Heavy Work

What is heavy muscle work?
It means just what it says! ...using our muscles and joints against resistance - so it feels like heavy work. Think about how you feel after moving furniture, washing walls, shoveling, pushing the lawnmower, digging in the garden, carrying groceries, hiking or using weights to exercise. Usually, our body feels more relaxed or calm.

How does it work? Heavy muscle work enters the brain through the cerebellum, which has connections to several other areas of the brain. The cerebellum regulates the flow of information and connects with the brainstem (contains the arousal center), the amygdala (part of the emotional brain) and the prefrontal lobe (location of executive functions – planning, organizing and impulse control) (Spark, 2008; A Leader's Guide to the Alert Program for Self-Regulation, 1994).

Why do some children need heavy muscle work?
Sometimes children need heavy muscle work to "feel" where their body is in space. These children may have some differences in their body awareness (proprioceptive) system.

For some children who are hyper-sensitive (over-sensitive to touch or sound), heavy muscle work can reduce their reactivity to sensory input so they can focus and pay attention.

If one of your students SEEKS heavy muscle work, it can look like…
- Pushing against walls, desks, tables or other people with their body or arms.
- Needing to be squished, cuddled, and squeezed yet sometimes resists those squeezes.
- Enjoying rough-housing at recess.
- Seeking crashing, falling, pushing, pulling
- Using too much or too little force for various activities.
- Chewing on non-food objects such as collars, shirt cuffs, pencils or other school tools.

Some children NEED heavy muscle work to feel "just right" and benefit from heavy muscle work activities interspersed throughout their day.

How can we provide heavy muscle work at school?
Many activities can include or incorporate heavy muscle work. Hopefully some of the ideas below will add to your tool box!

In the Classroom:
Sitting:
- children place their feet on the inside of the chair legs and push out; or on the outside and pull in
- children grab the seat of the chair and pull up or do a chair push-up
- isometrics – push hands against each other in front of chest; push hand against head (one side then the other side)
- playing with Theraputty (i.e. squeezing, pushing, pulling)

Next to desk:

- desk/table push-ups
- deep knee bends; tuck jumps

Waiting in the Hallway:

- wall push-ups
- wall sits
- floor push-ups
- jumping jacks using big and deep jumps

Run "errands" or do jobs:

- place chairs on desks at end of day or take down at beginning of day
- erase or wash the chalkboard
- help rearrange desks in the classroom
- help out the janitor with emptying wastebaskets, mop the floor, etc.
- help the gym teacher move mats, hang them up, etc.
- if there is a garden project at the school, have child dig the dirt
- sharpen pencils with a manual sharpener.
- holepunch paper or staple paper onto bulletin boards.
- fill egg/milk crates (small ones that kids can carry) with books to take to other classrooms or back to the library (teachers could ask kids to move these crates back and forth as needed)
- have student move several packs at a time of Xerox paper from the storage area to the school copy center
- manually "shred" papers that need to be recycled and collapse boxes that need to be recycled
- smooth pieces of wood with sand paper

Transitioning out of the Gym

- animal walks (bear, crab, duck)
- forward lunge walk with big steps

On the Playground

- play structure; specifically using monkey bars, climbing or hanging from a horizontal bar
- games that include jumping
- tug of war
- running uphill

Remember: Some kids engines run "too high" when engaged in unstructured movement activities. Adding heavy muscle work during and after these activities may help to bring their engine speed back down. Some of these students need a BIG DOSE of heavy muscle work compared to others! You can "adjust the dose" by adjusting:

Duration (how long they engage in the activity)

Intensity (making it harder work)

Frequency…Frequency (doing heavy muscle work more often during the day).