



Fine Motor Skills Development: Gross Motor Guidance and Ideas

Gross motor skills and fine motor skills are inextricably linked. Developing children's gross motor skills comes before focusing on their fine motor skills and is fundamental for their development. Gross motor skills require an ongoing focus as a child continues to develop. These key areas of gross motor development are essential for the progression of fine motor skills. As well as physical development, cognitive development is required in order for children to become proficient in these skills, for example they need to be able to sequence, remember and plan.

We need to develop gross motor skills to:

- create a firm foundation for all fine motor skills;
- develop an awareness of where our bodies are in space;
- control how the different parts of our bodies move;
- integrate movements across the midline of the body and establish a dominant hand;
- develop core strength and stability;
- maintain a good posture for using fine motor skills;
- develop upper body strength and shoulder girdle stability which supports the movements of hands and fingers;
- support everyday activities, such as self-care, learning and play.

Body Awareness

Body awareness is the ability to understand where our bodies are in space, changes in position and how our bodies move, for example, how far to reach to pick up an object. All children would benefit from any of the activities mentioned in the body awareness section as it is something all children will need to learn. However, it is worth noting that neurodiverse and SEND learners may have more difficulties developing these skills.

A child who could benefit from additional work on body awareness may:

- appear clumsy and may often trip over or bump into things;
- find it hard to copy others' movements, for example in action dances;
- be delayed in developing physical skills, such as running or throwing a ball;
- have poor posture;
- look at their feet when running;
- walk or stomp with extra force;
- avoid some physical activities;
- tend to use the left hand on the left side of the body and the right hand on the right side of the body;
- not yet show a preference for a dominant hand, for example when mark making.

Body Strength

Body strength involves strengthening various muscle groups throughout the body to increase stability and control. It affects posture as well as control of the trunk, shoulder, arm, wrist, hand and fingers. Body strength develops as children grow and develop and will be supported by children's growing body awareness, in particular proprioception, vestibular processing and crossing the midline.

A child who could benefit from additional work on body strength may:

- tire easily when writing;
- find it hard to produce neat work;
- not be able to control hands and fingers effectively;
- hold the arm away from the body when drawing or writing or work at an awkward angle;
- struggle to maintain good posture;
- find it hard to maintain balance;
- not be able to use upper body for weight-bearing activities.

If you think a learner has difficulties with body awareness or body strength, it is worthwhile seeking advice from a registered occupational therapist or other relevant professional.

Skill: Body Awareness - Proprioception

Description:

Proprioception lets us know where our different body parts are, how they move and how much strength each muscle needs to move. If we have our eyes closed, proprioception allows us to sense whether our arm is up in the air or down by our side. It also enables us to apply more or less pressure and force depending on the task, for example knowing that picking up a feather requires less pressure than picking up a rock.

Supporting Activities:

- crawling through tunnels
- dinosaur stomping
- running
- riding a bike
- pushing boxes
- jumping on the floor or a trampoline
- climbing frames, climbing walls and trees
- stretching arms to hang down from tree branches or climbing equipment
- using horizontal climbing bars and climbing equipment
- pushing a scooter board or riding it on stomach
- 'heavy work', such as carrying laundry baskets, weeding, raking leaves, shovelling snow, washing windows, mopping floors, moving furniture, carrying piles of books, moving gym mats and stacking chairs
- walking up a slide
- using obstacle courses
- digging in sand and soil
- deep pressure activities, such as sitting with weighted lap pads, squeezing into tight spots or lying under heavy objects, e.g. large cushions or pillows, wobble cushion
- tumbling on a sports mat
- rolling an exercise ball back and forth
- bouncing on top of an exercise ball
- rolling up in a blanket
- wall push-ups
- crab walks
- wheelbarrow walks
- playing hopscotch
- partner mirroring games
- games that involve identifying body parts
- games involving twisting, turning and maintaining balance, such as passing a ball to the person behind in a chain-style team game

Skill: Body Awareness - Vestibular Processing

Description:

The vestibular system is responsible for sensing any change of position, direction or movement of the head. It involves sensing movement, gravity and balance, enabling us to balance when walking and running and also when sitting and standing. The vestibular sense is linked to the inner ear, so children who suffer from ear infections or inner ear damage will often find that their balance is affected.

Vestibular processing is important for fine motor skills in a variety of ways, such as muscle strength, postural control, balance, attention, visual perception and processing, and spatial orientation.

Supporting Activities:

- swaying or slow dancing to music
- rocking in a hammock, on a yoga ball or rocking horse
- singing 'Row, Row, Row Your Boat' with rocking actions
- singing 'Head, Shoulders, Knees and Toes' with actions
- riding a see-saw
- going up and down ramps
- rolling balls up and down ramps
- climbing ladders and climbing frames
- picking up objects during a treasure hunt
- exploring large-scale loose parts or equipment and moving on/around them
- using loose parts to create large-scale pictures, such as filling outlines with different pieces
- skipping
- galloping
- somersaults
- cartwheels
- playing leapfrog
- mark making on large boards (perspex, blackboard, mirrors, different surfaces) at child height
- sliding down curved slides
- steering a bike/tricycle around obstacles
- playing games which involve placing hands and feet in different positions on the floor
- walking on balance beams made from different materials (cushions, tape, rope, foam mats, paper plates, rolled blankets)

Skill: Body Awareness - Crossing the Midline

Description:

Crossing the midline is when we move our arm or leg across the middle of our body to perform a task, such as putting shoes and socks on, cutting a sheet of paper or writing. It requires coordination and communication between the right and left sides of the brain.

A key aspect of developing midline crossing is to establish and strengthen the control of the dominant hand so it spontaneously moves over the other side of the body to work there.

Supporting Activities:

- playing with large blocks
- marching games using arms and legs
- sweeping and mopping
- wiping a table with one hand
- cleaning windows, tables or boards
- mark making on large surfaces, for example making rainbows
- drawing large circles on the floor with chalk
- using a cloth or roller to clean vertical surfaces
- playing with bats and a swinging ball
- swing painting on card as they swing
- dancing and performing a range of movements
- dancing with props, e.g. ribbons or scarves
- clapping games and chants
- playing Simon says with crossing actions
- giant weaving
- passing the ball in a line from one to another
- picking pretend apples off a tree by reaching and extending with one arm across the body
- pretending to be windmills and rotating arms across the midline
- playing a game tossing beanbags while sitting cross legged on the floor
- using the opposite hand to squeeze and remove clothes pegs placed on child's clothing at shoulders, knees and waist
- rolling balls down wide slopes where children have to reach across to catch them - working on both sides of the slope
- throwing beanbags into containers placed on the opposite side of the body to the hand used for throwing
- playing musical instruments, such as beating chime bars and percussion instruments which involve crossing the midline
- throwing to hit a target
- squirting a water gun across the body to hit a target
- relay games that involve passing objects
- yoga moves involving crossing the midline

Skill: Body Strength - Large Muscle Strength

Description:

Large muscles are the muscles in the trunk, back, shoulder, arms, legs and hips. They surround the spine, abdomen and hips. Strong large muscles give the body a stable foundation. They affect posture and balance. Postural control, upper body strength and shoulder stability all depend on this large muscle strength.

Supporting Activities:

- carrying out activities on all fours, such as kicking a ball while in a crab walking position
- playing a game or doing an activity kneeling at a low table
- activities in which children have to squat down to get the next piece
- jumping or hopping
- using horizontal climbing bars and climbing equipment, and climbing up ladders
- carrying, digging, raking
- climbing hills and rolling down them
- tackling obstacle courses involving a range of physical challenges
- sitting and balancing on a large ball
- standing and removing stickers from shoes - about five stickers can be placed on each shoe for children to remove one by one from alternate shoes
- balance bikes
- yoga, dance and tai chi
- swimming can also be valuable

Skill: Body Strength - Postural Control

Description:

This is the ability to stabilise the trunk and neck to enable coordination of hands and fingers and maintain balance. It involves contracting appropriate muscles required for a controlled posture, as well as making small adjustments in response to changes in position and movement.

As well as strength, it requires good body awareness and vision.

Supporting Activities:

- superhero pose on floor (lie on tummy and lift arms/legs)
- bouncing on space hoppers
- rolling
- pulling self along plank or balance beam on tummy
- painting on an easel
- sitting on exercise ball instead of chair
- using legs to kick a suspended ball
- hopping
- animal movements - bear walking, frog hopping, kicking like a donkey
- playing catch while high-kneeling
- walking along kerbs, ledges, wobbly bridges and other uneven surfaces
- side lying or side sitting when carrying out activities
- kneeling, squatting or sitting to standing transfers from one activity to another
- making a bridge shape when lying on back - zoom cars underneath
- static balancing activities, such as standing on one leg
- adopting the 'plank' pose

Skill: Body Strength - Upper Body Strength

Description:

This involves the entire upper body including the upper chest and the muscles in the upper back as well as the muscles attached to the shoulder joint.

Strong muscles can be developed from birth when babies are encouraged to push up on hands and extend arms during tummy time. As a child grows, weight-bearing activities using the arms are essential for continuing to develop these muscles.

Activities involving hanging and climbing involve the child's own body acting as a counterweight. Stretching activities promote flexibility while pulling and dragging activities develop strength.

Supporting Activities:

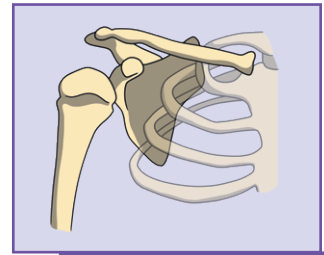
- crawling, such as through obstacle courses with tunnels or under parachutes
- climbing, for example up slides, climbing walls and ladders
- painting on vertical surfaces
- washing windows, cars, tabletops
- playing percussion instruments
- ribbon/scarf twirling
- carrying heavy objects, such as buckets of water or sand and building towers from large boxes/crates
- transporting 'bottle babies' made from bottles of different sizes filled with water (with eco-glitter or food colouring added if you like, and the caps glued shut) for children to lift, roll, carry and push – and collaborate to move the heavier ones
- playing with train tracks or racing tracks on vertical surfaces by attaching the track to a board and then positioning it vertically
- using geoboards vertically by attaching them to a wall
- pressing modelling dough against a vertical surface
- noughts and crosses on a vertical surface
- upside-down mark making
- walking on hands or on all fours, for example in wheelbarrow races or moving like different animals, such as bears or bunnies
- bunny jumping
- using swings
- playing ball games including catch games with a large exercise or weighted ball
- pulling and pushing activities, for example rope pulling activities or, using exercise bands
- hanging from horizontal climbing bars
- playing balloon volleyball keeping the balloon off the ground
- using a skipping rope - either an individual rope or turning large rope for someone else to skip
- moving on wheeled boards
- sawing

Skill: Body Strength - Shoulder Girdle Stability

Description:

Shoulder girdle stability involves the large muscles of the shoulder girdle (the ring of bones formed by the shoulder blades and collar bones) including the muscles at both front and back contracting together in order to stabilise the shoulder blade and the shoulder joint.

This stable support will let the smaller muscles in the arms and hands work efficiently and enable the full range of motion in the upper arm, elbow, forearm, wrist, finger and thumb.



the shoulder girdle

Supporting Activities:

- tummy time, for example at story time
- washing windows and surfaces
- all activities that involve climbing, pushing, pulling, throwing and weight-bearing through the arms
- shoulder spirals
- shrugging
- carrying heavy objects, such as buckets of water, tyres or large building bricks
- chair push-ups
- walking a large exercise ball up a wall
- hand pushes involving pushing the hands against each other
- commando crawling
- digging in the garden
- corner pushes with one hand on each wall
- jump rope activities
- playing catch with a large ball
- balloon volleyball (trying to keep the balloon in the air)
- crab walking
- animal walking
- wheelbarrow walking
- using horizontal climbing bars
- wall push - hands flat on wall and elbows slightly bent
- walking a ball along a length of wall at chest height
- throwing rubber darts
- playing beach volleyball
- rope pulling activities
- swimming is also very helpful