

Vancouver Regional Pediatric Team

STRENGTHENING

Here are some fun activities for building muscles. There are a few things to keep in mind when doing strengthening activities with your child. Exercise at a time when your child is well rested. Muscle strengthening occurs by doing the same activity several times. This will build endurance. Grade activities so that your child is giving a moderate effort. An activity that requires maximal effort is tiring and discouraging. Many of the activities below can be changed to different levels.

BUILDING MUSCLES WITH HOUSE CHORES



- Packing and unpacking groceries (i.e. carrying canned goods, milk jugs, big boxes...)
- Yard work (i.e. watering plants, raking leaves, mowing the lawn)
- Taking out the garbage
- Vacuuming the house (Pushing and pulling)
- Putting heavy things away
- Shoveling snow
- Staple paper onto bulletin boards

PUSH, PULL, AND CARRY



- Carry things on a tray
- Carrying, pushing, pulling a suitcase
- Carrying partially full milk jugs
- Carrying phone books
- Pushing a small cart or weighted stroller
- Pushing a full box
- Pushing a wheelbarrow
- Pulling things on a sheet
- Opening a heavy door
- Wearing a backpack - Start with light weight and progress to longer intervals and heavier items
- Tug of war game
- Helping the gym teacher move mats or heavy equipment

IDEAS FOR OUTSIDE



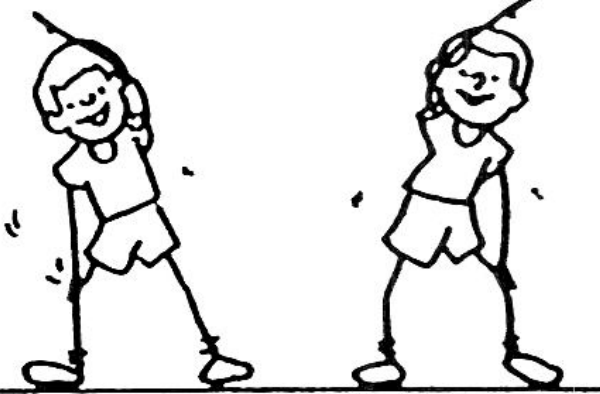
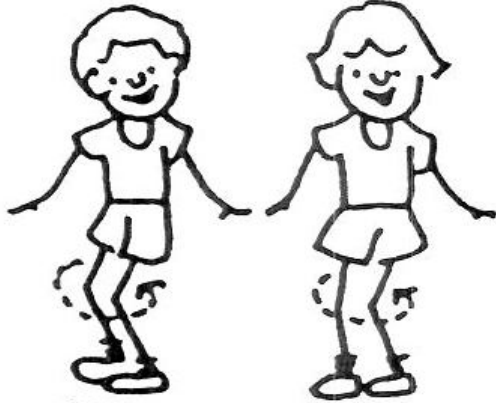
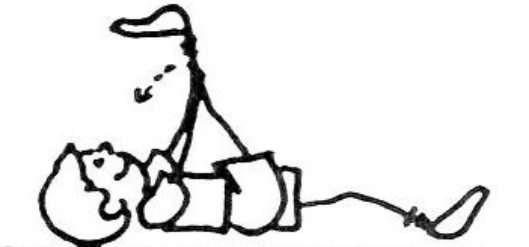

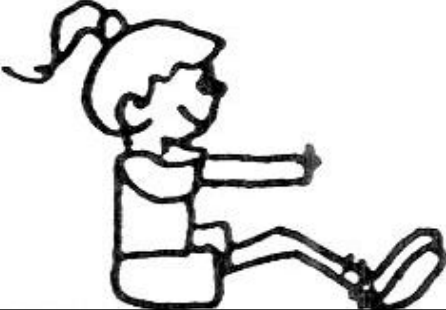

- Walking in snow
- Walking in sand
- Walking up hills and stairs
- Climbing bars and slides (i.e. jungles gym)
- Swing through monkey bars
- Playing the hula hoop
- Playing see-saw
- Riding a bicycle

GENERAL STRENGTHENING ACTIVITIES



- Playing “Horsy” or “train” with a towel around the child’s hips
- Wheelbarrow over a ball, sitting on a ball
- Playing in crouch, half kneel positions, and moving to and from standing
- Floor activities such as large colouring pictures done on hands and knees
- Walking up/down stairs leading with the weaker leg going up and stronger leg coming down
- Standing on one foot while playing
- Walking through a ladder on the floor or stepping in and out of boxes

STRETCHING AND WARM-UP - Hold stretches for at least 30 seconds
- During a stretch you should feel a muscle pull but no pain

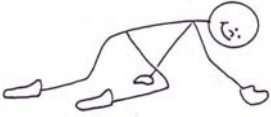





 <p>SIDE STRETCHER</p>	 <p>KNEE CIRCLES</p>
 <p>SUNFLOWER STRETCH</p>	 <p>BB CIRCLES</p>
 <p>FINGER STRETCHER</p>	 <p>ARM STRETCHER</p>




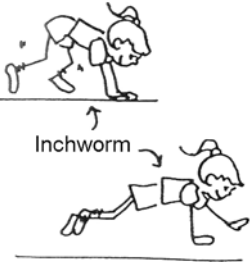


ANIMAL WALKS

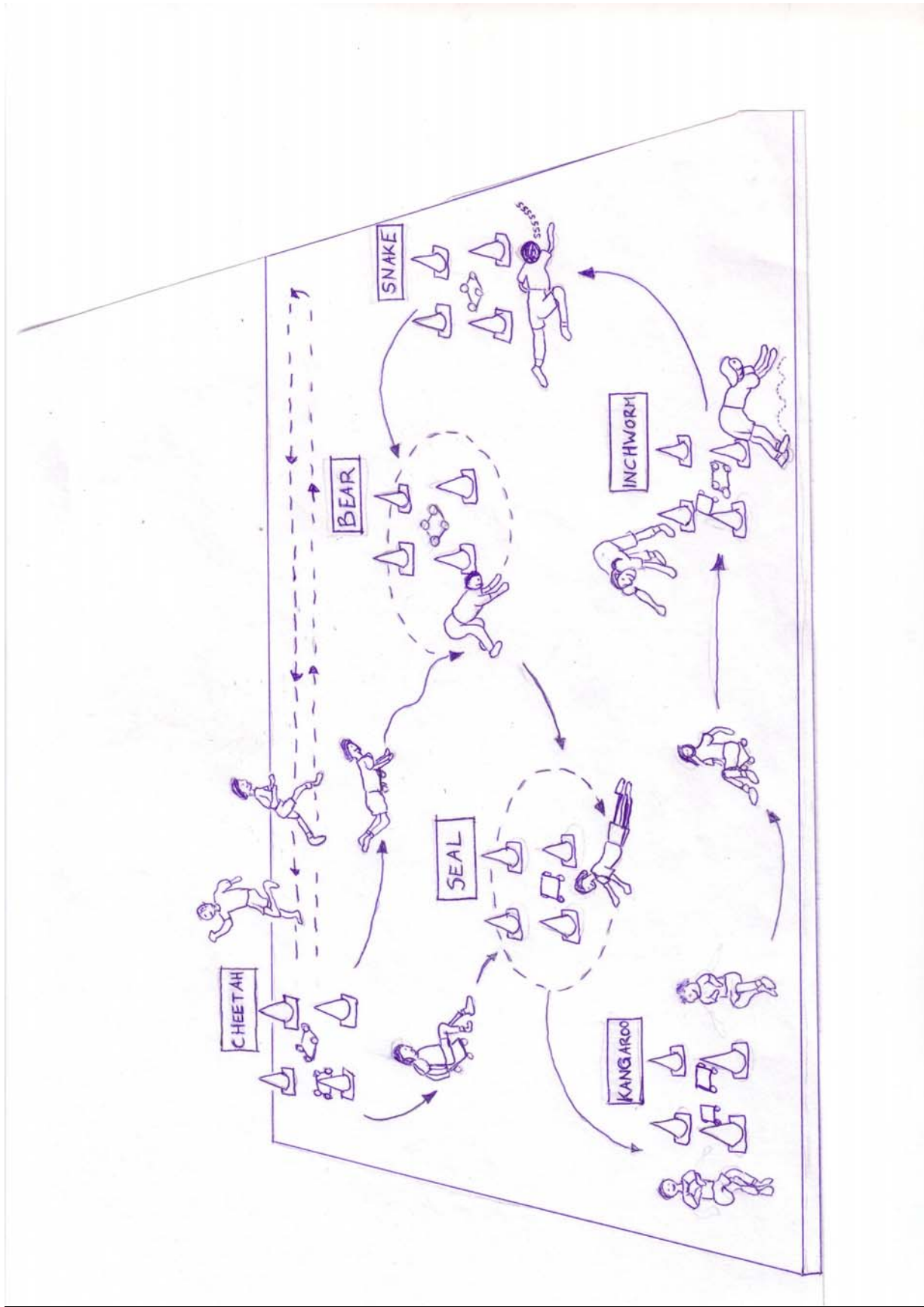
Activity: Animal walks can be practiced to music, used in place of running or walking in traditional children’s games or used in relay races.

Teacher Observations: *Body Awareness:* Can the child make postural adjustments to assume positions and maintain the various positions?

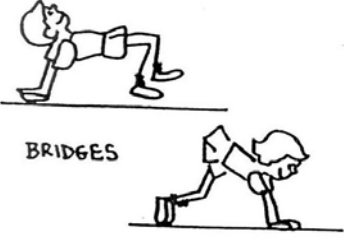



Motor Planning: Can the child copy the designated animal walk without physical cues?

<p>Bear</p> 	<p>Assume creeping posture, progress forward and backwards, moving arms and legs of same side simultaneously.</p>
<p>Bird</p> 	<p>Stand on tiptoes and wave the arms slowly up and down. As the “wings” move faster, tippy-toe around as if you were flying. As the flapping slows down the bird comes slowly to a stop.</p>
<p>Bunny Hop</p> 	<p>Squat low on heels and place hands palm down on floor. Move the hands forward, and bring the feet forward between the hands with a little jump.</p>
<p>Kangaroo</p> 	<p>In a squatting position, jump forward fully extending your body in the air. Land in a squatting position.</p>
<p>Seal Walk</p> 	<p>With your feet pointing out, drag yourself around the floor with your arms. Inverted seal is when your stomach faces the ceiling.</p>
<p>Puppy Dog Walk</p> 	<p>Walk forward or backward with both hands and feet on the floor.</p>

<p>Crab Walk</p> 	<p>In a squatting position, reach backward with the arms and put both hands flat on the floor behind you. Raise up until the head, neck, and body are in a straight line. Walk or run in this inverted position.</p>
<p>Duck</p> 	<p>Do a knee bend. Place your hands around your ankles. Walk forward one foot at a time, but remain in the knee-bent position.</p>
<p>Elephant</p> 	<p>Bending forward at the hips, allow the arms to hang limp. Big lumbering steps should sway you from side to side as you walk, imitating an elephant and his trunk.</p>
<p>Inchworm</p> 	<p>Support the body by hands and toes, keeping body in a straight line. With hands remaining stationary, walk the feet toward the hands, taking tiny steps. Keep the legs straight. Next, keeping the feet stationary, walk the hands forward in tiny steps until the first position is reached.</p>
<p>Horses Galloping</p> 	<p>Gallop forward with hands held simulating grasp on reins. Change and lead off with opposite foot.</p>
<p>Horses Prancing</p> 	<p>Stand straight, with hands held simulating grasp on reins. Lift knee high with toes pointed. Just as the foot touches the ground again, lift the other knee vigorously. Repeat in a rhythmical motion with forward momentum.</p>



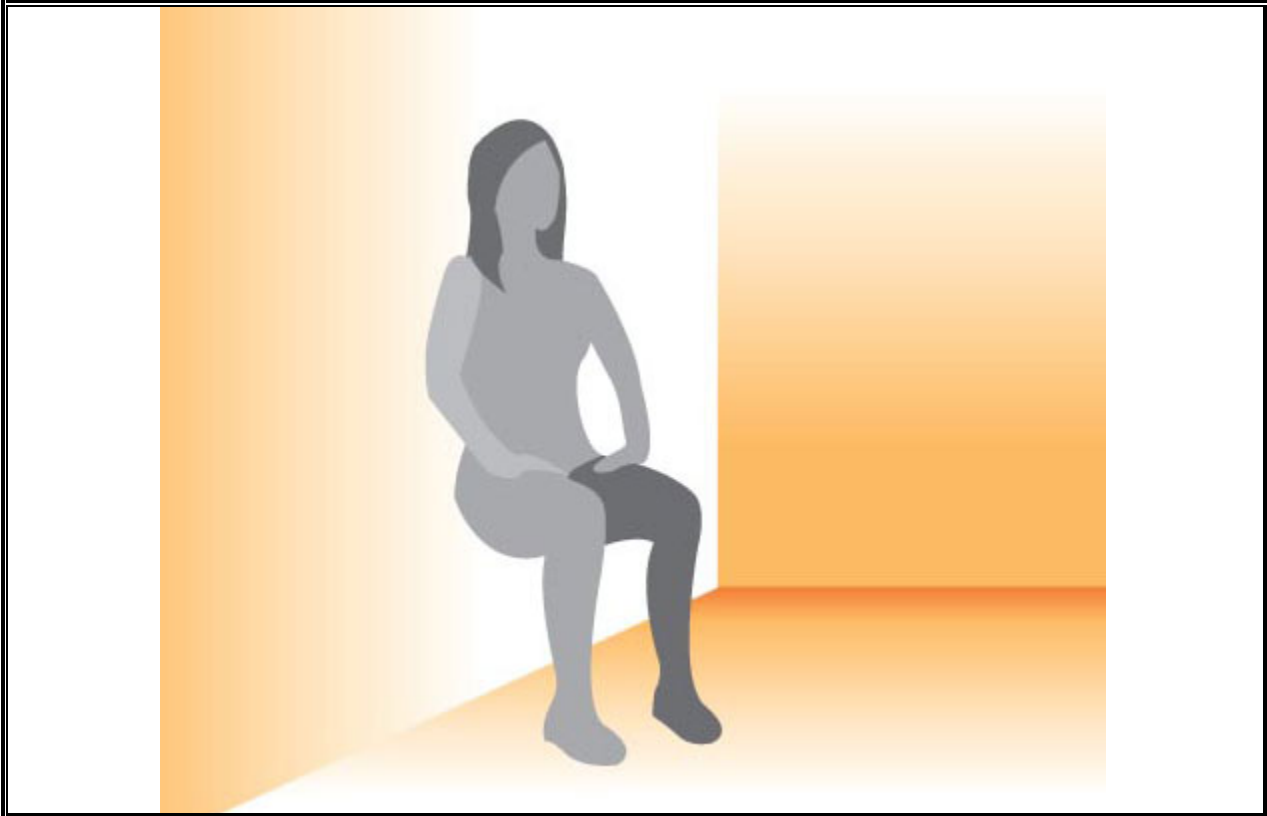
Other Activities

<p>Bridges</p>  <p>BRIDGES</p>	<p>Bridges & Tunnels</p>  <p>BRIDGES & TUNNELS</p>
<p>Jack-In-The-Box</p>  <p>JACK-IN-THE-BOX</p>	<p>Peek-A-Boos</p>  <p>PEEK-A-BOOS</p>

LOWER EXTREMITY STRENGTHENING (*Knee Extension*)

Wall Slides

- Purpose:** To strengthen the muscles that straighten the knee and help maintain the child upright for standing and walking.
- Directions:** have the child stand at a wall with the feet about shoulder-width apart and the back against the wall. Have the child slide part way down the wall by bending at the knees. The have the child straighten the hips and knees to return to a full-standing position.
- Ideas:** Position rings and a ring stacker, puzzle pieces and a puzzle, or pegs and a pegboard on two benches of unequal height. The child can slide down to grasp an item and return to a standing position to place it.
- Important:** Do not allow the child to turn the knees inward. This can often be prevented with gentle outward pressure from your hands. Ensure that the knee is in alignment with the second toe.



LOWER EXTREMITY STRENGTHENING (*Ankle Dorsiflexion*)

Dorsiflexion – Sitting (on Scooter Board)

- Purpose:** To strengthen the muscles that moves the foot up at the ankle.
- Directions:** have the child sit on a scooter board with the legs forward and both heels on the floor. Then ask the child to move the scooter board forward by pulling with the legs. Pulling with the legs with the heels planted firmly on the floor will help the feet move up at the ankles. The child may perform this activity with both legs moving together or alternating legs as if “walking” the scooter board. This activity also provides input to the heels to prepare for heelstrike in walking.
- Ideas:** Place item on the floor to be picked up as the child travels around the room on the scooter board.
- Important:** Do not allow the child to move the scooter board forward using trunk motion rather than pulling with the legs.



LOWER EXTREMITY STRENGTHENING

Climbing Stairs

Pre-Requisite Skills:	Child can walk independently alternating feet. Child can go up stairs with one foot leading and the other following.
Possible Problems:	Child is unable to alternate feet going up stairs.
Solution:	Start with wide and shallow stairs Have child support him/herself holding railing on one side and instructor's hand on the other Verbally instruct to lift alternating legs Progress to one hand support on rail then no support Gradually increase number of stairs Child should be able to go up stairs before teaching descending stairs

