

Heavy work information and activities

What is Heavy Work?

Heavy work is activity that requires effort from our muscles and these tasks usually involve pushing or pulling or lifting. The movement activities create resistance input to the muscles and this feedback is ultimately what calms and regulates the sensory system.

The sensory system that is activated during heavy work activities is called the proprioceptive system. The proprioceptive system receives messages when the muscles move to do work. These messages flow back and forth to the brain. The brain decides how much force a muscle should use based on the task at hand.

This allows children to use the correct amount of force when they need to hold something gently or when they need to lift something heavy. It's a complex system that is constantly adjusting to make sure the brain is getting the right information from all the joints and muscles in the body and as well as making sure the muscle output is appropriate to the task. This concept is also known as body awareness and allows us to know where our body is in space and how to move our body.

The takeaway message about the proprioceptive system is that it is a universal and powerful regulator. By working with the proprioceptive system, you can even out disturbances in other sensory systems. You can increase energy levels if you need to and you can reduce high energy levels to help children reach a calm, comfortable space to interact with the world.

When to do heavy work activities:

The beauty of heavy work is that they are easy to incorporate at home, in the classroom and in therapy settings. Adding heavy work to a child's daily routine will contribute to the development of their sensory processing.

Children will also gain valuable tools that they can use when they feel that they need to regulate themselves. How often you use heavy work input will depend on the individual child. Be guided by the child's enjoyment and response to the activity that you introduce.

Consider including a heavy work activity in the morning before going to school and again in the afternoon when children arrive home from school. Heavy work can also be incorporated into bedtime routines to help the sensory system feel calm and restful. At school, heavy sensory input for the whole class can be incorporated at regular intervals during the day.

Types of Heavy Work Activities

Pushing heavy work activities

- Wall push ups – stand an arm's length away from a wall and place both hands on the wall at shoulder height. Bend your elbows and lean into the wall until your nose is touching the wall. Return to the original position. Repeat ten times.
- Chair push ups – sit in a chair with your palms on the seat of the chair at either side of you. Push on your arms and lift your bottom and legs off the seat of the chair for a few seconds.
- Pushing a box across the room – fill a box with books or toys and kneel in front of it. Push the box across the room.
- Fill a laundry basket with laundry and ask your child to push it through the house.
- Push a large therapy ball or medicine ball along the floor and up the wall as high as you can go.
- Push a wheelbarrow or trolley.

Pulling heavy work activities

- Pulling on a rope – tie a rope to a tree, pole or secure door handle. Hold the rope and see how far you can lean back while pulling on the rope. You only need one person for this tug-of-war game!
- Tug of war – if two or more children are available have a game of tug of war.
- Pull up bar – it may be tricky for children to perform pull ups but just hanging from a bar is great work for muscles.
- Pulling and stretching a piece of TheraBand or stretchy material.

Jumping heavy work activities

- Trampoline – this provides endless hours of heavy work activity. Wonderful proprioceptive input while children enjoy the pleasure of jumping.
- Jumping on a mattress on the floor or couch cushions placed on the floor.
- Rocket jumps – crouch down and place your hands on the floor next to you. Count down from ten and leap into the air raising both hands up to the sky. Repeat the rocket launch a few times.
- Star jumps / jumping jacks are great for co-ordination and heavy work.
- Sitting on a small therapy ball and bouncing up and down.
- Hopper balls with handles are also a fun way to bounce around.
- Hopscotch
- Types of Heavy Work Activities

Lifting heavy work activities

- Carrying bags – allow children opportunities to carry bags of groceries or laundry at home.
- Weighted backpack – place a few magazines in a backpack and encourage your child to walk around with the backpack for a few minutes.
- A message could be placed in the backpack and your child could deliver this message to a family member at home or to another teacher at school.
- Carry a stack of books.
- Carry a full laundry basket.
- Carry a full tote bag.
- Weighted stuffed animal.

Chewing and sucking heavy work activities

- Chew dried mango, or other dry fruit.
- Chew gum
- Drink thick liquids through a straw e.g., yogurt, thick milkshake
- Specially designed necklaces, bracelets and toys are available for chewing.
- Chew on a straw
- Blow through a straw
- Eat crunchy snacks.
- Drink a smoothie through a sippy cup with a straw-type top.
- Use a “crazy straw” in a cup. The smaller opening is great for oral motor input.
- Play “Simon Says” with mouth exercises: Suck cheeks in/puff cheeks out/Make a big
- “O” shape/Stretch out the tongue.
- Use a straw to suck and pick up pieces of paper. Transfer them carefully to a cup using only the straw.
- Use a sport bottle.
- Use a cup with a coffee stirrer straw.