

GROSS MOTOR MILESTONES



BIRTH TO AGE ONE

- Consider the amount a baby accomplishes in its first year
 - Head control
 - Following objects with their eyes
 - Rolling
 - Grasping toys
 - Sitting
 - Banging toys together
 - Standing
 - Poking
- This is just a small sample of what a baby will do in its first year

GROSS MOTOR SKILLS

- One to three months of age
 - Turns head to side while on back
 - Starts to lift head up while on tummy
 - Turns head to side to clear airway on tummy
 - Kicks and extends legs
- Three to six months of age
 - Begins to roll – belly to back first
 - Puts weight through hands while on tummy
 - Lifts head when pulled into sitting
 - Sitting balance improves and should be close to independent

- Six to Nine months of age
 - Sitting independently
 - May crawl – backwards first
 - Pull to stand
 - Stands while holding on
- Nine to Twelve months of age
 - Walks with hands held
 - Cruises around furniture
 - Creeps on hands and knees
 - May stand alone momentarily
 - Kneels
 - May begin independently walking

• **Twelve to Eighteen Months of Age:**

- Walks alone
- Run is a hurried walk
- Can walk backwards and sideways
- Throws a ball forward
- Pulls a toy while walking
- Will bend and look through legs
- Goes up and down stairs on hands and knees
- May progress to walking up and down stairs holding a rail or hand (both feet on one step)

- **Eighteen Months to Two Years:**

- Carries toys while walking
- Will sit by backing into a child size chair
- Kicks a ball with purpose
- Run is maturing – legs more together, less falling
- Squats to play
- Will push or pull toys
- Walks upstairs with one hand held

● **Age Three:**

- Stand on tip toes
- Jumps with two feet
- Catches a large ball (trapping to chest)
- Jumps forward (12-36 inches)
- Jumps over objects (2 inches high)
- Starting to one foot stand
 - May start to one foot hop
- Walks forwards and backwards generally along a line
 - Walks up/down stairs alone, first with both feet per step, progressing to alternating feet
- Climbs jungle gyms and ladders
- Jumps down off small step
- May start to pedal a tricycle

● **Age 4:**

- Gallops forward
- Jumps at least 36 inches
- Starting to skip
- Stands on one leg for 5 seconds
- Can hop forward with either foot
- Throws underhand and overhand with direction (at least 6 feet)
- Starts to catch without trapping to chest (smaller 3 inch ball)
- May start to ride bike with training wheels
- Can jump and change direction repetitively
- Maintains balance on tip toes

- **Age 5:**

- Skips effectively
- Hops forward on one foot 20 inches
- Is able to perform a sit up and push up
- Kicks a ball so it raises in the air
- Stands on one foot more than 10 seconds
- Starts to walk heel to toe
- Starts to catch a tennis ball without trapping it to the chest
- Starts to hop side to side on one foot over a line

BASIC LOCO-MOTOR SKILLS

- Walk
- Run
- Climb
- Jump
- Hop
- Gallop
- Skipping

LOCOMOTOR SKILLS
Movements that transport an individual through space in upright position

WALKING

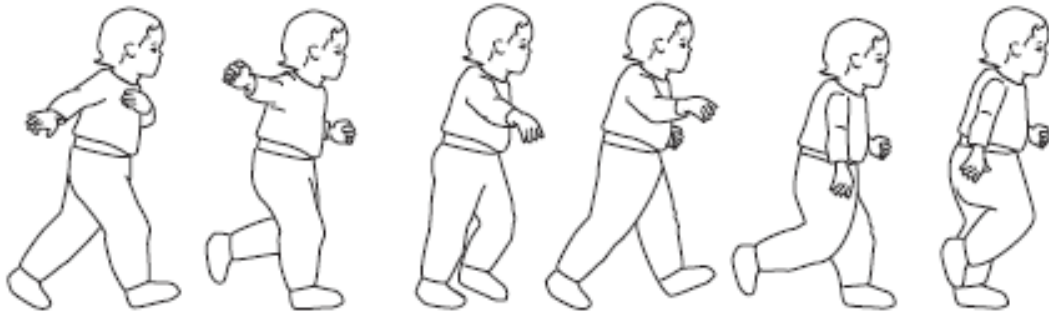
- One foot moves ahead of the other
- The heel of the forward foot touches the ground before the toe of the opposite foot pushes off
- Arms & legs move in synchronous opposition

RUNNING

- Extension of walking pattern
- Phases:
 - Push off
 - Flight
 - Landing



RUNNING



- Characterized by “flight” phase
 - **No foot is contacting surface**

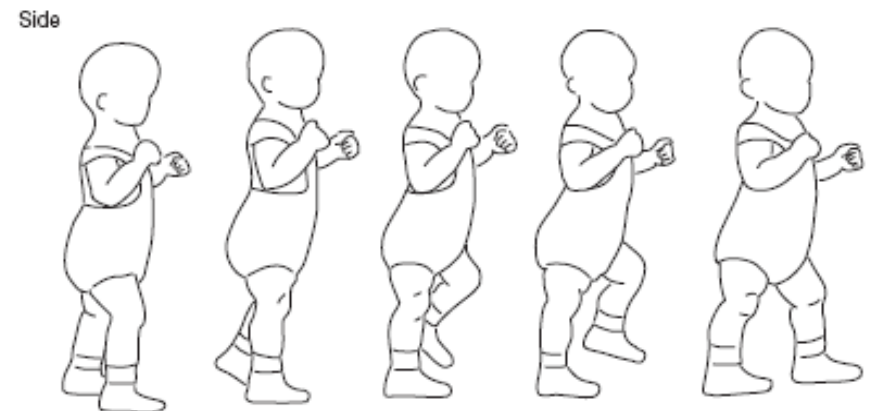
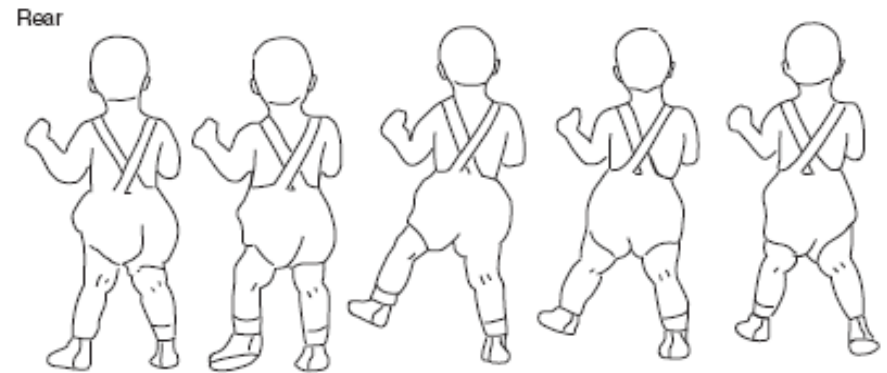


RUNNING PREREQUISITES

- Muscle strength
 - To push body forward and upward into flight phase
- Dynamic balance
 - Ensure proper alignment through phases
- Coordination
 - Allow opposition between arms & legs

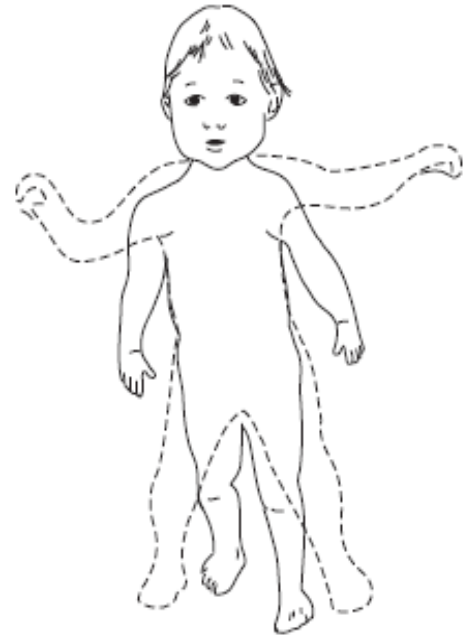
RUNNING – THE BEGINNER (2 Years)

- Exaggerated movement around long axis of body
- Stiff arms swing from side to side
- Knees rotate outward
- Feet wide apart
- Toes outward



RUNNING - MATURING (5-6 Years)

- Less body rotation
- Arms begin to swing easily
- Elbows bend
- Knees & feet begin to move in a straighter line
- Base of support becomes narrower
- Body inclined forward with weight placed on balls of feet



CLIMBING

- Involves ascending and descending movements
- Marking time pattern:
 - Using the same foot to step up and down
- Unilateral method:
 - Both sides



CLIMBING PREREQUISITES

- Strength
- Balance
- Coordination
- Development requires opportunities to climb
 - Climbing equipment
 - Trees, jungle gyms, boxes, nets



BEGINNER CLIMBER (2 Years)

- Climb up & down stairs
 - Marking time pattern
 - Unilateral method



MATURE CLIMBER

- Alternate foot ascent of stairs (3 years)
- Alternate foot descent of stairs (4-5 years)





(a)



(b)



(a)



(b)

JUMPING

- Project into the air without tumbling out of control
- Project:
 - **Throw**
 - **Tumbling**
 - **Falling**
- Requires courage & self confidence



TYPES OF JUMPING

- Jumping from a **height**
- Jumping from a **distance**
- Jumping over an **obstacle**
- **Vertical** jump



JUMPING FROM HEIGHT - Preliminary Events

- Preliminary:
 - Initial or beginning
1. 1 foot, land on lead foot
 2. 1 foot & land on opposite foot
 3. 2 feet & land on 2 feet
 4. 1 foot & land on 2 feet



JUMPING A DISTANCE - Preliminary Events

1. Jump in place with both feet
2. Run & leap from 1 foot to another
3. Standing jump forward with 2 feet & landing on both
4. Running & Jumping forward from 1 foot and landing on both feet



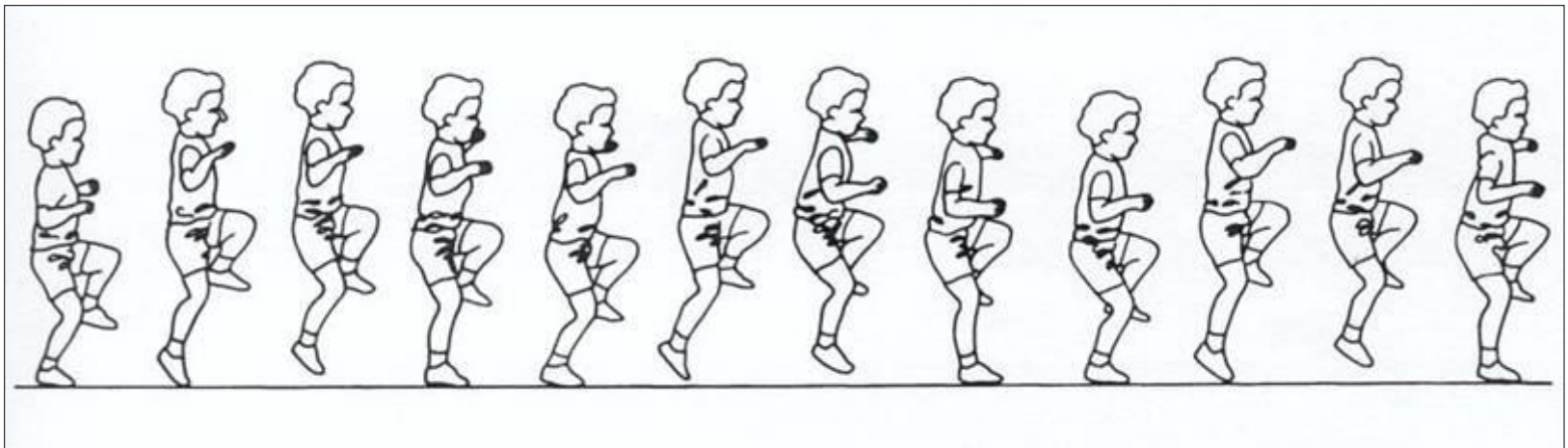
JUMPING OVER OBSTACLES

- More difficult than jumping from height or distance
- 2-foot jump over an obstacle landing with 2 feet



HOPPING - ONE FOOT HOPPING

- Jumping off 1 foot and landing on the same foot



HOPPING - PREREQUISITES

- Static balance
- Strength to push body off ground



GALLOPING AND SKIPPING

- Galloping, same foot leads (walk / leap)
- Skipping, step-hop pattern alternating feet

