



## Core Stability & Postural Control

Many children with coordination difficulties have reduced core stability. Core stability describes the ability to control the position and movement of the central portion of the body (the trunk). The 'core' muscles consist of many different muscles that stabilize the spine, pelvis and shoulder girdle and provide a solid foundation for movements in the extremities.

When core muscles contract they stabilize the central part of the body, creating a solid base of support, which in turn enables us to generate controlled movements of our arms and legs. This is an essential component for successful motor skill development. For example, strong co-contraction of the muscles around the shoulder joint is necessary to provide a supportive base in order to enable the steady and refined movements of the hand that are required for writing. Muscles around the pelvic girdle need to be strong in order to allow balance on one leg, which in turn will allow you to kick a football or hop.

### Activities

- **Supine flexion:** lying on back, curl head and legs up into a ball with arms crossed in front of chest. Hold for up to 30 seconds.



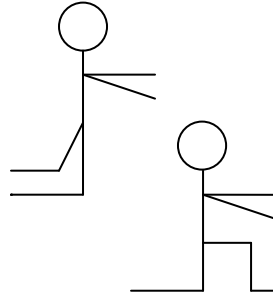
- **Prone Extension:** 'Superman': lying on tummy, lift head and limbs up and fly like a superman. Hold for up to 10-30 seconds.



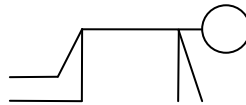
- **Bridging:**  
Lie on your back with knees bent and feet on the floor, hip width apart.  
Cross your arms across your chest.  
Tighten your stomach and bottom muscles and lift your bottom up to create a line between your knees bottom and hips. Try to keep as still as possible with your legs in a good alignment. Hold for 10 seconds, gradually increasing to 30 seconds.



- Half and high kneeling:  
Complete activities such as throwing and catching, counting, spellings.  
Repeat on both sides.



- 4 Point Kneeling (kneeling on hands and knees) – you can play games in this position, do a jigsaw or read a book. Gradually increase the time as tolerated. To make it more dynamic you can play games such as throwing a bean bag/ball into a box or playing skittles. You can also practise balancing by lifting one arm or leg out straight, or opposite leg and arm out straight



- Animal walks
- Gym ball activities – including sitting on a ball, marching, gentle bounces
- Climbing frames and playground equipment
- Swinging
- Riding a bike
- Wheelbarrow walking
- Any other activity sitting on a gym ball, or in the positions below.



### Games/Toys

Postural control can be developed through games and social activities too:

- Twister
- Musical statues
- 'What's the time Mr Wolf'
- Console games e.g. Wii

### Day-to-day activities

Activities that you complete every day can help develop postural control. This can be done by encouraging the child to be slow and controlled in their movements, by carrying out activities that require large movements and challenge the child to remain in a position. Activities that involve using strength and force also help develop this.

Examples include:

- Folding large sheets/towels/clothes
- Helping at home:
  - Tidying away objects - reaching up/down, squatting down and standing up
  - Sweeping/hovering/cleaning
- Carrying shopping bags

Pushing a shopping trolley (with supervision)