

Proprioceptive Activities

Proprioception is the sensation that has been observed to help children regulate their responsiveness to sensation. Proprioception occurs when we move our muscles. Movement of our muscles against gravity or against a weight/resistance (heavy muscle work) increases the amount of proprioceptive stimuli.

Activities to try at home or school

Some of these activities are really useful if provided before or during class activities. It should be remembered that the activities need to be appropriate to the child.



Activities to be completed in standing/sitting/lying:

- Place linked hands on head and press down firmly: count out loud slowly to 10 – keep pressing!
- Place palms of hands together in front of chest and press hands together: count out loud slowly to 10 – keep pressing!
- Stamp, slowly and heavily, with alternate feet, in rhythm: 20 stamps.
- Jump, slowly and heavily, in rhythm: 10 jumps.
- Bear hug: fold arms over tummy, and hold onto your sides. Give yourself a big hug and squeeze! Keep hugging, and count out loud to 10.
- Sitting, place hands on knees and press down: count out loud to 10.
- Chair press-ups: put your hands on the sides of the chair and press down to lift your body weight off the seat: 5 times.
- Desk press-ups: stand between 2 desks, place one hand on each desk, and lift your feet up. Desks must be secure and solid!
- Press-ups, or cat-lapping press-ups (these are press-ups done in a crawl position, with knees drawn up under hips: they are easier!)
- Do wall push ups with claps in between.
- Hand-walking: from lying on the sofa, walk forward on your hands until just your feet are left supported on the sofa, then walk back on your hands.
- Play on pull up bars (can be put in the doorways at home).
- Push against a wall using various body parts, e.g. head and back, hips and shoulders (one side at a time), bottom and feet. Can sing to the tune of 'If you're happy and you know it' with the following words:
Push your hands against the wall, on the wall (repeat)
Push your hands against the wall, and do not let them fall
Push your hands against the wall on the wall
- Use cardboard boxes, blankets and pillows to make dens.
- Animal walks – walking like a bear, crab, giraffe, and frog.
- Encourage child to play on while lying on their tummy, pushing or weight bearing on their hands.
- Colour a rainbow on hands and knees on a large piece of paper or outside with chalk.
- Use a squeazy ball and squash it flat in as many different ways as you can.

- Blowing games: blow a heavy cardboard tube across the table or floor, straws or empty washing liquid bottles can be used to direct the air flow.
- Using playdough, stand at a table, place palms over the dough and press flat. Repeat several times. Roll the dough into sausages, or use a rolling pin.

Movement – with and without a partner

- Army crawl.
- Crawl football.
- Bunny hops.
- Ride a bike.
- Encourage climbing activities.
- Pushing a box filled with heavy items (filled bottles, cans etc.) This activity is better if the child is on their knees in a crawling position. Encourage the child to push it around obstacles – “driving a car”.
- Put child in a heavy cardboard box and get the other to push them along.
- Participate in activities like horse riding, swimming, and karate.
- Fill a pillowcase with toys for weight and encourage child to pull up stairs.
- Play ‘going camping’ by pulling heavy blankets over chairs.
- Play jumping games.
- Jumping and climbing in and out of inner tubes.
- Play catch or roll a heavy ball.
- Pile up and crash into sofa cushions.
- Roll, walk or run up a hill.
- Yoga.
- Play ‘row, row, row your boat’.
- Two children sitting back to back with knees bent and feet flat on the floor, interlock arms and then try to stand up at the same time



Rich heavy work activities during the course of daily routines at home

- Unpack heavy shopping.
- Carry heavy shopping.
- Encourage the child to push the shopping trolley when you go shopping.
- Rearrange bedroom furniture with the child encouraging them to push.
- Wear a heavy back pack (10-15% of child’s body weight only).
- Hoover.
- Sweep.
- Mop.
- Dust.
- Empty the rubbish.
- Carry the laundry basket.
- Wipe the table after dinner.
- Push chairs under the table after a meal.
- Carry buckets of water outside to water plants.
- Clean windows using a spray bottle.
- Scrub rough surfaces with a brush.
- Help change sheets – throw the linen downstairs for the wash.
- Cooking activities – stir, mix, chop, and roll out dough.
- Wash the car.
- Push the wheelbarrow, digging, raking the grass or leaves.



At school

- Wash/wipe desks or wipe chalkboard or dry erase board.
- Place chairs on desks at end of the day or take them down in the morning.
- Fill box with books for child to take to other classrooms.
- Encourage the child to help prepare for PE lesson as much as possible by moving mats etc.
- Sharpen pencils with a manual sharpener.
- Give child opportunities to safely use hole punchers, staplers – anything that requires effort to use.
- Encourage child to play on all fours.

In addition:

- Chewy foods also provide proprioceptive input e.g. chewing gum and crunchy foods.
- Do oral motor games with acceptable items to explore with the mouth, e.g. whistles, blowing bubbles, blo-pens.
- Drink thick liquids e.g. smoothies, milkshakes through a straw, the thickness of the straw can be changed to make this harder. Smaller straw = harder work and more proprioception.
- Use a weighted lap pad, body warmer or back pack.
- Climb on playground equipment.
- Use squeeze toys that can be squeezed quietly on the child's lap under the desk so they do not disturb the class e.g. blu tack.

