

Children, Young People and Families Occupational Therapy Team

GROSS MOTOR SKILLS

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Enhance Development of Motor Skills.

Gross motor skills are big motor skills that require balance and co-ordination and include a variety of big movements in play, such as running, jumping, hopping, crawling, climbing, kicking, pushing and pulling.

In order to develop these skills, try some of these activities:

- Playing on playground equipment such as swings, climbing frames and merry-go-rounds.
- > Rough and Tumble play with an adult.
- > Jump on a space hopper or trampoline.
- Funny walks e.g. wriggle like a worm, walk like a crab, soldier or pirate, hop like a frog.



- > Sing songs or rhymes and add actions and dance.
- Try following the actions of party songs e.g. Superman, Hokey Cokey, Cha Cha Slide.
- Create different obstacle courses for play that require walking along a line, on stepping stones, over, under and through objects, hopping, jumping or walking in a crouched position.
- Place mats or paper on the floor and pretend they are islands surrounded by sharks so your child has to use them as stepping-stones.
- > Play with balloons hitting or kicking to another person.
- Blow bubbles and get your child to pop them with their pointer finger. Make sure you vary the height and direction of the bubbles so your child has to reach, jump, crouch and chase them. This activity also helps development of hand-eye co-ordination in preparation for writing and drawing.
- Play "Twister" or "Simon Says" (using odd body parts such as standing on one leg, or balancing on one foot and one hand).
- Play with balls or beanbags whilst the child is sitting, kneeling, half-kneeling, squatting and standing to practice throwing, catching, kicking, bouncing etc.
- > Play tug-of-war.

- Kicking a ball in the back garden or park.
- Skateboarding.
- Play "What's the time Mr Wolf?" where the child has to stop quickly and not move.
- Hopscotch or jumping on squares in an obstacle course.
- Practicing walking along balance beams or stools with supervision.



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- Organised activities such as swimming, gymnastics, horse riding, martial arts such as Tai Chi, Tae Kwon-do or Karate or dance classes.
- > Attend organised play gyms.

Ball Skills

Catching a ball is a skill which should be approached carefully and sympathetically. Some children are quite frightened of a ball coming towards them through the air and are more inclined to avoid being hit by it than attempting to catch it. While children are waiting to catch a ball, ask them to rub their hands together quite hard. The tingling

sensation felt afterwards gives tactile feedback in the catching area of the hands. Before catching is attempted, making the hands familiar with the feel of a variety of sizes of ball is useful.

Familiarity activities for the hands

Equipment needed: balls of different sizes, beanbags, ropes, skittles, etc.



- 1. Standing feet apart, roll the ball in a figure of eight around the feet, using different parts of the hands, (backs, fingers, palms), first in one direction and then the other.
- 2. Sitting, legs bent, feet on the floor. Roll the ball gently under the knees from one hand to the other.
- 3. As in 2, but roll the ball under the knees, round the feet, first in one direction, then the other.
- 4. As in 3, but roll the ball under the knees, round the feet then round the back in both directions.
- 5. Sitting legs astride. Hold the ball near the ground in both hands, open the hands to release the ball. Try to get both hands back to the original position as the ball bounces up.
- 6. Sitting legs straight, feet together. Place the ball on the ankles, raise the legs and catch the ball as it rolls down the legs.
- 7. As in 6, but first roll the ball down to ankles, then raise the legs and catch the ball as it rolls back towards the body.
- 8. Using different parts of both hands, guide the ball between and round an obstacle course made from beanbags, ropes, skittles, etc.
- 9. As in 8, using either hand.

Once the child is more familiar with balls and how to handle them, work through the following activities, beginning with rolling and ending with throwing and catching. Always use bigger balls (or balloons) first and then move onto smaller balls as skills improve. Encourage the child to talk themselves through each activity beforehand (verbal self-guidance).

Rolling and stopping a ball

- 1. Roll the ball, chase it and stop it.
- 2. Roll the ball, chase and run past it, crouch down and gather the ball in the hands.
- 3. Roll the ball against a bench or wall; gather the rebound in the hands.
- 4. The child stands at the opposite end of a table from a partner, with each person taking it in turns to roll the ball to each other, catching it as it drops off the table.

<u>Kicking</u>

- 1. With the child standing and the ball still, kick the ball.
- 2. Progress to the child walking then running to kick a stationary ball
- 3. With the child standing, roll the ball for them to kick it, gradually increase the speed
- 4. Practice dribbling the ball so that both the child and the ball are moving

Catching

- 1. Have the child throw the ball with 2 hands at a helper or target. Start with a large gym ball or balloon, and reduce the ball size and encourage one handed throw as bilateral integration (2-handed skills) improves.
- 2. Practice stopping a rolling ball.
- 3. Practice catching two-handed until consistently catching without trapping the ball against their body. Then one hand catching.
- 4. Practice throwing at a large target, e.g. through a hoop. Prompt to keep an eye on the ball whether throwing or catching.

Postural Control and Shoulder Stability

Shoulder stability refers to having the strength to keep your upper arms steady against your body so you can use your hands for completing a task. Postural control is the ability to maintain your trunk position, such as being able to sit at a desk or on a therapy ball without falling.

Postural control provides the underlying support needed for developing fine motor skills. Without adequate postural control, a child might have difficulty maintaining a sitting position and may fatigue quickly. Similarly, the stability needed for fine motor tasks like handwriting and cutting depends on having adequate stability in your shoulders. The following activities will help:

Encourage child to spend time playing and watching TV on their tummy – propping on the arms helps shoulder stability

- Complete games, drawings or read books while the child has their tummy supported on the edge of the seat of a study chair and are supporting themselves with their hands. At first, they may find it difficult to lift one hand off the floor, but once they get stronger they may be able to use one hand to turn the pages of a book etc. and the other to support their weight.
- Get child to help carry heavy items around the house e.g. carry the shopping bag, washed clothes to the line.
- > Pour water or sand from a pitcher.
- > Work on a vertical surface (writing on blackboard or easel).
- > Chair push ups.
- Sit on a gym ball for 5 minutes (increasing time as child gets better) whilst watching TV.
- Get child to help with household chores: using a vacuum, wiping the walls or windows (using big, circular arm movements).
- > Swimming.
- > Climbing frame.
- > Any jumping on a mini trampoline, old

mattress.

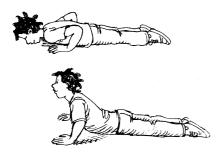
- Scooter board in prone-lying position to pick up objects around the room.
- Carry an object on a spoon at arms length and have a race, without letting it fall off the spoon!
- Use masking tape or string to make paths or set up obstacle courses. Do wheelbarrow walks, combat crawls or imitate animals around the course.
- > Tug-of-war games.

Warm Up Exercises

SHOULDER SPIRALS

- Hold both arms out horizontally to the side and start to circle them, initially making small circles but gradually getting larger until the circles are as large as possible, (this should take about 5 rotations).
- When the circles have reached full size, change direction and gradually reduce the circles, (again taking about 5 rotations) to get back to the smallest size.
- Start by trying to complete 3 spiral sequences then gradually build up the number you can do. Aim to do 10 spiral sequences comfortably. This will help improve your stamina when writing.



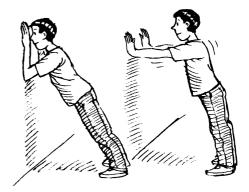


HALF PUSH UPS

- Lie face down on the floor and push your body up with your arms in the same way as a normal pressup, but keeping your tummy on the floor. (If you are able to lift your tummy off the floor then you can do this.)
- Repeat 10 times.

WALL PRESS-UPS

- Stand facing a wall about 1 1/2 arms length away from it.
- Stretch your arms out in front (keeping them at shoulder level) to place your hands flat on the wall. Then bend your arms to try to bring your face to the wall, without moving your feet.
- Keeping your body straight, straighten your arms, pushing yourself away from the wall.
- ≻ Repeat 10 times.



Pelvic & Core Stability

Half-Kneeling Position.

- Develops core stability (balance, pelvic stability, shoulder stability).
- ➢ Gives kinaesthetic feedback.
- Promotes wrist extension.
- Promotes trunk rotation and crossing of the midline.
- Promotes an upright sitting position (1/2 sitting).
- > Develops bi-lateral co-ordination.



Kneeling Position.

- Develops pelvic stability, shoulder stability and shoulder triangle.
- Promotes external rotation of shoulder and forearm.
- Promotes trunk and head extension as in an upright position.
- Promotes flexion of knees.
- Gives proprioceptive feedback through knees.
- Promotes weight shifting through knees.
- Promotes trunk rotation and crossing of the midline.

Standing position.

- ➢ Gives proprioceptive feedback through feet.
- Gives kinaesthetic feedback.
- Promotes weight shifting through feet.
- > Promotes trunk rotation.
- Develops core stability.
- Develops shoulder strength due to large movements.
- > Abduction of shoulder.



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Prone "Puppy" Position.

- > Upper body extension .
- Gives a wide base of support.
- Gives proprioceptive feedback.
- Develops shoulder triangle & shoulder stability.
- Promotes midline position & bilateral integration.
- > Forces wrist extension.
- > Stabilises elbow.
- Forced to adjust paper.





Centrefold" Position.

- Develops trunk stability (laterality, more alignment).
- Develops bilateral integration (legs & arms crossing midline, trunk rotated).
- Gives proprioceptive feedback through elbows & shoulders.
- Promotes dynamic use of wrist and discourages hand swapping.
- Promotes wrist extension.
- > Develops lateral muscle of neck.

All-Fours Position.

- Develops shoulder triangle.
- Gives a wide base of support.
- Gives pelvic stability.
- > Weight bearing through shoulder.
- Promotes 90° sitting position.
- > Helps bi-lateral weight shifting.
- Gives proprioceptive feedback through knees and elbows.



Posture Preparation

Here's a warm up that's great for posture and a positive attitude.



Push Palms



Pull Hands



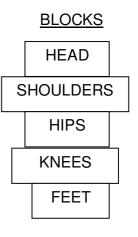
Hug yourself tightly



Reach high, one hand then the other



Pull up on the chair





Stack your blocks



Assume a funny posture



again