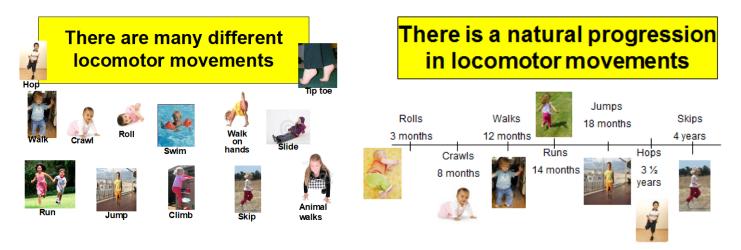
# Locomotor skills

Locomotor skills require moving from one location to another e.g. crawling, walking, running, jumping, skipping etc.

These skills are important because they provide the basis for how we move around in day to day life and they are how we eventually move around in a sports game e.g. dodging a player.



## Walking

A baby will start to walk any time from 12 months, though this can be earlier. When a child first starts to walk their hips are turned (hips are turned approximately 180 degrees from birth). Over a period of 18 months, the hips turn and straighten. This is why toddlers are usually bow legged and look like they are walking like a robot. Once the hips have pronated (turned), the child is then able to bend at the knee and start to run.

Look for smooth, straight steps with arms swinging gently in opposition of feet. We need to encourage and practise: heel to toe walking, bare feet so skin comes in contact with different surfaces, walking over different heights-down hill, up hill, over mounds, through water etc.

## Running

Running is the natural progression from walking. It is a rapid movement that involves transferring weight from one foot to the other with a brief loss of contact with the ground by both feet. Speed and maturation of running style increases with age as the child's muscle strength, balance and coordination improve.

- Three year olds can run around obstacles and corners.
- Four year olds can more skilfully navigate sharp turns and manage on a variety of surfaces.
- Five year olds can stop quickly on a signal and can run backward as well as forward.

#### What to look for:

- The children's arms moving in opposition to their legs and elbows that are bent.
- Ensure there is a narrow foot placement, landing on the heel or toe rather than flatfooted.
- Encourage them to try running faster by landing on the balls of their feet and toes.
- The non-support leg should be bent to approximately 90 degrees.

When children are learning to run, they can often have trouble stopping. They might also trip forward as they have not acquired the coordination needed for a smooth running action. When they are learning to run, their arms will often be held out to the side or in front. As they get older, the cross patterning arm action will begin to emerge. Children need a safe environment where hazards are removed.



## **Jumping**

Before children learn to jump they will start to bob up and down. This usually happens even before walking and is often done in time to music.

Give them plenty of practise at bending and straightening their knees and 2 foot landing. Get them to stretch both arms forcefully forward and upward reaching all the way above the head to create momentum, take off and land on both feet simultaneously and thrust the arms downward during landing.

Children who do not crawl usually lose the Plantar reflex (push away reflex) so are often late jumpers and or have difficulty establishing this milestone.

Safe landing technique: Land on the balls of their feet, followed by heels touching the floor, bend knees on landing, ankles and hips flexing. This landing technique usually occurs around 2 ½ yrs old. Before this discourage landing flat footed.

On Jolly Jumpers make sure their heels can touch the floor. Bouncing on toes can lead to shortening of their Achilles tendon (become a toe walker).

- Three year old children can jump off the bottom stair, and jump over a line on the floor.
- Four year old children can jump with two feet from a stationary position approximately 60 centimetres (horizontally).
- Five year old children can jump with two feet from a stationary position approximately 80 centimetres (horizontally).

## **Hopping**

With one foot on the ground, push with the toes. Landing should be fairly quiet. Hopping requires the ability to balance on one leg and then generate enough force in the stance leg to hop, clear the ground and land without putting the other leg down or falling over.

- Three year old children are learning to hop on their preferred leg.
- Four year old children can hop on a preferred leg four to six times and are starting to hop on their non-preferred leg.
- Five year old children can hop on either leg and can hop forwards along a line.

## Skipping

March with knees high; each time the knee is in the air, hop on the other foot - step/hop, step/hop

