

FURTADO-GALLAGHER
CHILD OBSERVATIONAL MOVEMENT PATTERN ASSESSMENT SYSTEM
== Testing Protocols ==



Brief Introduction

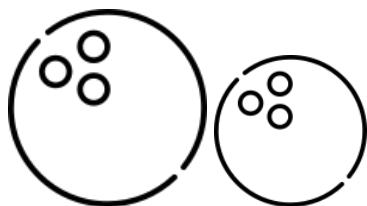
As part of this document, you will find the testing protocols used to collect data for the FG-COMPASS. This is a criterion-related (process-oriented¹) assessment tool intended to assess the fundamental movement skill proficiency levels of children 5-10 years of age. Although test users may videotape performances for later assessment, the FG-COMPASS was developed to assess skill performance live, *in situ*. This requires test users to study its testing protocols before conducting the assessments. Currently, only the paper-and-pencil version of the test is available. Soon, its mobile version will be released.

General Instructions

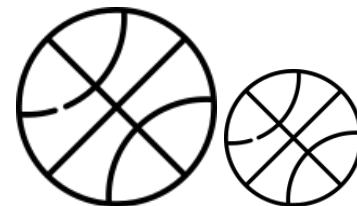
1. Study the criteria (questions) in the decision trees and compare them with the illustrations;
2. Watch the performance 3 times and look for consistency;
3. Answer **YES** if a criterion (behavior) is present in **at least 2 of the 3 trials**; otherwise, answer **NO**;
4. Don't try to predict the performance level based on the apparent age of the performer, as chronological age is NOT determinant of optimal performance.
5. When giving demonstrations, don't speak and demonstrate simultaneously. Unless asked to do so (under Notes for Assessors), do not say anything before/after the demonstration, as too much information may confuse the performer.
6. To save time, test three to five children simultaneously. Ensure they are paying attention to the instructions and can see your demonstration. In this case, give demonstrations only once.

¹ Assess the qualitative aspects of fundamental movement skills.

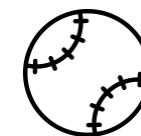
EQUIPMENT



4- and 8-inch nerf balls



Small and medium sized basketballs



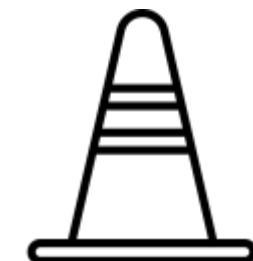
Nerf softballs



Floor tape



4- to 5-inch beanbags



Plastic cones



Plastic basket



Name tags



Stopwatch



Manipulation → Overhand Throw

Child's ID

Did the trunk rotate to the side of the throw during preparation?

Y

Was there a long step opposite the throwing arm?

Y

Level 4 →

N

Level 3 →

N

Did the child fail to step forward?

N

Level 2 →

Y

Level 1 →

Set up

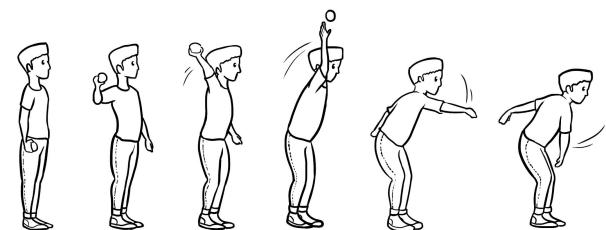
- Tape a line on the floor 20 feet from the wall
- Stand about 10 feet from the examinee so that you can have a side-view of the action
- Have a bucket with several bean bags inside, which should be placed 3 feet before the line

Directions for performers

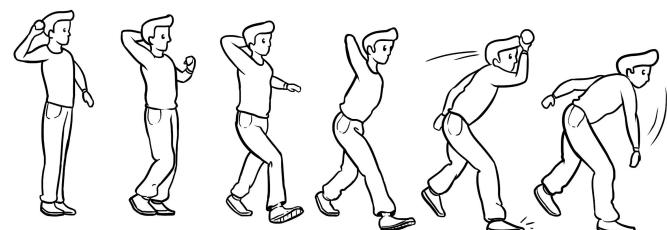
- I want to see your throw
- Walk up to the bucket, grab one bean bag; then, throw it against the wall as hard as you can, without stepping over the line
- Then, repeat it 3 more times
- Watch as I demonstrate

Notes for assessors

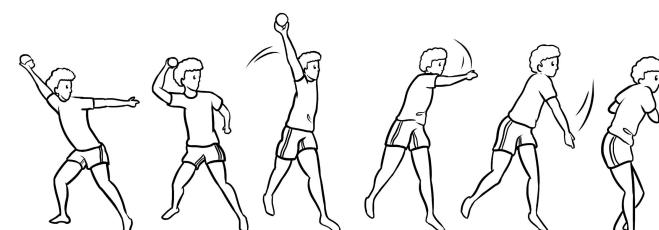
- Give the performer 4 trials (1st trial is for practice only)
- Do not allow performers to step over the line



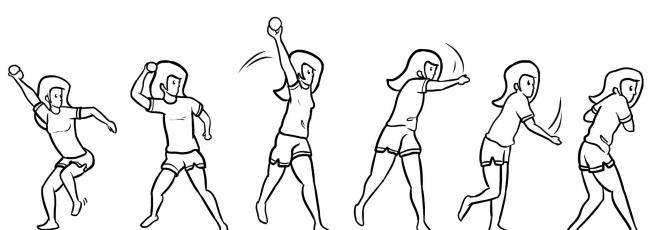
LEVEL 1: Trunk faces the target and there is no step forward. The performer may jump up and down, but this is not considered a step forward.



LEVEL 2: Still very little or no trunk rotation to the side during preparation. However, there is a step forward with either foot.



LEVEL 3: There is a trunk rotation to the side just before the throwing action begins. There is a short (i.e., the width of the step is less than half of the performer's height) contralateral step forward.



LEVEL 4: Rotation of the trunk to the side is clear, and there is a long contralateral step forward (i.e., the width of the step is at least half of the performer's height)



Manipulation → Kick

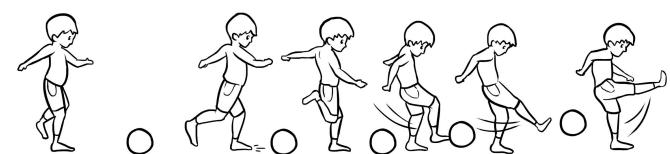
Child's ID

Did the child take a long stride/leap before ball contact?

Y	Did the placement foot move forward following ball contact?	Y	Level 4 →				
		N	Level 3 →				
N	Did the child fail to step toward the ball?	N	Level 2 →				
		Y	Level 1 →				

Set up

- Tape a line on the floor 20 feet from the wall (kicking line)
- Stand about 10 feet from the examinee so that you can have a side-view of the action
- Have a bucket with several soccer balls inside, which should be placed 3 feet before the kicking line



Directions for performers

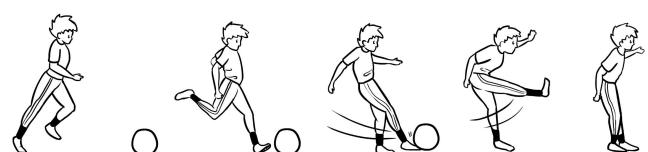
- I want to see your kick.
- Walk up to the bucket, grab a soccer ball, place it on the kicking line; then kick it against the wall
- Then, repeat it 3 more times
- Watch as I demonstrate

LEVEL 1: There is no step forward. The child stands behind the ball and then kicks it.

LEVEL 2: There is at least one complete step before the kick, but there is still no long stride/leap before the kick. The performer seems to run "through" the ball.

Notes for assessors

- Give the performer 4 trials (1st trial is for practice only)
- Sometimes a child runs towards the ball, stops completely, then kicks it. This is the same as not taking any step towards the ball
- Swing the body back, then forward before the kick is not considered a complete step



LEVEL 3: Besides taking steps toward the ball, the child shows an elongated step/leap immediately before the kick, but there is no follow-through.

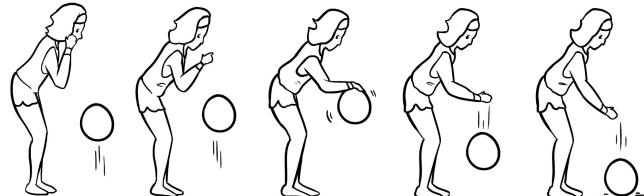
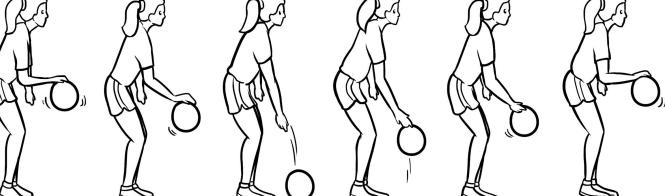
LEVEL 4: Steps are taken; there is a long stride/leap before ball contact, and the placement foot moves forward following ball contact.



Manipulation → Hand Dribble

Child's ID

Did the ball bounce in front/outside of the preferred foot?	Y	Was the child able to keep control without using vision?	Y	Level 4 →							
	N	Did the child ever lose total control of the ball?	N	Level 3 →							
			N	Level 2 →							
			Y	Level 1 →							

Set up - Tape a 4'x4' square on the floor to designate personal space - Stand about 6 feet from the examinee - Have a bucket with several soccer balls inside, which should be placed 3 feet before the kicking line Directions for performers - I want to see you dribbling a basketball using one hand - Try to stay inside the square while dribbling the ball - if the ball goes out of bounds, pick it up, return inside the square, then re-start - I will tell you when to stop - Watch as I demonstrate Notes for assessors - Give the performer a practice trial (about 5 seconds) - Use a stopwatch to time the child dribbling for 15 seconds. Stop time if the ball goes out of bounds Resume timing when the child restarts dribbling - Occasional glances at the ball do not indicate the child relies on video for ball control. If the child loses partial control whenever attempting to take their eyes off the ball, this indicates a level 3		LEVEL 1: The ball bounces all over the place; the child loses control of the ball at least once.	LEVEL 2: Despite a lack of control, the child bounces continuously for 15 seconds.
			
		LEVEL 3: There is more control, and the ball bounces in front/outside of the preferred foot; the child relies on vision to maintain control of the ball.	LEVEL 4: Control is clear, and the child does not rely on vision to maintain control of the ball.



Manipulation → Catch

Child's ID

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Was the ball caught using only hands, without touching any other body part?

Y

N

Did the hands move well-timed and synchronized while catching the ball?

Did the child hold the ball against the chest?

Y

N

Level 4 →

Level 3 →

Level 2 →

Y

Level 1 →

Set up

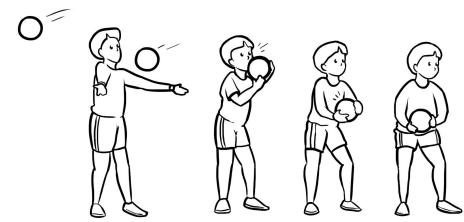
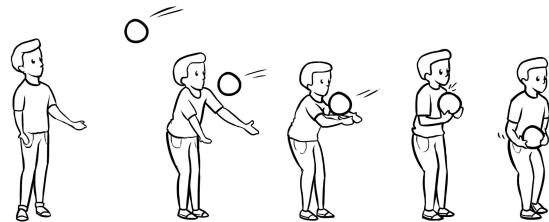
- Tape a 4'x4' on the floor to designate personal space
- Stand about 6 feet from the child

Directions for performers

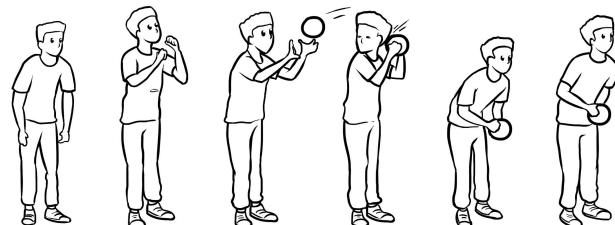
- I want to see you catching a ball using two hands
- Stand anywhere inside of the square
- Watch as I demonstrate

Notes to assessors

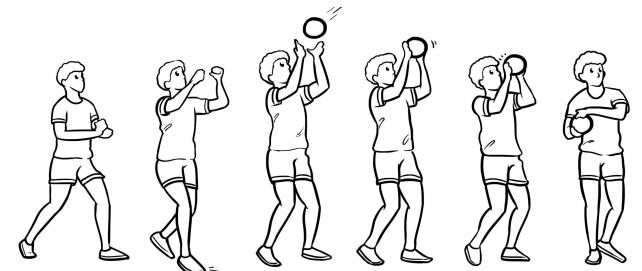
- Give the performer 4 trials (1st trial is for practice only)
- Use an underhand toss and toss the ball at child's chest level
- Repeat any attempt that results from a bad toss (too high/low or to the sides)
- Only assess consistency on the three "valid" tosses
- If the ball is caught with hands and later brought against chest, this indicates a level 2



LEVEL 1: Child uses a scooping action to secure ball against chest.



LEVEL 2: Ball is not secured against the chest but touches a body part other than the hands following a successful catch.



LEVEL 3: Ball does not touch any body part besides the hands, but the action is not well-timed. Often, arms are kept extended, and/or face is turned to either side.

LEVEL 4: Action is well-timed with the simultaneous motion of hands.



Manipulation → Strike

Child's ID

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Did the swing follow a full arc in a horizontal plane?

Y

N

Did the body weight shift from one leg to the other during movement?

Was the bat's motion on a downward plane from back to front?

Y

N

Level 4 →

Level 3 →

Level 2 →

Y

Level 1 →

Set up

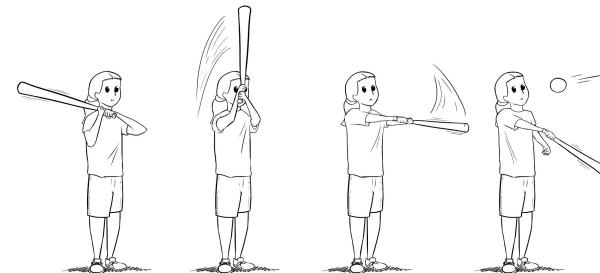
- Tape a 4'x4' square on the floor and 20 feet from the wall
- Stand slightly to the side (about 12 feet) facing the child
- invert the position (child faces the opposite wall/open space) if the child is left-handed

Directions for performers

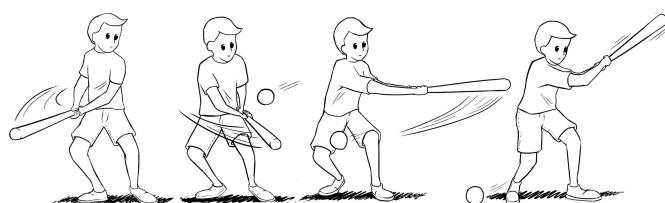
- I want to see you striking a ball tossed in your direction
- Try to stay inside the square, but you are free to move as the ball approaches
- Strike the ball against the wall/open space
- Watch as I demonstrate

Notes for assessors

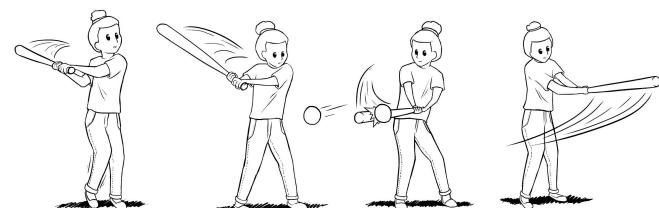
- Give the performer 4 trials (1st trial is for practice only)
- Use an underhand toss
- Toss the ball just above the child's hip level
- Repeat any attempt that results from a bad toss (too high/low or to the sides)
- Only assess consistency on the three "valid" tosses



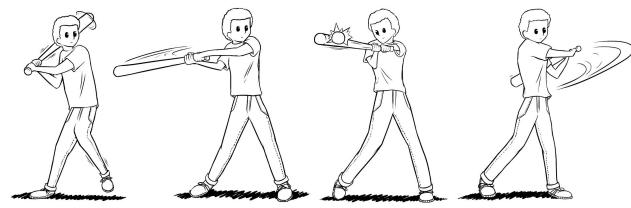
LEVEL 1: The arm action is from back to front and resembles a vertical chopping motion.



LEVEL 2: The motion occurs on the horizontal plane, but the action is limited in its amplitude. Often, the bat is held in front of the body.



LEVEL 3: The strike does occur in a long (full arc) horizontal plan, but there is no body weight transfer.



LEVEL 4: Same as level three, but now there is a transfer of body weight in the direction of the strike, which occurs from one to the other leg.



Child's ID

Locomotion → Hop

Was the hanging leg's knee bent 90 degrees or less, with a vertical thigh?

Y

Did the hanging leg's foot swing across the support leg's line like a pendulum?

Y**Level 4 →****N****Level 3 →****N**

Was the hanging leg held in front of the body?

N**Level 2 →****Y****Level 1 →****Set up**

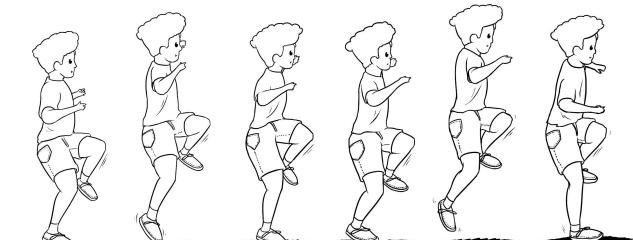
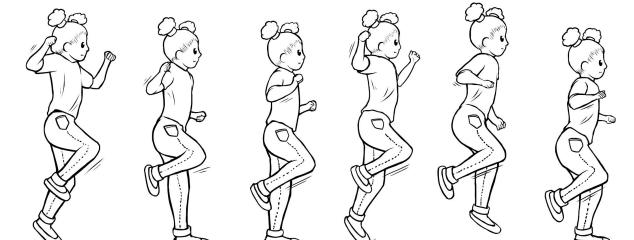
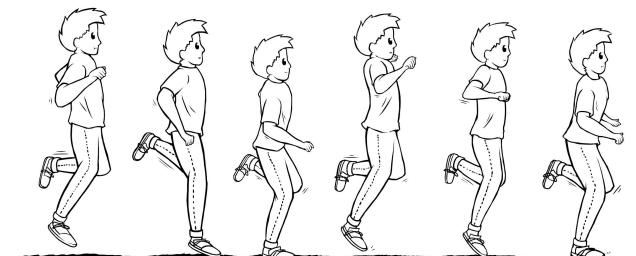
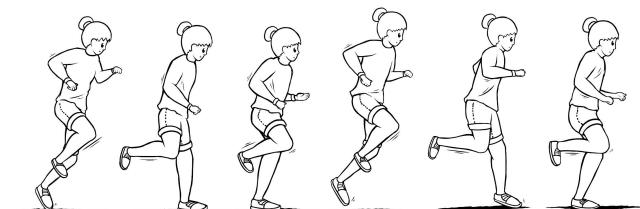
- Create a 15-long traveling lane using cones
- Tape starting and ending lines on the floor
- Stand perpendicular to the traveling lane so that you can see both the starting and ending points
- Place two cones (each end) 1 foot before the starting and ending lines

Directions for performers

- I want to see your hopping on one leg
- Choose your preferred leg to hop
- Start from that starting line and do not stop until you pass the ending line; then come back using the same leg
- This is not a race; show you best form
- Watch as I demonstrate

Notes for assessors

- Give the performer 4 trials (1st trial is for practice only)

**LEVEL 1:** The suspended leg is held in front of the body.**LEVEL 2:** The knee is flexed with the foot of the hanging leg held near the buttocks.**LEVEL 3:** The hanging leg is held back with the thigh vertically.**LEVEL 4:** Similar to level 3, but the foot of the hanging leg crosses the line of the support leg like a pendulum.



Locomotion → Horizontal Jump

Child's ID

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Did the arms move forward & upward upon takeoff and downward at landing?

Y

Did the hands exceed the height of the head at liftoff?

Y

Level 4 →

N

Level 3 →

N

Was the takeoff/ landing executed on one foot?

N

Level 2 →

Y

Level 1 →

Set up

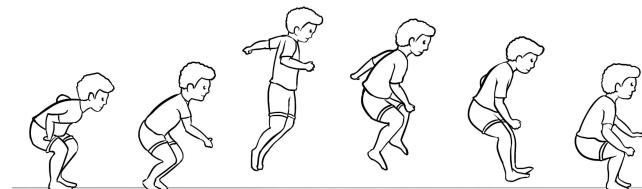
- Tape two parallel lines on the floor two feet apart
- Stand perpendicular to the jumping action facing the side of the child

Directions for performers

- I want to see you jumping forward over the second line and using both feet
- Walk up to the 1st line and stop completely
- Then, jump as far as you can over the second line
- Use both feet when taking off and landing
- Then, walk back to the starting point and do it again
- There is no rush, show your best jump
- Watch as I demonstrate

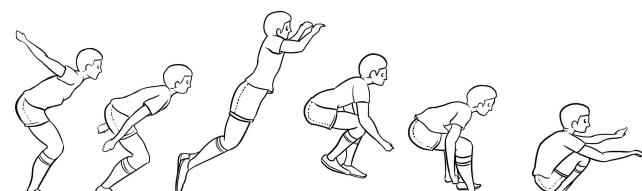
Notes for assessors

- Give the performer 4 trials (1st trial is for practice only)
- The child must stop completely behind the line before jumping

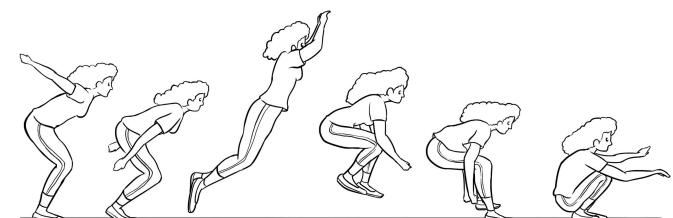


LEVEL 1: The arm action is inconsistent with no defined pattern, sometimes even motionless. The takeoff/landing is executed on one foot.

LEVEL 2: The arm action is still inconsistent, but the takeoff/landing is executed on both feet.



LEVEL 3: The arms move forward and upward during takeoff and then downward at landing. But the hands do not exceed the height of the head at liftoff.



LEVEL 4: A pattern similar to Level 3, but the hands are high above the head during the liftoff.



Locomotion → Skip

Child's ID

Did the arms move rhythmically in opposition to the legs?	Y	Was there a low vertical lift on hop?	Y	Level 4 →							
	N	Is there a break in the rhythm caused by a double hop or step?	N	Level 3 →							
	N		N	Level 2 →							
			Y	Level 1 →							

Set up

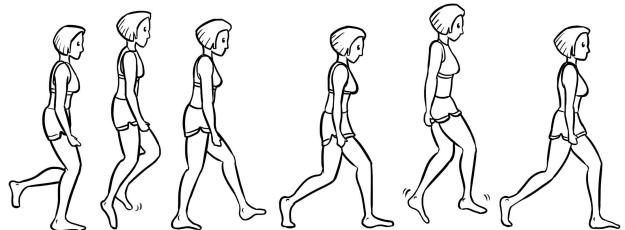
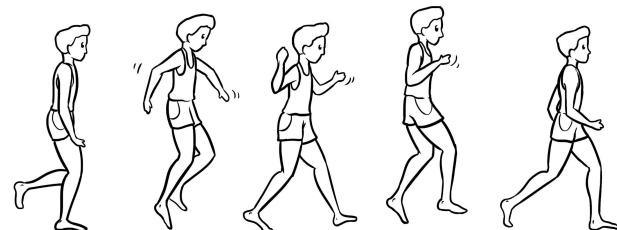
- Create a 15-long traveling lane using cones
- Tape starting and ending lines on the floor
- Stand perpendicular to the traveling lane so that you can see both the starting and ending points
- Place two cones (each end) 1 foot before the starting and ending lines

Directions for performers

- I want to see you skipping
- Start from that starting line and do not stop until you pass the ending line
- This is not a race; show you best form
- Watch as I demonstrate

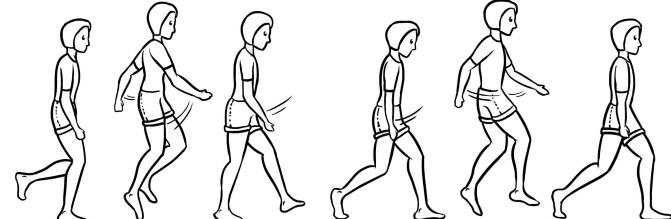
Notes for assessors

- Give the performer 4 trials (1st trial is for practice only)



LEVEL 1: The arm action is inconsistent with no defined pattern. The rhythm is affected by a double hop or step.

LEVEL 2: The arm motion may improve, but it is still inconsistent and often motionless. The action of the feet is well coordinated, not being affected by a double hop or step.



LEVEL 3: The arms move rhythmically in opposition to the legs, but there is an exaggerated vertical lift on hop.

LEVEL 4: The arms move rhythmically in opposition to the legs, and the vertical lift on hop is low.



Locomotion → Vertical Jump

Child's ID

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Did the arms move backward during preparation?

Y

Did one arm reach upward at the flight's peak while the other swung downward?

Y

Level 4 →

N

Level 3 →

N

Was the takeoff/ landing executed on one foot?

N

Level 2 →

Y

Level 1 →

Set up

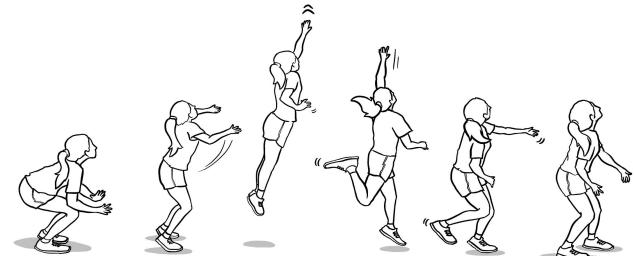
- Tape four parallel lines on the wall two feet apart
- Stand perpendicular to jumping action facing the side of the performer
- Ask the child to stand sideways with dominant arm facing the wall

Directions for performers

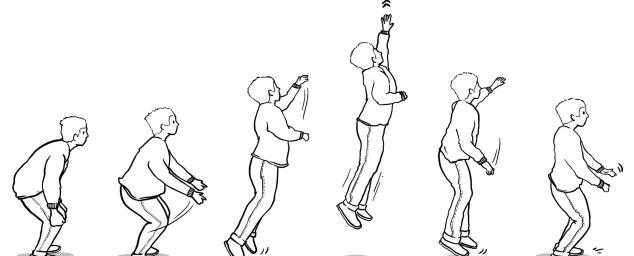
- I want to see you jump high up
- Walk up to the wall and stand sideways
- When I say so, jump up and touch the highest point on the wall using your dominant hand
- Use both feet when taking off and landing
- Then, get back to the starting position
- There is no rush; show your best jump
- Watch as I demonstrate

Notes for assessors

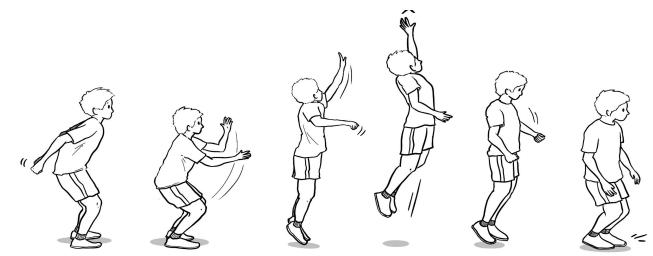
- Give the performer 4 trials (1st trial is for practice only)
- Ask the child to show the hand he/she writes with. That will help determine the dominant hand



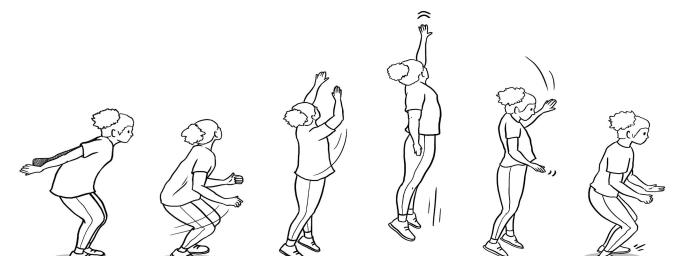
LEVEL 1: Arms don't move to the rear before taking off; the child takes off and/or land with one foot.



LEVEL 2: Arms don't move to the rear before takeoff; takeoff and landing occur with both feet.



LEVEL 3: Arms move to the rear before taking off, but only the reaching arm reaches up.



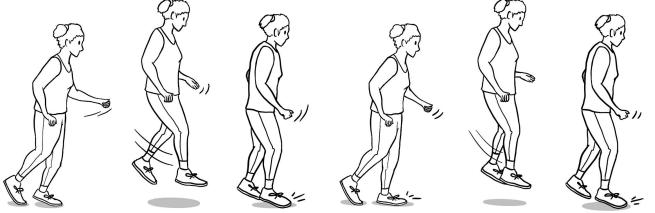
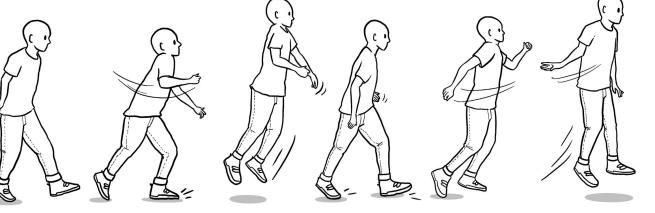
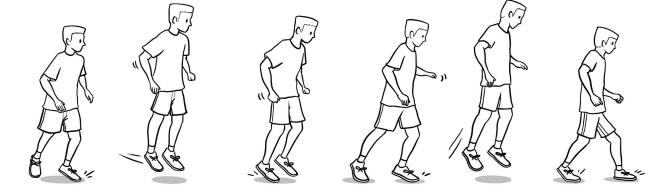
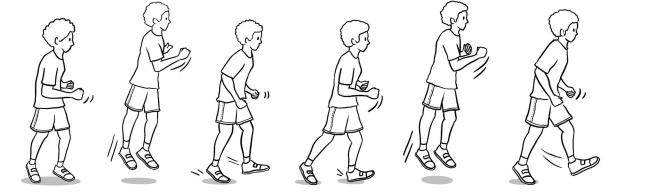
LEVEL 4: Arms move to the rear before taking off; both arms reach up, with the non-reaching arm moving down at the peak of the flight.



Locomotion → Gallop

Child's ID

Was the action smooth (not choppy) and performed at a moderate speed?	Y	Did the arms move in unison, upward during take-off and downward during landing?	Y	Level 4 →							
	N	Did the trailing foot land in front of the leading foot?	N	Level 3 →							
	N	Did the trailing foot land in front of the leading foot?	N	Level 2 →							
	N	Did the trailing foot land in front of the leading foot?	Y	Level 1 →							

Set up - Create a 15'-long traveling lane using cones - Tape starting and ending lines on the floor - Stand perpendicular to the traveling lane so that you can see both the starting and ending points - Place two cones (each end) 1 foot before the starting and ending lines			LEVEL 1: The action is not smooth/rhythrical and seems choppy/stiff, often done at a fast tempo; the trailing foot (foot that follows) land in front of the leading foot several times.			LEVEL 2: Still not a smooth action, but while the trailing foot may cross the leading foot during airborne action, it does not land in front of the leading foot.
Directions for performers - I want to see you galloping - Start from the starting line and do not stop until you pass the ending line - This is not a race; show you best form - Watch as I demonstrate						
Notes for assessors - Give the performer 4 trials (1st trial is for practice only)						