

#### What is core strength?

- The body's core consists of the muscles surrounding the abdomen, pelvis and back.
- Core strength allows the body to have an upright posture while sitting and standing.

#### Why is core strength important?

- To reduce the energy demands of maintaining an upright posture
- To support postural stability for success with learning, fine motor and gross motor skills
- To help improve self-regulation

#### How do core-strengthening activities help?

- Stronger core muscles allow students to sit upright, move and play without having to rest or rely on environmental supports (e.g. lying on tables, leaning on walls).
- Once cores are strong, students are better prepared to learn as they can pay less attention to their posture and more attention to what they see and hear.
- Incorporating core-strengthening options for seating and activities help create a universally designed classroom (e.g. wobble stools, posted animal crawl cards).

#### Students with weak core strength may display the following:

- Difficulty sitting in one position for a long time
- Resting head on desk often during the day, frequently leaning on walls and tables
- Difficulty with self-regulation or paying attention
- Avoidance of climbing and jumping
- Awkward running

#### How can Occupational Therapists (OTs) help?

- OTs have experience working with students who have weak core strength. They can teach strategies that will help students improve core strength so they can be ready for learning and moving.
- OTs can also help create individualized programs for students when necessary.

#### General classroom tips to help students with weak core strength:

- For optimal support, ensure desk and chair are the proper height for a student's posture: hips, knees and ankles should be at 90 degree angles when sitting, desk height should be approximately 2 inches above the elbows and feet should be flat on the floor.
- To develop core strength and endurance, explore alternative seating options and encourage students to do work in a variety of positions (e.g. sitting on a chair with a wedge cushion, sitting on a wobble stool, kneeling at a low table, lying on their stomach with a clipboard or standing at a table).
- Incorporate core strengthening activities in the classroom and gym class, including:



Superman



Planking



Full Bridge



Partial Bridge

or



Stomach Lying



Curl-Up

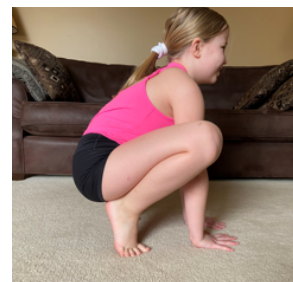
(lie on back, slide hands up to knees, lift head off floor)



**Animal walks:** Crab Walking



Lizard Walking



Frog Hopping

### Precautions:

- Sitting on a wobble stool or cushion without a back support may be hard initially for students with weak core strength.
- It will take time to build up the strength needed to sit on stools or cushions or lie on the stomach for longer periods.
- Students should still have access to a regular, stationary chair and should always lead the decision when choosing between active seating and a stationary chair.
- Reduce or discontinue use if a student reports back pain after using a wobble stool.
- Discontinue use if a student uses their active seat unsafely.