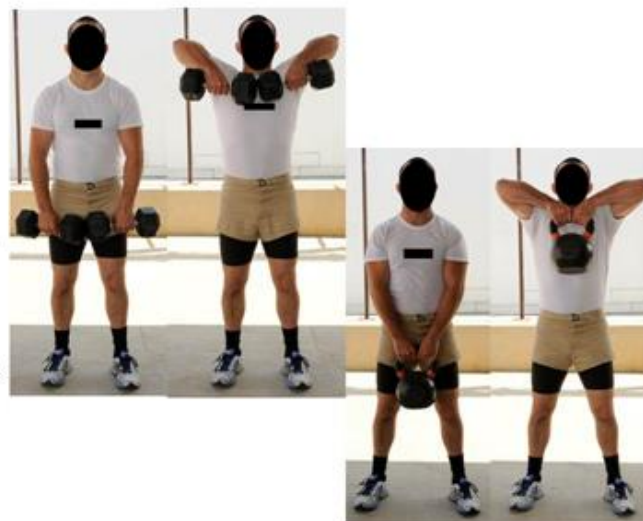
Biceps Curl

- **Category:** upward pull
- Keep torso stable in seated or standing position
- Begin with arms fully extended and curl dumbbell through full range of motion
- With control, lower dumbbell to full extension
- Do both arms together, or one arm at a time (maintain lateral stability of torso)
- May use other resistance (such as barbell or cable machine)



Upright Row

- **Category:** upward pull
- Stand with arms straight, weights resting against thighs, and palms inward
- Draw weights up in a straight line, stopping just below chin
- Bring elbows just above shoulders
- Keep torso upright (don't lean forward)



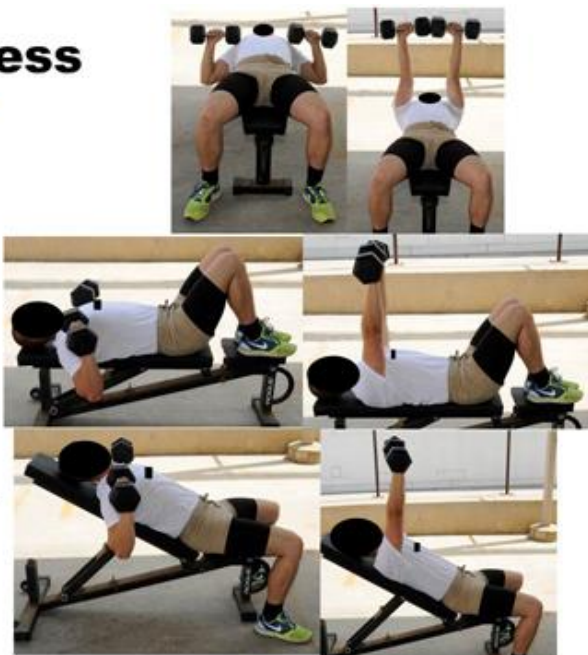
Shoulder External Rotation

- **Category:** rotator cuff
- Lie on side (on a bench or on the floor)
- Upper arm against torso and elbow at 90°
- Rotate forearm outward through full Range of Motion, pause briefly, return to starting position
- Do not let upper arm move away from torso; axis of rotation is through the humerus



Chest Press

- **Category:** outward push
- Begin with back on bench, dumbbells against body at shoulder/upper chest level
- Feet on floor or end of bench; do not arch back during lift
- Press dumbbells away from chest in a natural path until arms are fully extended
- Pause briefly before lowering dumbbells with control to starting position
- Variation: incline or decline bench



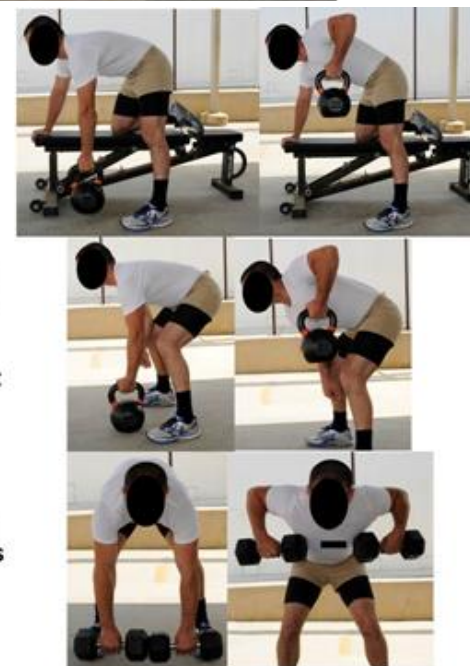
Y Exercise

- **Category:** scapular
- Stand with arms at sides and dumbbells in each hand
- Raise arms approx. 45° to the sides till hands are slightly above shoulders, thumbs downward in "empty can" position
- Pause briefly and lower hands with control



Bent Over Row

- **Category:** pull towards
- May use bench for support
- Grab weight with arm fully extended
- Pull weight directly to armpit; pause briefly, then lower with control
- Weight may touch ground, but not rest there
- Complete desired reps, then switch to other arm
- May lift two weights together (or use barbell) if lower back is strong enough to keep torso stable, parallel to ground



Hip Abduction

- **Category:** lateral hip
- Use an elastic band to provide resistance, by isolating one leg or doing a monster walk
- Use a cable machine to provide resistance
- Move smoothly through a complete ROM, with resistance in concentric as well as eccentric phases



Dorsiflexion

- **Category:** ankle flexion
- Use an elastic band to provide resistance
- Use your own hands to provide resistance
- Move smoothly through a complete ROM, with resistance in concentric as well as eccentric phases
- Can also perform in/out (adduction/abduction) movements for foot

