# Stability Skills

Stability is a key element required for every human movement. Stability is necessary for all locomotor and object control skills. Stability skills are focused on maintaining and acquiring balance, both static and dynamic.

Your child is constantly seeking to maintain stability throughout the day. This means he needs to be sensitive to postural changes of the body and its parts, and be able to make the necessary adjustments to achieve stability. Changes in posture or the body's location in space will cause changes in the base of support and the location of the body's centre of gravity.

**Stability skills include:**

- **Static Balance**
- **Dynamic Balance**
- **Bending and Curling**
- **Turning**
- **Twisting**
- **Stretching**
- **Transferring Weight**

The stability skills covered in this guide represent only the common stability skills that your young child needs to better manage and control his body. It is hence not an exhaustive list.

# Static Balance

Static Balance is one of the most fundamental movement skills. It is the body's ability to maintain a stationary position with control while performing a task (e.g. standing in a moving bus, riding on an escalator, or getting dressed). It is also necessary in sporting activities such as catching, bouncing, or two-handed sidearm strike.

To achieve static balance, the body's centre of gravity needs to remain stable within a base of support. A body is more stable when it is supported over a wide base of support with the centre of gravity near to, and/or directly over, the base of support. A narrow base of support and a centre of gravity far from, and/or outside, the base of support creates instability and affects static balance.

# Variations

## "Can your child balance...?"

### How the body moves

| Force/Effort | Time | Flow |
|---|---|---|
| • like a dragonfly on a leaf<br>• like an angry/a frightened statue<br>• with eyes opened/closed | • and hold for 10 counts<br>• on toes for two counts and then on heels for another two counts | • while swinging his arms like a helicopter trying to take-off<br>• and freeze after a fast run-up |

### Where the body moves

| Location | Direction/pathways | Levels/Extensions |
|---|---|---|
| • with one hand against a wall<br>• with one foot inside a hoop and both palms outside on the floor | • with hands outstretched at the sides<br>• on one foot for five counts then turn on the spot to face another direction | • on tiptoe like a flamingo with feet together/apart<br>• at a low level like a snail<br>• with one foot higher than the hip |

### With whom/What the body moves

| Self (body parts)/People | Objects |
|---|---|
| • on three different parts of his body<br>• together with you leaning on two different parts of his body<br>• on his back with feet pointing skywards | • with a folded towel on his head/shoulder/wrist/raised foot<br>• on a low stool<br>• on one foot with one hand on a basketball placed on the floor |

## COMBINATIONS

- With one foot in the hoop and a bean bag on the shoulder. Hold balance and count to five
- Jump forward/sideways and freeze into a low/medium/tall statue representing different animals

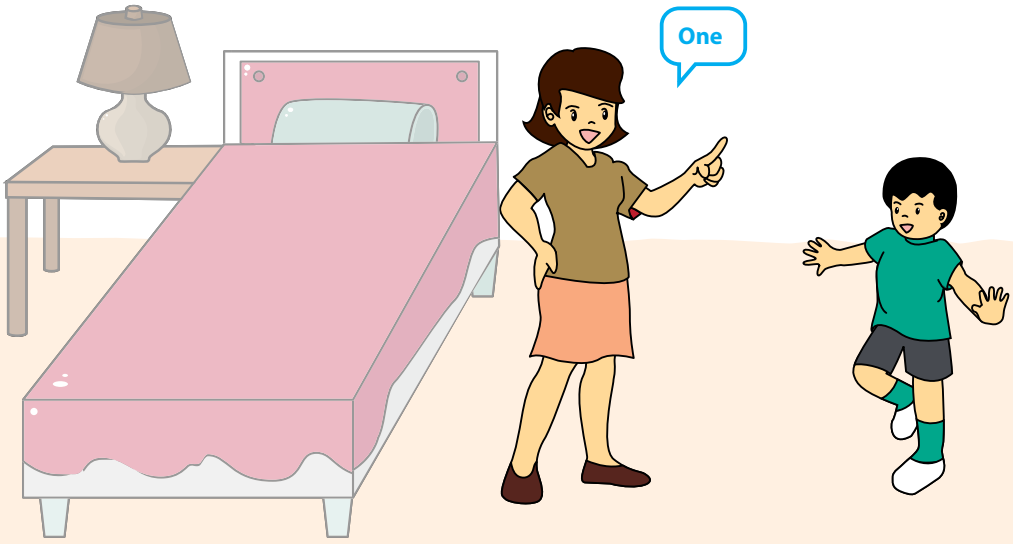
# Activity 1

## Static Balance

**STABILITY SKILLS**

### WHAT YOU NEED

- Newspaper




### HOW TO PLAY

- Ask your child to balance on one part of his body (e.g. leg, hand, backside). Name this action as number one. Have him balance again on another part of his body. Name this action as number two. Call out the numbers randomly and have your child balance accordingly.
- Gradually increase the pace of your prompts.
- Gradually add more numbered options.

- Place a newspaper sheet on the floor. Balance on the newspaper with your child and hold the position.
- With each successful balance-and-hold, fold the newspaper in half, and repeat the balance-and-hold. See how many folds you and your child can achieve before being unable to hold the position.


# Dynamic Balance

Dynamic balance is maintaining balance when the body is moving. It is required in every locomotor activity (e.g. walking, running up stairs, stepping over a small drain) and in play and sporting activities (e.g. dribbling a ball, climbing on playground apparatus, balancing on a beam, fleeing and dodging).

During movement, your child has to manage instability challenges by constantly seeking to balance the centre of gravity over a moving, and usually narrow, base of support. Providing him with different dynamic balance activities will help him develop body movement awareness.

# Variations

## "Can your child balance...?"

### How the body moves

| Force/Effort | Time | Flow |
|---|---|---|
| • while doing a logroll flat on the ground/down a slope<br>• while rocking on his back and rolling over<br>*(Refer to variations in locomotor skills)* | • while crossing the bench/ beam slowly using different locomotor movements<br>• while running and kicking the ball slowly/quickly | • while flying like a bee<br>• while marching like a toy soldier<br>• on one foot according to a start-stop signal |

### Where the body moves

| Location | Direction/Pathways | Levels/Extensions |
|---|---|---|
| • while skating without colliding into anyone<br>• while curling over a bar | • while marching<br>• while jumping backward<br>• while walking down the slope (may be substituted with different locomotor movements) | • while doing a forward logroll<br>• while moving like a caterpillar<br>• while jumping up and turning in the air |

### With whom/ What the body moves

| Self (body parts)/People | Objects |
|---|---|
| • while walking towards a friend on a line and crossing each other without stepping out of the line<br>• while jumping away from you | • while walking and balancing a folded towel on different parts of his body<br>• on an inclined/raised kerb<br>• while stepping on bean bags |

## COMBINATIONS

- While leaping over a row of bean bags to land inside a hoop without colliding into anyone
- While marching slowly across the room like a toy soldier, with a folded towel on his head
  *(Refer to variations in locomotor skills)*

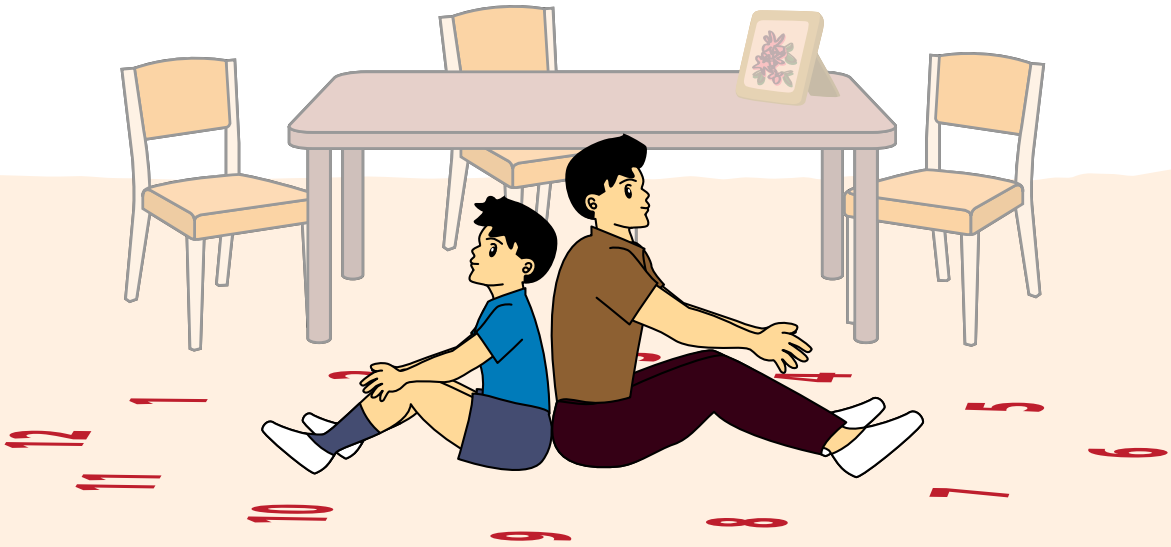
# Activity 2

## Dynamic Balance

**STABILITY SKILLS**

### WHAT YOU NEED

- Big cut-outs of numbers (1-12), to make a clock face



### HOW TO PLAY

- Place the cut-out numbers on the floor to make a clock face. You and your child are the hour and minute hands of the clock.
- Get down into the sit-up position. Now, move around to make up different times.

- Try doing the activity in a push-up position.

### BE AWARE

- Before this activity, have your child practise time-telling with an actual clock.

# Bending & Curling

Bending over with control is an essential life skill (e.g. bending over to pick up something or to tie shoelaces). A simple forward roll also requires bending and curling of the body. Similarly, many playground apparatus encourage children to bend and curl (e.g. curling around a monkey bar, crawling through tunnels).

For a young child, bending or curling to touch his knees or toes while sitting on the ground is a good start to learn the skill. This is because when seated, your child is on a wide base of support and his centre of gravity is near ground level, both prerequisites for maintaining stability. In contrast, bending over from a standing position creates a sense of instability even though young children do enjoy seeing the world 'upside down'.

Bending or curling is a flexibility skill and should be encouraged so that your child learns to stabilise his body in different positions and levels.

# Variations

## "Can your child bend or curl...?"

### How the body moves

| Force/Effort | Time | Flow |
|---|---|---|
| • like a strong stone bridge<br>• into a small fishball<br>• and roll like a heavy watermelon | • and stand up slowly/quickly<br>• and roll slowly on a mat<br>• like a tortoise out of its shell according to signal | • and swing his arms like the trunk of an elephant<br>• and walk on all fours, balancing a bean bag on his back |

### Where the body moves

| Location | Direction/Pathways | Levels/Extensions |
|---|---|---|
| • into small snails near a wall<br>• inside a hoop<br>• and walk on all fours to the end of the room | • and roll forward<br>• and roll to the sides<br>• and inch forward like a caterpillar | • with his hands touching his feet<br>• while keeping his back on the ground<br>• with one foot higher than the hip |

### With whom/What the body moves

| Self (body parts)/People | Objects |
|---|---|
| • with one arm around a leg<br>• like a bridge for a friend to crawl under<br>• into a small snail for a friend to skip around/step over | • around a low bar<br>• around a basketball<br>• with hands and feet on the curve of a hoop on the floor |

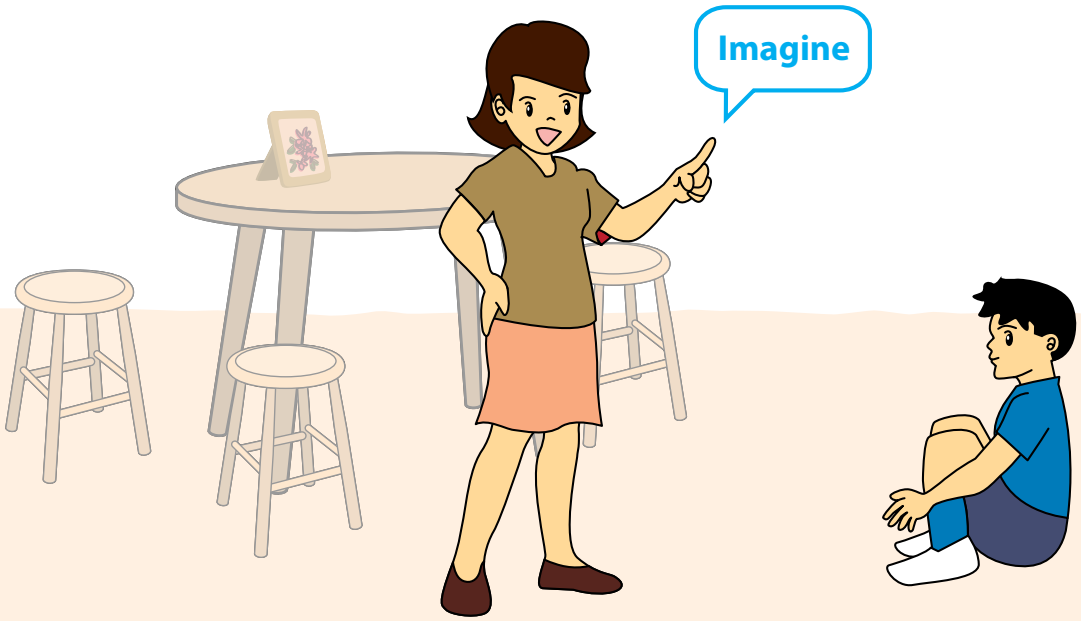
## COMBINATIONS

- Like a stone bridge over two lines
- Like a small fishball. On signal, stand up and stretch like a star before bending over to touch his knees

# Activity 3

## Bending & Curling

**STABILITY SKILLS**




## HOW TO PLAY

- Get your child to role-play as astronauts going on a trip to the moon. Prompt your child with different instructions.

**Parent may say:**

- Astronaut, put on your spacesuit, boots, special gloves, and then helmet
- Climb into your spaceship, feet first. Then sit and buckle up
- Check and make sure your equipment are all in working order
- Prepare for take-off. Count down from 10 to 1, and blast off!
  (*For the blast-off, your child must curl up, then gradually jump up and land with feet together, hands lifted skywards and palms facing each other*)
- You have reached the moon. Get out of your spaceship and walk lightly
  (*Explain to your child that everything is weightless on the moon*)
- Oh, no! A space creature is coming towards you. Quickly, hide yourself!
  (*Your child must curl up into the smallest shape possible*)
- Now, make your way home
  (*Your child must go on all fours, crawl slowly back into the spaceship, and blast off*)

# Turning

Turning is a rotational movement around the body's axis. The body can turn around on the spot (e.g. in dancing, around obstacles) or while it is in motion and in mid-air (e.g. gymnastics). Maintaining stability while the body is in mid-air is generally more challenging than turning on the spot.

Many daily activities, games and sports involve turning around the body axis. Turning is easier when the base of support is small and narrow, and more difficult when the base of support is wide.

# Variations

## "Can your child turn...?"

### How the body moves

| Force/Effort | Time | Flow |
|---|---|---|
| • like a towel in a washing machine (wash/spin cycle)<br>• like peanut butter being stirred in a jar<br>• like a ballerina in a musical box | • his body in time with slow/fast music<br>• on the spot with his feet crossed<br>• according to a start-stop signal | • in a hoop, lifting his left knee to touch his right elbow slowly<br>• and move around the room like a ballerina<br>• in different directions according to the drumbeat |

### Where the body moves

| Location | Direction/Pathways | Levels/Extensions |
|---|---|---|
| • on the spot without leaving his mat<br>• and move to another hoop<br>• and hold his body in a twisted shape away from you | • with hands and head in same sideway direction<br>• around with right hand touching left shoulder while left hand reaches skyward | • to the side while seated on the floor<br>• with his back to the wall, bending his knees and turning to touch the wall<br>• and spin with his legs straddled |

### With whom/What the body moves

| Self (body parts)/People | Objects |
|---|---|
| • to look behind without moving his feet<br>• around while holding hands with a friend<br>• with his hands high up like a pair of chopsticks | • while holding a stick against the ground<br>• and pass the bean bag to a friend standing behind him |

## COMBINATIONS

- Like a towel in a machine wash cycle by linking/crossing two or three body parts together without 'falling out of the machine' (hoop)
- Twist his body slowly on the spot and freeze when he hears the drumbeat

# Activity 4

## Turning

**STABILITY SKILLS**

## WHAT YOU NEED

- Ribbons, or strips of papers, attached to one end of a stick (pom-pom stick)

## HOW TO PLAY

- Have your child swing a pom-pom stick side-to-side (like a windshield wiper).
- Get him to swing in different ways.

  **Ways to swing**

  - Forward and backward
  - Left and right, over his head (like a rainbow)
  - In a circular pattern, in front of his body (like a propeller)
  - In a circular pattern, to one side of his body (like a spinning wheel)
  - Swish on the floor (like a snake)
- Challenge your child to make spirals by turning his whole body around while holding the pom-pom stick.

- Get your child to use the pom-pom stick and trace numbers or alphabets for you to guess.

# Twisting

Twisting occurs when different parts of the body cross the mid-line of the body (e.g. reaching backward to retrieve something without moving the feet). This creates stability challenges for your child as the centre of gravity has shifted while the base of support remains unchanged (feet remain stationary).

Twisting activities thrill children as they feel themselves being ‘knotted up’. Twisting activities help children to develop body flexibility as the twisting movements require a range of motion at different body joints.

# Variations

## "Can your child twist...?"

### How the body moves

| Force/Effort | Time | Flow |
|---|---|---|
| • his hands around his body tightly like an interwoven rope<br>• to the back without moving his feet as if to lift a heavy box | • to the beat of slow/fast music<br>• his hands together and draw circles in front slowly/quickly | • to the music while balancing a towel on his shoulders<br>• his hands and swing them freely as he moves around the room |

### Where the body moves

| Location | Direction/Pathways | Levels/Extensions |
|---|---|---|
| • without leaving the hoop/mat<br>• on the Twister mat according to instructions | • to the left/right/back<br>• around a horizontal bar<br>• clockwise/anti-clockwise as if shaking ants off his body | • with one leg over another while seated on the floor<br>• to touch the wall with his knees bent<br>• his hands high above his head and spin in the air |

### With whom What the body moves

| Self (body parts)/People | Objects |
|---|---|
| • with his hands together above his head<br>• with one hand across the opposite shoulder to scratch the back<br>• holding hands with you | • to the right and reach for a bean bag behind him<br>• around a pole like a snake<br>• and cross his legs while bending down to pick up a ball |

## COMBINATIONS

- to the back without moving his feet, keeping hands together in front
- while lying on the ground with his hands and legs entangled, and untangle slowly like an ice block melting gradually

# Activity 5

## Twisting

**STABILITY SKILLS**

### WHAT YOU NEED

- Two pairs of socks, rolled up separately
- Two pieces of string

### HOW TO PLAY

- Tie one pair of rolled-up socks to one end of a string.
- Tie the other end of the string around your waist such that the socks hang away from your waist. Do the same for your child.
- Then twist and turn to swing your respective socks. Try to hit each other as many times as possible with the socks.

# Stretching

Stretching is a fundamental stability skill required in many aspects of daily life as well as in physical activity and sports. Stretching while the body is lower to the ground is usually easier than when the body or its parts are further from the ground or in the air.

Different parts of the body can be stretched separately or together at the same time (e.g. outstretching of the hand and the body to reach for a book from a top shelf). Your child should be provided with fun and engaging activities to explore stretching different parts of the body while in static or dynamic balance.

# Variations

## "Can your child stretch...?"

### How the body moves

| Force/Effort | Time | Flow |
|---|---|---|
| • and move lightly like a spider on a web<br>• like a branch being blown by strong wind<br>• like he is plucking rambutans from a tall tree | • his limbs in and out of a shell slowly (lying face up)<br>• his hand and foot on same side according to the drumbeat<br>• his hands out quickly and turn on the spot | • to push a 'heavy rock up a hill'<br>• and swing like a tornado<br>• like a mosquito stuck on a spider's web |

### Where the body moves

| Location | Direction/Pathways | Levels/Extensions |
|---|---|---|
| • like a big star standing inside the hoop<br>• feet in the air without touching anyone<br>• with one hand and one foot on the ground | • his hands backward<br>• his feet in opposite directions<br>• his arms from side to side like wipers on a windscreen | • like a starfish on the beach<br>• and jump up like fireworks<br>• like a fencer ready to attack |

### With whom/What the body moves

| Self (body parts)/People | Objects |
|---|---|
| • like an aeroplane about to take-off<br>• on the ground like a chopstick for you to roll him like a log<br>• and reach for a ball held high by you | • his legs to straddle a hoop<br>• and hit soap bubbles<br>• and mark on the wall with a chalk |

## COMBINATIONS

- Move forward/sideways lightly like a starfish with hands and toes on the ground
- His hands and legs in and out according to signals given for fast/light and slow/strong movements

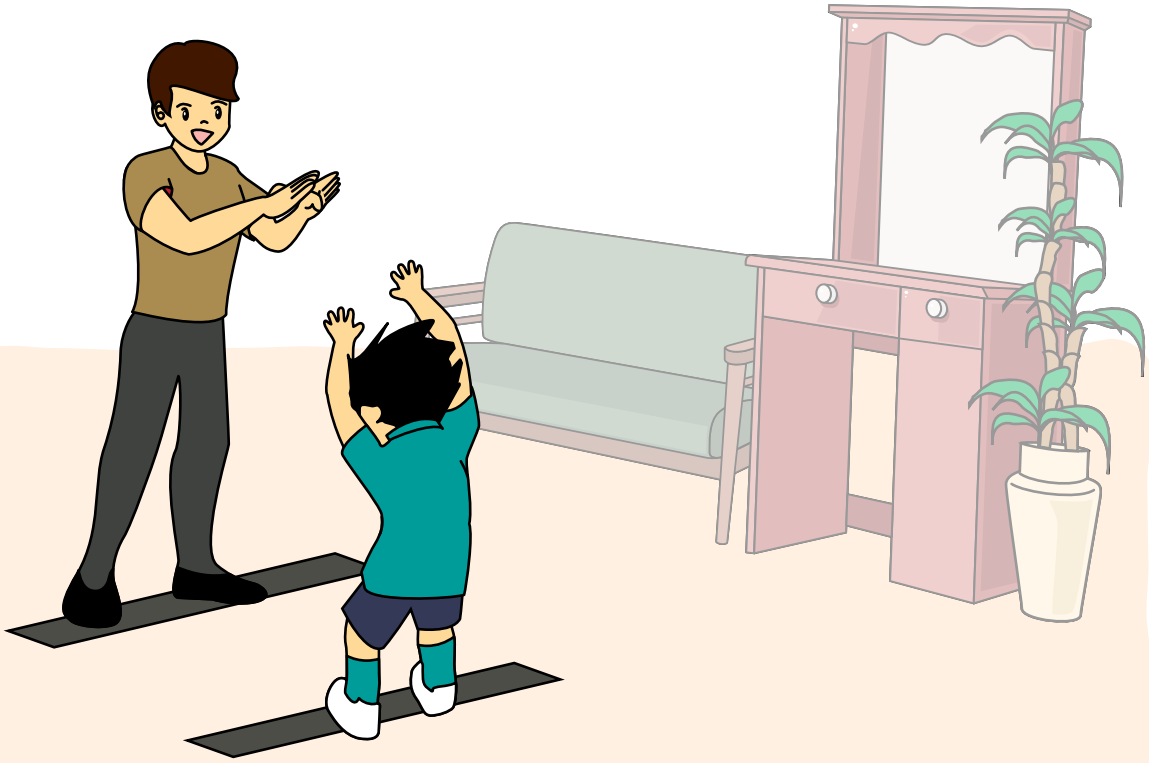
# Activity 6

## Stretching

**STABILITY SKILLS**

### WHAT YOU NEED

- Tapes, to form two lines on the floor



### HOW TO PLAY

- Place two strips of tape on the floor, parallel to each other. Hold hands with your child and skip around the room.
- Call out "London Bridge". Still holding hands, you must both stand on a tape each and carry your hands up high to form a bridge. Hold for 10 seconds, then start all over again.

- Gradually increase the distance between the two strips of tape. As the gap widens, you and your child will have to stretch more to form the bridge.

# Transferring Weight

Transferring weight is fundamental to maintaining stability of the body. The human body is capable of transferring body weight from foot-to-foot, hand-to-hand, foot-to-hand and vice versa. Most of the locomotor and object control movements involve foot-to-foot weight transfer (e.g. walking, jumping, throwing, kicking and dribbling). Foot-to-hand and hand-to-hand weight transfers are most frequently used in playground apparatus (e.g. spider pyramid, monkey bars and climbing frames) and sports (e.g. gymnastics, acrobatics and rock climbing).

It is important to show your child how to transfer body weight safely, for instance, by bending his knees to absorb his body weight upon landing after a jump. Your child should also be wearing shoes and exploring on grass or gentler playground surfaces when transferring weight from a high platform to a lower level.

# Variations in

## "Can your child transfer weight by...?"

### How the body moves

| Force/Effort | Time | Flow |
|---|---|---|
| • walking like a giant with his knees raised high outward and body swaying from side to side<br>• imagine walking in a pool of marshmallows | • spinning on the spot like a washing machine<br>• walking and holding his leg up for three seconds for every step taken | • marching like a toy soldier along lines on the floor<br>• gliding with alternate feet forward as far as he can<br>• flying like a little lost bird looking for its mother |

### Where the body moves

| Location | Direction/pathways | Levels/Extensions |
|---|---|---|
| • placing hands on the ground and kicking his feet to the back<br>• jumping/leaping over wide/ narrow 'rivers' scattered around the room | • travelling on heels backward<br>• travelling on toes clockwise/anti-clockwise<br>• walking down the stairs | • jumping like a frog<br>• rocking his body to the left and to the right<br>• walking along a low/ medium height balance beam |

### With whom/ What the body moves

| Self (body parts)/People | Objects |
|---|---|
| • holding hands with you and walking as if his inside legs are glued together<br>• hopping on alternate legs with his hand touching the raised knee of the non-hopping leg<br>• walking around on his heels | • reaching out to burst all the soap bubbles<br>• hopping from hoop to hoop<br>• leaping over the coloured floor mats/tiles in the playground |

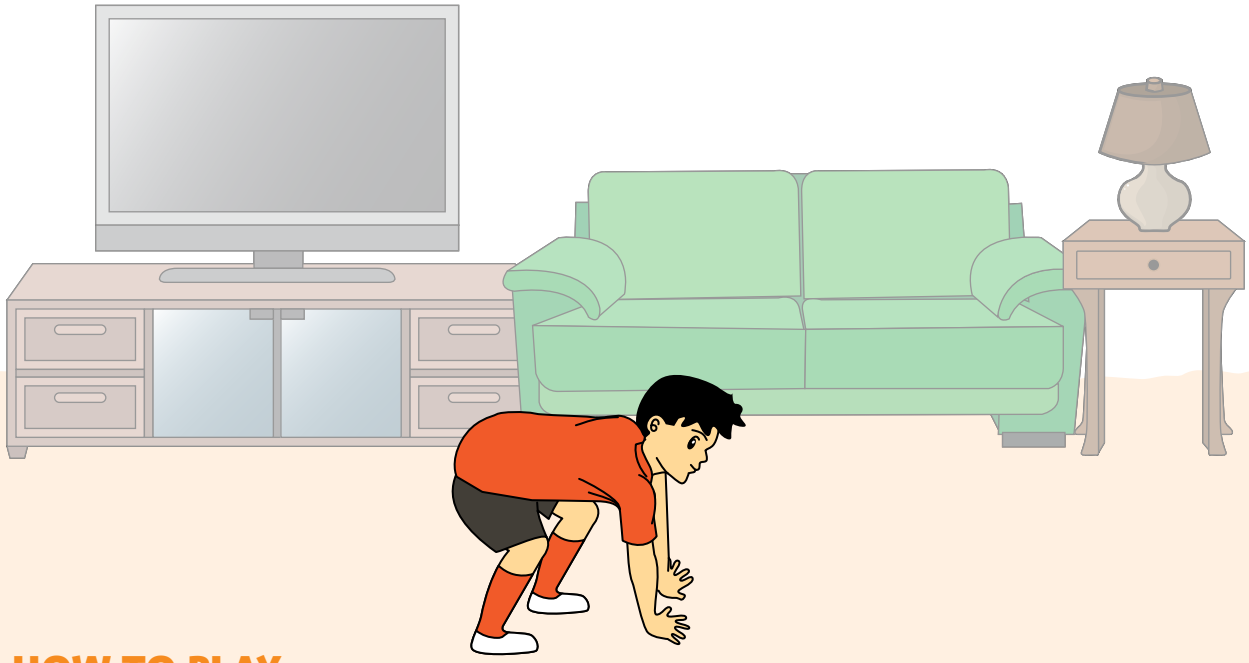
## COMBINATIONS

- Walk slowly and heavily like a giant along a low balance beam to the end, and jump into a hoop
- Place hands on the ground and kick feet to the back and then jump forward like a frog
  *(Refer to variations in locomotor and object control skills.)*

# Activity 7

## Transferring Weight

**STABILITY SKILLS**



## HOW TO PLAY

- Have your child role play as different animals.

**Pussycat walk**

- Go down on all fours, and crawl softly and smoothly like a cat
- Imitate cat behaviours by meowing, stretching and fur-licking
- Here comes a mouse! Your child must then try to catch an imaginary mouse

**Puppy run**

- Go down on all fours, with arms and legs slightly bent like a puppy
- Keep his head up and crawl quickly forward, backward and sideways to chase after other puppies
- Imitate puppy behaviours by rolling over, then flipping back onto all fours
- Imagine being an injured puppy. Your child must then limp like a lame puppy, crawling with one leg off the floor. Start slow, then pick up pace

**Bear walk**

- Go down on all fours, and walk around like a bear. Since bears are huge, your child must make exaggerated movements. Guide him to swing his hips, and move his arms and legs alternately but on the same sides
- Imitate bear behaviours by moving around, sniffing out honey to eat

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# Notes