

UNIVERSAL DEEP PRESSURE ACTIVITY IDEAS



BACKGROUND AND CONSIDERATIONS

Deep pressure input has a calming effect on the nervous system. Some students with regulation challenges benefit from regular deep pressure input to help them participate in their school day. Monitor the student's zone/engine speed before and after the activities to increase the student's understanding of the purpose of these activities, and to help determine which activities are most helpful.

*Always honor students who request not to have tactile/deep pressure input; instead, try heavy work activities.

*If a student has a diagnosis that implies physical complications, or you have questions about these Activities, consult your school OT for further clarification.

ACTIVITIES

- Steamroller:
 - Student lies on tummy. EA rolls large therapy ball or large rolling pin over back, arms and legs – checking in with student regularly regarding how much pressure. Can do 5 rounds over body – or more depending on time.

- Deep pressure squishes:
 - Arm/hand squeezes – do 5-10x per arm/hand; check in with student if they prefer arm vs hand or both
 - Shoulder compressions: Student sits well supported on chair; adult applies downward pressure on both shoulders at the same time. Keep pace of squishes slow and steady; complete 5-10x and check-in with student to see if another round would be helpful or not.

- Legs up!
 - Student lies on their back with their legs up the wall; remain in place for 20-30 seconds (or longer if beneficial).

- Taco/sandwich:
 - Child lies on the mat or on a beanbag chair. Adult squishes mat/beanbag around student like a taco. Can also pile other pillows or beanbags on top of the student to make a big sandwich. Students typically prefer to remain in place for a few seconds before working their way out.

- Heavy work activities (see handout)

ACTIVITIES CONTINUED

- Roll small weighted ball or tennis ball over arms/legs – student can do themselves if possible.
- Log rolling on the ground: Keep feet and arms tight together while outstretched, then roll across to a target. Can have student hold beanbag between hands and feet to help cue them to keep arms/feet together.
- Tummy work
 - Can be done in the classroom too – any task completed while lying on tummy (drawing, reading etc. Keep in mind this is a challenging position to maintain; complete in short durations (eg. ~ 5 mins depending on child).
- Carry/Push weighted ball through tunnel
- Lie on floor, tummy down on the floor, EA/peer and student facing each other about 5-10 feet apart (further apart increases difficulty). Keeping tummy on floor, use shoulders/arms to absorb and pass ball. Can use weighed/medicine ball for increased difficulty. Go for 10 passes.
- Ball hugs: Hold medium size ball at shoulder height, 10 tight squeezes.
 - Can also try: student holds ball against chest, and SEA/teacher counts 1,2,3, squeeze! Student squeezes and holds for 3-5 seconds. Then repeat 3-5 times.
- Wall squats: Lean against the wall, knees over feet. Slowly lower down into squat, pause and then slowly raise up. Go for 10x.
- Take 5 stretches (see handout attached); Isometric exercises (see handout attached)
- Wall presses (picture below)
 - Stand facing wall, arms extended, legs staggered. Push hard through your arms and hands and try to press the wall down! Hold for 10 seconds. Relax and then repeat.





HEAVY WORK ACTIVITIES AND ERRANDS

Moving out of the classroom

- Move reams of paper from office to classroom/library/photocopy area
- Take a stack of books from classroom to library
- Move a chair inside/outside of classroom
- Push the TV cart down the hall
- Take the recycling to the front office, or collect recycling from each class
- Move the beanbag chair from support room to library

Staying in the classroom

- Carrying books, paper, binders, or other school supplies across the classroom (pass out handouts to peers, assist teacher with clean-up, tidy own desk)
- Erase the board
- Use water bottle or spray bottle to wet desks and wipe with paper towel or cloth
- Stack/un-stack chairs
- Move a chair across the room
- Push the overhead projector cart into place or move it away at the end of the day
- Sharpen pencils with a manual sharpener
- Cutting stacks of think paper
- Squeeze a stress ball, playdoh or silly putty
- Help the teacher set up gym equipment
- Action school physical breaks (just quick 2-minute breaks for the whole class)
- Jumping Jacks, Burpees
- Take 5 Stretches
- Chair push-ups, wall press, desk press
- Use the stretchy bands or hand grippers
- Big arm circles, standing up
- Quick football run on the spot, followed up with deep breathing
- Encourage students to keep a water bottle on the desk. Sucking is heavy work for the mouth. Using a straw for apple sauce, yogurt or milkshake also works!
- Chewy snacks such as gum, licorice, fruit roll-ups, starburst or tootsie rolls, or crunchy foods such as dry cereal, vegetables, pretzels or popcorn

Activity Room

- Carrying, rolling, pushing or pulling heavy items (e.g. ball, bean bag chair)
- Crawling through or on equipment
- Body sox or lycra tunnel
- Animal walks (e.g. walk like a crab, bear, army crawl)
- Isometric exercises (Take 5 Stretches)
- Clean up: lifting, pushing, and pulling equipment
- Drinking from a straw or from squirt-top lid of water bottle

HEAVY WORK FOR THE MOUTH



BACKGROUND AND CONSIDERATIONS

The resistive input obtained through heavy work activities is generally organizing and calming for the nervous system. Heavy work can be applied to the whole body, the hands or the mouth. Many people find oral heavy work very regulating.

Check with parents before trying these ideas.

ACTIVITIES

- Sucking on a water bottle:
 - Make sure the student's water bottle has a suck-style top and not a pour spout.
 - Prompt him/her to take frequent drinks while sitting calmly.
 - This can be especially useful to calm the body quickly after a movement break.
 - Consider a thicker liquid for stronger sucking with a straw - smoothie or yogurt.
 - Also, fruit squeeze pouches provide another chance for sucking (soothing) input.

- Crunchy and chewy snacks:
 - In addition to being regulating, this type of input can also reduce oral sensitivity and provide an internal noise in the child's head to help reduce external auditory distractions.
 - Gum – big or multiple pieces work best. See list of rules on next page.
 - Fruit chew candies, licorice. These work even better if kept in the fridge.
 - Fruit roll-ups or the old fashioned fruit leather
 - Dried fruit pieces
 - Beef jerky
 - Pepperoni sticks
 - Bagels instead of bread
 - Granola bars, especially if kept in the fridge
 - Raw veggies – carrots, celery, cucumber, pepper, snap peas
 - Apples
 - Pretzels, popcorn and nacho chips to crunch
 - Nuts
 - Roasted chickpeas

- Blowing activities:
 - Use deep breathing strategies to practice big inhales and exhales. For example, count on your fingers 1-5 breathing in (smell the cupcakes) and then blowing out (blow out the candles).
 - A straw in a cup half-filled with water. Let the student blow bubbles while working to keep the water in the cup. This requires some focus and sustained blowing.
 - Tossing a ball with an adult, “blow as you throw” for extra power.

➤ A chew tool:

- For students who continue to seek oral input, even with lots of opportunities to suck water and have chewy/crunchy snacks, consider trying a dedicated chew tool. These offer a safe and accessible chew option to children who may be chewing their clothes or classroom items. Chew tools can be hand-held, or worn as a necklace, a bracelet or pinned to the student's shirt.
- Some examples: <https://www.fdm.ca/en/chewelry>
- Work with parents to find suitable options and monitor the effectiveness of each tool.
- Ensure the student is always supervised when using a chew tool.

GUM RULES:

Review these rules with students using this strategy:

1. *The gum stays on the teacher's desk.*
2. *You put one/two pieces in your mouth and keep the paper wrapper in your pocket.*
3. *Gum stays in your mouth - no pulling it out with your fingers. You only chew gum in the classroom.*
4. *When you've had enough of the gum or it's time to leave the classroom, spit the gum onto the paper (from your pocket), wrap it up, put it in the garbage.*

It's not usually very effective to use standard chewing gum, unless you use multiple pieces in your mouth at the one time. The bigger pieces of bubble gum are usually more beneficial. If the student blows bubbles that becomes a distraction, add "no bubbles" to the list of rules.

Intermediate Class wide Self-Regulation Tools

BENEFITS of SELF-REGULATED LEARNERS:

- ✓ Reduced stress related to academics
- ✓ Strategies become habits, which make them easier to apply and use
- ✓ A sense of control over academic career
- ✓ Ability to tackle complex tasks without feeling overwhelmed



WHY TABATA?

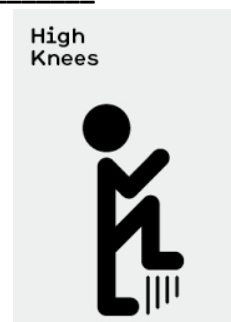
- ✓ “You can see better fitness gains with 4 minutes of Tabata intervals than an hour of running...”
- ✓ “High-intensity intermittent training is a very potent means of increasing maximal oxygen uptake”. Fox, E. *Sport Physiology*. Philadelphia: W.B. Saunders, 1979, pp. 226.

STEP 1: Select and Play one Tabata video from list below

Tabata Videos

1. Teacher Tabata #1: https://www.youtube.com/watch?v=cPn-15F_Rsc
2. Teacher Tabata #2: https://www.youtube.com/watch?v=yjrl_ttKkkw
3. Teacher Tabata #3: <https://www.youtube.com/watch?v=F3CNa9v9pcU>
4. Fortnight Tabata: <https://youtu.be/OkvyBAPinGU>
5. Tabata Kids 5: <https://youtu.be/qhqmxxOAH6w>

Want more Tabata videos? Visit Runk PE on you tube.



STEP 2: Play one 2-5 minute breathing video (first time play one how to video to support buy in)

How to Videos: Proper breathing technique. PLAY ONE

1. **Deep Breathing as a coping Skill/Athletes:**
<https://www.youtube.com/watch?v=rMj9ZNdRQEc&feature=youtu.be>
2. **Mind of the Athlete—Deep Breath:**
<https://www.youtube.com/watch?v=gcRARq2DVjE&feature=youtu.be>



Breathing Videos: (Choose one. Play for 2-5minutes)

1. How to Breathe Like a Navy SEAL:
<https://gearpatrol.com/2018/12/24/box-breathing-navy-seals/>
2. Triangle Breathing: <https://www.youtube.com/watch?v=G4-hVD9Tj6E>
3. Just Breathe: <https://www.youtube.com/watch?v=sebjvA54XBo>
4. 2 min Breathe Bubble: https://www.youtube.com/watch?v=9tOJZqhO_Uw
5. Box Breathing: <https://www.youtube.com/watch?v=cR8KSNe6VaM>

EXTRA: Teach kids how to take their own Heart Rate. Check out this link:

<https://www.cyh.com/HealthTopics/HealthTopicDetailsKids.aspx?p=335&np=285&id=1467>



Sensory Strategy Package Part 2 – SD42 OT Handout 2019; updated 2022

KEEPING CALM IN THE CLASSROOM: READINESS EXERCISES

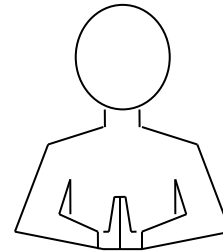
*Information adapted by Brooken Sayers, MS OTR/L

The following exercises may be completed as a class or independently by individual students, with adult cues. These exercises offer deep pressure and heavy work to the joints and muscles, which can have a calming effect on the nervous system and facilitate improved focus. Incorporate deep breathing with each exercise (eg. have kids count out loud and then do a big exhalation when the posture is released). This will engage the core muscles and provide a lot of input throughout the arms and hands to physically and mentally prepare for desk work.

Choose one of these and repeat it 3x:

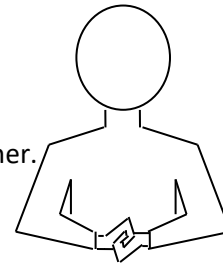
1. Squish the bug ~

Place palms together in front of chest with elbows bent and fingers pointed towards the ceiling. Press hands together firmly to the count of 5 to squish the bug inside your hands! Then open hands and blow the bug away.



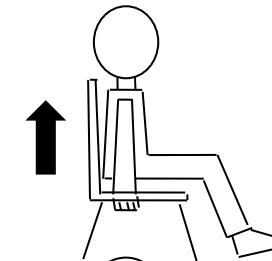
2. Train pulls ~

Bring hands together at chest level with elbows bent. Turn one hand towards the ceiling and the other towards the ground. Curl the fingers and lock them together like 2 train carriages linking together. Pull arms apart with steady force for a count of 5 while keeping fingers in the locked position. Then release and breathe out.



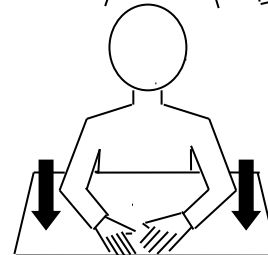
3. Chair push-ups ~

While seated in a classroom chair, grasp both sides of the chair and lift the body off the chair. Ensure students are using their arms to perform this lift without using their legs to assist. Complete one set of 3-5 push-ups. Hold body up for a count of 5.



4. Desk or wall push-ups ~

Place hands palm down on desktop while seated at desk. Do 10 push-ups, leaning body into the desk. OR, standing at the wall, position feet at arms-length from the wall and place palms against a wall at shoulder level. Do 10 push-ups, leaning body into the wall.



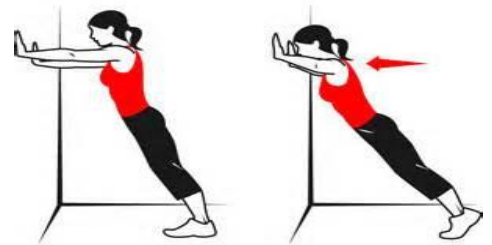
5. Shoulder shrugs ~

Shrug your shoulders, pull them up to your ears, hold for a count of 5, then let them drop with a sigh.

Boot Camp Circuit

Station 1

Wall push ups



Sit ups



Chair push ups



(10 times each)

Station 2

**Step up and down
with weighted ball
one foot at a time. (10
times each)**



Station 3

Stretchy bands in standing and sitting(10 times each)



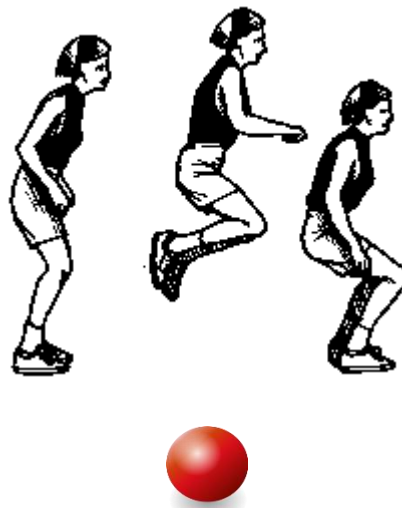
Station 4

Sit (squat) onto a yoga ball then stand up while holding the weighted ball (10 times)



Station 5

Place ball on floor. Stand with 2 feet in front of the ball and then jump over and land on 2 feet. Turn and repeat (10 times)



Station 6

Inch worm push up:

From standing place hands on ground, walk hands out to plank position, push up, walk hands back in and stand up.

(repeat 5-10 times)



Station 7

Half Burpees:

Start standing, crouch down to floor hands flat. Jump legs back out into extension. Then jump legs back to hands. (Repeat 5 times before standing up)





STANDING DESKS: FAQ

1. Q: WHAT IS A STANDING DESK?

A: A standing desk is just what it sounds like – a desk that can be used for classroom work, but instead of sitting at the desk, the desk is raised so that the student can stand. They come in various shapes and sizes, so be mindful of the type of desktop that will work in your room.

2. Q: WHAT ARE THE BENEFITS OF USING A STANDING DESK?

A: There are benefits to standing desks/workspaces. Physiologically, there is an increase in alertness (state of arousal) when we stand vs. sit. This can result in better student ability to pay attention and learn. For students who often seek movement (fidget, ask to leave the classroom frequently, have a hard time sitting in their chair and focusing), trialing a standing desk *may* help meet their physiological need for movement so that they are better able to pay attention and learn. Standing desks can also be beneficial to students who need to increase their state of alertness (students who appear tired, sluggish or ones that seek movement). It is not a one-size fits all solution. See page 2 for links to some popular media articles, as well as some recent research studies.

There is conflicting research regarding the health benefits from standing vs. sitting. See page 2 for links to some articles that discuss both sides.

3. Q: WHAT POSITION CONSIDERATIONS ARE THERE?

A: As with typical desks, consider the height of the desk in relation to your student(s). With shoulders relaxed (not hiked up) and elbow at 90 degrees, the hand should rest comfortably on the desktop. Consult your school OT if you are unsure.

4. Q: WHERE CAN I PURCHASE ONE?

A: Standing desks are widely available; School Specialities is one website that has a number of different price point options, from \$160 and up. Ikea also offers a few variations from \$69 (fits laptop only), \$299 for sit-to-stand desk, and up. Be sure to consider the size of the desktop needed as well as the maximum height when purchasing.

You can also use creative options, like raising a typical desk (particularly for early elementary students) until it is at a suitable height, utilize drafting tables that are no longer in use, or place sturdy boxes on top of a desk to raise the height of the work surface.

USE OF STANDING DESKS ARTICLES AND RESEARCH

ATTENTION/COGNITIVE BENEFITS: SEE THESE LINKS FOR SOME POPULAR MEDIA ARTICLES, AS WELL AS SOME RECENT RESEARCH STUDIES:

- Media articles, easy reads:
 - <http://www.cnn.com/2015/12/10/health/standing-desks-impact-health-education/>
 - <https://vitalrecord.tamhsc.edu/want-kids-to-pay-attention-in-class-give-them-standing-desks/>
- Research article, neurocognitive benefits of standing desks:
<https://www.ncbi.nlm.nih.gov/pubmed/26703700>
- Research article, behavioral benefits of standing:
<https://www.ncbi.nlm.nih.gov/pubmed/22836531>

HEALTH BENEFITS: THERE IS CONFLICTING RESEARCH REGARDING THE HEALTH BENEFITS FROM STANDING VS. SITTING. HERE ARE SOME ARTICLES THAT DISCUSS BOTH SIDES:

- Media article: <https://vitalrecord.tamhsc.edu/standing-desks-effective-in-the-fight-against-childhood-obesity/>
- Research article: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3134494/>
- Research article: <http://www.tandfonline.com/doi/full/10.1080/14635240.2015.1029641>
- Media article: <http://www.npr.org/sections/health-shots/2016/03/17/470713717/stand-to-work-if-you-like-but-dont-brag-about-its-benefits>
- Media article: <http://www.cochrane.org/news/health-effects-sit-stand-desks-and-interventions-aimed-reduce-sitting-work-are-still-unproven>