



Irish Primary PE Association

Cumann Corpoideachais Bunscoile na hÉireann

Strength

Strength can be classified as muscular strength and muscular endurance. Muscular strength is the maximum force that a muscle exerts against a resistance in a single effort. Muscular endurance is the capacity of a muscle to exert force repeatedly against a resistance. Muscle strength and endurance are specific to particular muscle groups (e.g. strong arm muscles do not mean strong leg muscles).

Get Ireland Active recommendations for children <http://www.getirelandactive.ie/get-the-guidelines/children-and-young-adults/> include:

‘At least three times a week, include activities that promote muscle strengthening, flexibility and bone strengthening’.

The IPPEA encourages teachers to include strengthening activities regularly in their PE lessons and to provide further opportunities for strengthening activities at break times. **Strengthening activities for children should be in accordance with their age, growth and skill level.** Each PE lesson should aim to have a strengthening section of 2-3 minutes. Activities should vary and be fun. Perhaps highlight ‘a muscle of the week’ activity (see card below). Break time activities should promote strength development e.g. hopscotch and rope skipping.

Remember to always warm up before any exercise. Warming up reduces the risk of injury, and gets muscles ready. You can actually lift/push/pull etc. more if you go through a proper warm up routine. Make sure to stretch your key joints and muscle groups.

When performing strengthening activities correct and safe techniques should be developed initially. Children should perform 3-4 repetitions of each strengthening activity i.e. sit up. The teacher should observe children’s movements and provide feedback. When safe technique is mastered, over time, children can gradually increase the number of repetitions to form a set i.e. 10 repetitions = 1 set. The number of sets can be increased depending on the child e.g. 3 sets. Remember to keep the activity fun. Children should only carry out strengthening activities using their own body weight. Free weights are not recommended as children are growing.

Activities that promote strength:

Crab Soccer (Arm strength)

Teams 3v3-5v5

Large beach ball or soft footballs, Cones for goals; Bibs; Mark the zone of play to accommodate the number of children playing.

Children use hands and feet to support them. Everyone must be sitting down with hands and feet on the ground at all times. Once the game starts players can lift their seats off the ground and walk in crab-like positions. Players can only move the ball with their feet. Teams try to score goals using feet only.

Push Up Beanbag (Arm strength)

Two children in push up position face each other about 3 meters apart. Using a bean bag try to slide the object between your partners two hands. The partner may stop it with one hand only. Children may choose to keep score if they would like.

The push up position should be performed as follows:

Starting Position: Lie face down with hands under the shoulders. Fingers straight; legs straight and parallel with them slightly apart. Toes should be supporting the feet.

Action: Straighten the arms, keep the back and knees straight, then lower the body until there is a 90-degree angle at the elbows with the upper arms parallel to the floor.

The head should be up with the neck and body aligned. Eyes should be looking slightly forward.

A development: Stacking objects

Older children could work individually stacking objects while in the push up position.

www.speedstacks.ie

Sit Up (Abdominal curl)

The child lies on his/her back with the knees bent at 90° and feet on the floor. Arms are extended to the sides with the fingers touching the ground. The child slowly lifts his or her shoulders blades off the floor by flexing the spine. The fingertips slide along the floor at the same time for about 6-8cms. The child breathes out during this phase. Then the child slowly returns the shoulder blades to the floor by flattening his/her back into the floor. Breathe in for this phase.

Games and Activities (Leg strength)

- hopscotch
- hopping, skipping, jumping;
- rope skipping
- Jumping for height or distance develops leg strength. The athletics, games, gymnastics and dance strands can promote jumping. Children can try to beat their previous results. However children need to be taught to jump correctly and safely first.
- Lunges promote muscular strength and endurance. To perform a lunge, take a large step forward on the heel and then the forefoot. Lower the body by keeping the back straight but bending the knee and hip of the front leg until the knee of the back leg is almost in contact with the floor. Return to standing by pushing up on the hip and knee of the front leg. Bring

the feet back to meet and repeat on the other leg. This exercise can easily be incorporated in to a warm up.

Visiting a Local Park Playground:

Set up station teaching to include swinging and climbing on playground equipment or bars. Intersperse strengthening activities with endurance activities (rope skipping, star jumps, running around the perimeter of the playground). Below is a guide but each playground varies with different equipment. Perhaps in advance make station cards. Take a photo of pieces of playground equipment at your local school park. Title each photo with a heading of the activity. The cards can be hung at the object and should prompt the children what to perform at each station.

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| 1. Rope Skip | 2. Climb | 3. Run |
| 4. Hang/monkey bars | 5. Hopscotch | 6. Climb again |

Walking is a strand unit of the Outdoor and Adventure strand of the PE Curriculum. It is physical activity and children can accumulate their daily recommendation of 60mins (See Endurance Document 1). ‘Walking’ can be integrated with other curricular subjects. Walking can be used as a gentle warm up to a playground to participate in station teaching.

Sample Card:

Muscle of the Week Card

Muscle Area	Specific Muscle	Activities
Back of Arms	Tricep	Throwing objects (small balls, sponge javelins, Frisbees)
Front of Arms	Bicep	Climbing activities
Tummy	Abdominal	Curl Up
Back of Legs	Quadricep	Lunges
Calves	Gastrocnemius	Hopping