


MUSCULAR STRENGTH AND ENDURANCE FOR TRACK AND FIELD (CARD 1)
GRADE LEVEL: 5th grade and up



ORGANIZATION	<p>Have students form a large circle around you while you lead them in muscular strength and endurance exercises.</p>
GUIDELINES	<ul style="list-style-type: none"> • Warm up and stretch properly before performing any of these strengthening exercises. • Alternate muscle groups to avoid strain or injury. • Try to perform two or three sets of a strengthening exercise, alternating with periods of rest, where a set consists of a certain number of repeated exercises or repetitions. • Instead of a static rest period, you can have athletes perform another strengthening exercise that works a different muscle group (e.g. alternate sets of push-ups and crunches). • Begin gradually with only a few repetitions of an exercise. As your athletes learn the exercise and become stronger, increase the number of repetitions. • The focus should be on improving muscular endurance rather than strength, so aim for 10 to 20 slow repetitions per set with a concentration on proper form. • Perform the exercises slowly in a controlled manner through the full range of motion to guarantee that your athletes work the correct muscles. • Avoid performing the exercises too quickly because momentum will minimize the effect on muscular endurance. • Exercising muscles that are sore or injured invites further injury. If you are sore, go easy and push through mild discomfort, but not pain.

MUSCULAR STRENGTH AND ENDURANCE	INSTRUCTION
<p>Core</p>	<p>Crunches</p> <ol style="list-style-type: none"> 1. Lie on the ground with the knees bent and the feet flat on the floor roughly shoulder-width apart. 2. Place fingertips on the back or sides of the head with the elbows pointing outward. 3. Take a deep breath and, while exhaling, contract the abs and raise the chest and head until the shoulder blades are 1-2 inches off the floor. 4. At the same time, pull the belly button towards the spine and flatten the lower back against the floor, squeezing the abs tightly. 5. While inhaling, lower the shoulders back down until they are just above the ground. <p>Performance Points</p> <ul style="list-style-type: none"> • Keep the neck long and raise the chin to avoid straining the neck. • Relax the neck by using the hands to support the weight of the head. • Never pull the head up with the hands or interlock fingers behind the head. • Breathe deeply and rhythmically throughout the exercise, exhaling when going up and inhaling when coming down. • Lift both the chest and the head to achieve more of a lift than a curl. • Keep lower back on the ground. <p>Benefits</p> <ul style="list-style-type: none"> • Strengthens the abs, which are essential for stabilizing the upper body and maintaining an upright posture, which in turn enables runners to breathe efficiently and avoid energy-wasting movements of the upper body.

Planks

1. Lie flat on the ground and prop up the upper body using your forearms.
2. Curl the toes under and prop up the lower half of the body.
3. With the whole body parallel to the ground, hold the plank for 10 to 30 seconds for 2 to 4 repetitions.

Legs

Toe Raises

1. Stand facing a wall or chair and place one hand against it for support.
2. Slowly stand up on your toes, and then slowly lower heels to the floor.
3. Perform 10 to 20 repetitions.

Benefits

- Toe raises strengthen the calf muscles located in your legs directly below the back of the knee.

Side Leg Raises

1. Lie on your side.
2. Align the upper leg with your body and bend the bottom leg at the knee.
3. Lay your head on the outstretched bottom arm and bring the top hand across, placing it palm down in front of chest for support.
4. Slowly lift your upper leg, leading with the heel, as high as you comfortably can. Slowly lower it to the starting position and repeat.
5. Perform 10 to 20 repetitions with each leg.

Benefits

- Side leg raises strengthen the abductor muscles located in the hips and groin region.

Squats

1. Stand with feet facing forward, shoulder-width or slightly wider apart.
2. Slowly and fluidly bend your knees and lower the body, extending the arms out in front.
3. Pause for two to three seconds.
4. Slowly raise back up and then repeat the action.

Performance Points

- In the ultimate squat the angle of the knees will be 90 degrees and the thighs will be parallel to the ground. Squat within your own limits. Do not let the hips sink lower than the knees.
- Keep the knees behind the toes. To help, imagine sitting back in a chair.
- Maintain an upright posture. A slight forward lean is okay.
- Keep chin up and parallel to the ground and feet and knees pointing forward.

Benefits

- Strengthens various muscle groups and improves running stride while preventing "leg collapse," the sinking of the knees and hips as the foot strikes the ground.

MUSCULAR STRENGTH AND ENDURANCE	INSTRUCTION
<p>Legs (continued)</p>	<p>Lunges</p> <ol style="list-style-type: none"> 1. Stand upright with feet shoulder-width apart. 2. Step 2 to 3 feet forward with one foot and lower into a lunge position. 3. Hold for one to two seconds. 4. Pushing off the front foot, return to a neutral standing position. 5. Repeat the lunge, leading with the opposite foot. <p>Performance Points</p> <ul style="list-style-type: none"> • In a lunge position, the front knee should be bent at about a 90-degree angle while the back knee angle hovers between 90 and 120 degrees. • Keep the back straight and the shoulders over hips. • Do not let the hips or torso twist or drop to one side. • Tighten the core muscles. • Point the toes and knees forward. • Keep the front knee over the ankle, not the toes. <p>Benefits</p> <ul style="list-style-type: none"> • Strengthens the quads, hamstrings, and glutes, which absorb the forces of impact upon landing and prevent leg collapse.
<p>Arms</p>	<p>Push-Ups</p> <ol style="list-style-type: none"> 1. Place the hands on the floor slightly wider than shoulder-width apart. 2. Raise the body so that only the hands and toes support it. 3. Lower the body down to about 1 inch off the ground and then raise it back up to where the arms are straight. 4. For a modified version, keep the knees on the ground. <p>Performance Points</p> <ul style="list-style-type: none"> • Keep the body in a straight line, with no raising or sagging of the knees, hips, back, or head. • Lower the body to about 1 inch off the ground without touching it. • Do not lock the elbows when fully extended. • Raise and lower the body slowly using controlled movements. • Exhale while pushing up; inhale while lowering down. <p>Benefits</p> <ul style="list-style-type: none"> • Strengthen multiple muscle groups which enables a stronger arm drive. Helps develop a stable and balanced upper body and improved posture.

Younger athletes may be unable to perform regular push-ups. Start with modified push-ups until athletes are strong enough to do the regular variety.

1. Position your hands as you would for a regular push-up.
2. Bend your knees and rest them on the ground. Cross your ankles and hold your toes off the ground. Lower yourself like a regular push-up.
3. Keep your knees in contact with the floor while keeping your back straight and your head aligned with your spine.
4. Straighten arms fully at the top of the push-up.

Full Body

High Knee Skipping

1. You can do this while moving slowly forward or standing still.
2. From the balls of your feet, raise your knee up higher than 90 degrees, while moving your arms as you would during running.
3. Bring that leg down and raise the opposite knee higher than 90 degrees. This motion should develop a slight hopping cadence.
4. Start off doing 3 repetitions for 30 seconds each and build up to doing 3 repetitions for 2 minutes each.

