

## O.T. Works, Inc.

The Therapy Playce  
2521 E. Market St. Ste. A  
Nappanee, IN 46550  
Phone 574-773-7733 Fax 574-773-7133

### Heavy Work Activities

Heavy work activities (or proprioceptive input) are used to help children with sensory processing difficulties. The resistive input obtained through heavy work activities is generally calming and organizing to the nervous system. Heavy work can improve attention, improve alertness levels, improve body awareness, improve muscle tone, and decrease defensiveness and aggression. The effects of heavy work can last for up to 2 hours; incorporating these activities throughout the day is most effective.

Heavy work activities include:

- \*Whole body actions including pushing, pulling, lifting, carrying, jumping and climbing.
- \*Oral actions such as blowing, sucking and chewing.
- \*Hand/Finger actions involving pushing, pinching, squeezing and rolling.

#### Whole Body

- Carrying:* books  
chairs  
groceries  
weighted laundry basket
- Wearing:* weighted vest  
wrist or ankle weights  
weighted backpack
- Pushing or Pulling:* wagon  
broom or mop  
vacuum  
book cart or supply cart  
shoveling snow  
raking leaves  
furniture
- Jumping or Bouncing:* trampoline  
large ball  
jump rope  
gymnastics  
potato sac races

(movement activities can over-excite some children - make sure to include heavy work with these activities)

*Climbing or Hanging:* jungle gym  
monkey bars  
rock wall  
trees  
rope ladder  
climbing rope  
rings or trapeze  
animal walks

*"Sandwich" or squishing activities:* squishing in couch cushions  
bean bag chair  
rolling tight in lycra or blanket  
heavy blanket or weighted blanket  
compression (tight fitting) underclothes

### Oral Activities

*Chewy Foods:* jerky  
bubble gum  
fruit leather  
dried fruit  
gummy snacks  
licorice  
taffy  
raisins  
bagels  
cheese  
chewy granola bars or breakfast bars  
soft pretzels

(can use chewies - bracelets, necklaces, pencil toppers, etc.)

*Blowing Activities:* wind instruments  
bubbles  
whistles party favors  
blow pens  
kazoos  
whizzers

*Resistive Sucking:* thin curly straws  
sports bottle with long straw  
drink yogurt, pudding, applesauce, shakes through straw  
suckers  
popsicles  
peanut butter  
hard candies

### Hand/Finger Activities

*Resistance:* playdoh  
moon dough  
legos  
clothespins  
spray bottles  
scissors - cut thick paper or playdoh  
push pins  
paper punches  
weighted pens or pencils  
weighted eating utensils  
digging in sand  
cooking tasks - stirring, kneading, pulling, pressing finger  
squeezing/joint compression

*Fidget Items:* stress ball  
squishy toys  
rubber bands  
bracelets  
straws  
twisty toys

### Heavy work (proprioceptive) Tasks

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Heavy Work activities include:

Whole body actions including pushing, pulling, lifting, carrying, jumping and climbing

Oral actions such as blowing, sucking and chewing

Hand/Finger actions involving pushing, pinching, squeezing and rolling

Weighted blankets and weighted vests give proprioceptive input that provide calming and organization to the nervous system. Weighted vests and blankets should ideally, be used under the direction of an OT. The weight should be 5-10% of the child's body weight. Weighted blankets are helpful for sleeping and at quiet times. Weighted vests are vests that have weights sewn in or placed in the pockets. Weighted vests can be worn for up to 30 minutes, several times a day. If the child wears the weighted vest for longer durations their body can become dependent on the weight. The weighted vest should not be worn during strenuous play activities as this can cause too much stress on the body.

### Movement (Vestibular) Activities

Swinging, jumping, sliding activities

\*Movement activities can be disorganizing on the sensory system so it is beneficial to combine movement tasks with heavy work activities (jumping on trampoline; swinging from trapeze and kicking down boxes, etc).

### Tactile Activities

Shaving cream, sand, water play, bean tub, PlayDoh, clay, rubbing the skin with various textures of cloth

### Heavy Work/Regulatory Tasks

- Whole Body Actions
  - Pushing
  - Pulling
  - Lifting
- Oral Actions
  - Chewing crunchy or chewy foods
    - Dried fruit, gummy bears, licorice, beef jerky, bagels, gum, popcorn, soft pretzels
  - Sucking thick liquids such as milkshake or applesauce, popsicles, lollipops
  - Blowing such as bubbles or balloons, whistles, balloons
- Using weighted objects
  - Carrying groceries
  - Using weighted lap pad or weighted blanket
  - Moving furniture

- Carrying laundry
  - Shoveling snow
  - Raking leaves
  - Riding bike
- Jumping
  - Trampoline
  - Into bean bag chairs or couch cushions
  - On a therapy ball
  - Jump rope
- Climbing
  - Monkey bars/jungle gym
  - Rock walls
  - Trees
  - Ladders
- Squishing in crash pads or couch cushions or under exercise ball
- Wall pushes
- Pushups
- Sit ups

The proprioceptive system is one of the lesser known, but critical systems. Proprioception give us information about where our body parts are and what they are doing; allows us to grade movements, and indicates how much force our muscles are exerting. When this system is well integrated it is possible for one to skillfully guide arm and leg movements without watching what they are doing. It plays a key role for learning skills that require automatic body awareness such as: handwriting, bike riding, dressing, and stair climbing.

Children with poor proprioception may: appear stiff and uncoordinated, be clumsy, fall frequently, have difficulty with stairs, rough house, break toys, or have a weak grasp with crayons or markers.

Proprioception typically develops naturally/ but some children may need extra help in developing this sense!

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#### Home intervention Ideas...

- Sitting on or laying under bean bag chair; sandwiched between two heavy cushions during quiet reading, puzzles time, watching TV, playing board games
- Any push/ pull activity: tug - of - war, row boat, push wall (with back, feet, arms), push shopping cart, pull wagon
- HEAVY WORK! carrying laundry or groceries, raking, shoveling snow, move furniture Washing dishes, scrub tables - encourage two hand and heavy pressure Opening heavy doors
- Suspended or hanging equipment: monkey bars, trapeze bars, tire swing Encourage weight - bearing activities: wheelbarrow, bear, or crab walking incorporate animal walks into daily routine (i.e., bear walk to dinner, crab walk to bath time)
- Weights: playing with heavy balls, wearing heavy back packs to school, weighted vests or blankets
- Tight fitting clothing: spandex, leotards, long underwear, tights, benix fabric
- Forts and tunnels: encourage child to crawl through or sit in to play
- Playing with suspended equipment: Hitting a balloon suspended from a string
- Crash - N - Bump: walk on uneven surface, roll over stuffed animals
- Play turtle: crawl with bean bag on back
- Bear Hugs (every one needs at least one a day)
- Pouring/ cooking, ripping paper, using paper punch, pick up toys with tongs or strawberry huller (builds proprioception awareness in hands)
- Vibration (from electric toothbrushes, massagers, or toys - even bouncing)

...why learning is not all in your head...

-Carla Hannaford, Ph. D.-