

Required Equipment

Assistive device the child uses.

Stopwatch.

2 sturdy chairs of identical height without armrests or back support.

1 chair with a backrest for support.

Pen or pencil (referred to as object).

Tennis ball.

Soccer ball.

30 centimeters (12 inches) ruler.

Obstacle that is 6 centimeters (2.4 inches) tall, 11 centimeters (4.4 inches) wide, and 44 centimeters (17.6 inches) long (e.g., 2 boxes of hygiene gloves).

Flight of stairs with a minimum of 2 steps; 3 to 4 steps are preferred.

Distance of at least 8 meters (~26 feet.).

Preliminary instructions

General:

The term "Child" refers to both children and adolescents.

The term "Affected Leg" refers to the leg with prosthesis or Extension-prosthesis.

"Guidelines" instructs the test administrator.

"Instructions" are directions to the child.

The chair's height should be adjusted so the child's hips, knees, and ankles are positioned as close to 90° as possible.

All tasks should be assessed with the child wearing their prosthesis or Extension-prosthesis.

The assessment should be explained to the child as follows: "You will be asked to perform 25 tasks, ranging from sitting to standing to moving. Your performance on each task will be scored."

Refrain from unrelated conversations throughout the assessment.

Safety first; no task should be performed if the child, parent, or administrator is uncertain of a safe outcome.

Scoring:

If you are not satisfied that the performance depicts the child's actual ability, repeat it up to 2 additional attempts. Record the best score.

If the child cannot perform the task for reasons unrelated to physical ability (e.g., lack of understanding, cooperation, or hyperactivity), label the task as "not tested" and exclude it from the total score calculation.

Final score calculation is determined as a percentage of the total score.

Total score = Raw score (sum of scores) / score of tasks performed (sum of scores) X 100

Before you begin the assessment, review item #26.

This item's score is determined based on the type of assistive device used 2 or more times in tasks #18-23.

Administrator's name:

Date:

Child's name:	ID:
Side of the affected leg	RT / LT
Diagnosis of the affected leg	Trauma / Infection / Oncology / Congenital amputation / Congenital deficiency without amputation
If the affected leg is amputated, what is the height of the amputation?	Partial foot / Transtibial / Knee disarticulation / Transfemoral / Hip disarticulation / Not amputated
If the affected leg is shorter, what is the leg length discrepancy?	_____ centimeters / No discrepancy
What is the condition of the contralateral leg?	Intact _____ Other _____
Prosthetic components	
Extension-prosthesis components	

Raw score (sum of scores) / score of tasks performed (sum of scores) X 100 = Total score: _____

TASK #1: SITTING BALANCE

Guidelines	<ul style="list-style-type: none">Have the child sit on the sturdy chair with hips, knees, and ankles at 90° and arms crossed across their chest.
Instructions	"Hold this position for 60 seconds."
Scoring	0. Cannot sit upright independently for 60 seconds. 1. Can sit upright independently for 60 seconds.

Score: _____

TASK #2: SITTING REACH

Guidelines	<ul style="list-style-type: none">Have the child sit on the sturdy chair with hips, knees, and ankles at 90°, trunk unsupported, holding palms together extended forward with 90° shoulder flexion and elbows fully extended.Measure the distance beyond the child's fingertips with a ruler in accordance with the child's age (see below).At the specific measured distance, suspend the ruler down. The distance of the ruler to the child's fingertips:<ul style="list-style-type: none">2-3 years: 10 centimeters (4 inches).4-5 years: 15 centimeters (6 inches).6-7 years: 20 centimeters (8 inches).8-18 years: 30 centimeters (12 inches).
Instructions	"Reach forward with either hand and take the ruler."
Scoring	0. Does not try. 1. Reaches out but cannot take ruler or requires arm support. 2. Takes the ruler successfully.

Score: _____

TASK #3: CHAIR TO CHAIR TRANSFER

Guidelines	<ul style="list-style-type: none">Place the 2 sturdy chairs perpendicular to each other.Have the child sit at the front of one chair with hips, knees, and ankles at 90°.
Instructions	"Move from the chair you are sitting on to the other chair. You may choose the direction of transfer. You may use your upper limbs or an assistive device."
Scoring	<ol style="list-style-type: none">0. Cannot perform task or needs physical assistance.1. Performs task independently but appears unsteady.2. Performs task independently; appears steady and safe.

Score: _____

Tasks #4-7: Scores for these tasks are given when the child performs a single sit-to-stand transition with standing balance for 30 seconds. If unable to perform with arms crossed over the chest, allow performance with assistance (arm, assistive device).

Tasks #6-7: Once the child is standing, begin timing immediately. Track the 5 seconds (task #6) and 30 seconds (task #7) from when the child stands upright.

TASK #4: SIT-TO-STAND

Guidelines	<ul style="list-style-type: none">Have a stopwatch ready to measure time for Tasks #6 and #7.Have the child sit on the sturdy chair with hips, knees, and ankles at 90° and arms crossed across their chest.Once standing, begin timing immediately.
Instructions	"Transition from sitting to standing and maintain your standing position until I tell you to stop." If unable to stand without hand assistance, "You may use your hands or an assistive device to stand up straight."
Scoring	<ol style="list-style-type: none">0. Unable to stand up or needs physical assistance from another person.1. Able to stand up with support from arms or an assistive device.2. Able to stand up without support.

Score: _____

TASK #5: NUMBER OF ATTEMPTS TO PERFORM A SIT-TO-STAND

Guidelines	<ul style="list-style-type: none">Same as Task #4.Scoring rules:<ul style="list-style-type: none">If the child scored 0 on Task #4, they will also score 0 on Task #5.If the child scored 1 on Task #4, then on Task #5 score they receive a 1 if required more than one attempt WITH assistance or 2 if required only one attempt WITH assistance.If the child scored 2 on Task #4, then on Task #5 score they receive a 1 if required more than one attempt WITHOUT assistance or 2 if required only one attempt WITHOUT assistance.
Instructions	Same as Task #4.
Scoring	<ol style="list-style-type: none">0. Unable to stand up or needs physical assistance from another person.1. Able to stand up but requires more than one attempt.2. Able to stand up on first attempt.

Score: _____

TASK #6: IMMEDIATE STANDING BALANCE

Guidelines	<ul style="list-style-type: none">• Same as Task #4.• Track the first 5 seconds from when the child stands upright.• Ensure the child is not leaning against the chair with their legs.
Instructions	Same as Task #4.
Scoring	<ol style="list-style-type: none">0. Unable to maintain steady standing (shaking, moving leg, nearly falling).1. Able to maintain steady standing with the help of an assistive device or other support.2. Able to maintain steady standing without support.

Score: _____

TASK #7: STANDING BALANCE

Guidelines	<ul style="list-style-type: none">• Same as Task #4.• Track the 30 seconds from when the child stands upright.• Ensure the child is not leaning against the chair with their legs.
Instructions	Same as Task #4.
Scoring	<ol style="list-style-type: none">0. Unable to maintain steady standing (shaking, moving leg, nearly falling).1. Able to maintain steady standing with the help of an assistive device or other support.2. Able to maintain steady standing without support.

Score: _____

TASK #8: SINGLE LIMB STANDING BALANCE

Guidelines	<ul style="list-style-type: none">• Have a stopwatch ready to measure performance time.• Prepare a chair with a backrest for support in front of child.• Have the child stand upright on a single leg without leaning against the chair.• Measure the duration of the task in accordance with the child's age (see below). Measured duration:<ul style="list-style-type: none">o 2-3 years: 5 seconds.o 4-5 years: 10 seconds.o 6-7 years: 15 seconds.o 8-18 years: 30 seconds.
Instructions	"Lift your affected leg and remain standing on the intact leg until I tell you to stop". If unable to stand independently - "you may use the chair's backrest or an assistive device." - "Now, lift your intact leg and remain standing on the affected leg."
Scoring	<ol style="list-style-type: none">0. Unable to maintain steady standing on one leg.1. Able to maintain steady standing on one leg with the help of an assistive device or other support for the required time.2. Able to maintain steady standing on one leg without support for the required time.

Intact Leg Standing Score: _____

Affected Leg Standing Score: _____

TASK #9: KICKING A BALL

Guidelines	<ul style="list-style-type: none">• Have the child stand facing the soccer ball, positioned 30 centimeters (12 inches) in front of their legs.• Do not ask the child to perform this task if an assistive device is needed; the score will be 0.
Instructions	<p>“Use your intact leg to kick the ball forward as hard as you can without falling.”</p> <p>“Now, use your affected leg to kick the ball forward as hard as you can without falling.”</p>
Scoring	<p>0. Unable to kick the ball without an assistive device, does not kick, or kicks and falls.</p> <p>1. Able to kick the ball but without moving the kicking leg backward for momentum.</p> <p>2. Able to kick the ball while moving the kicking leg backward for momentum.</p>

Intact Leg Standing Score: _____

Affected Leg Standing Score: _____

TASK #10: STANDING REACH

Guidelines	<ul style="list-style-type: none">• Prepare a chair with a backrest for support.• Have the child stand with feet 5-10 centimeters (2-4 inches) apart, holding palms together, extended forward with 90° shoulder flexion and elbows fully extended.• Measure the distance beyond the child’s fingertips with a ruler in accordance with the child’s age (see below).• At the specific measured distance, suspend the ruler down.• The child may use the chair’s backrest or an assistive device.• The distance of the ruler to the child’s fingertips:<ul style="list-style-type: none">o 2-3 years: 10 centimeters (4 inches).o 4-5 years: 15 centimeters (6 inches).o 6-7 years: 20 centimeters (8 inches).o 8-18 years: 30 centimeters (12 inches).
Instructions	<p>“Reach forward with either hand and take the ruler without moving your legs.”</p>
Scoring	<p>0. Unable or afraid to perform the task.</p> <p>1. Reaches out but cannot take ruler or requires support.</p> <p>2. Takes the ruler successfully.</p>

Score: _____

TASK #11: THROWING A BALL

Guidelines	<ul style="list-style-type: none">• Have the child stand and throw a tennis ball forward from an overhead position as hard as possible.• Observe the child's entire body movement while performing the task.
Instructions	<p>“Hold the ball overhead with your preferred hand and throw it as hard as you can.”</p>
Scoring	<p>0. Throws the ball from a non-overhead position.</p> <p>1. Throws the ball from an overhead position without body movement.</p> <p>2. Throws the ball from an overhead position with trunk rotation and backward movement of the opposite leg.</p>

Score: _____

TASK #12: “NUDGE” TEST

Guidelines	<ul style="list-style-type: none">• If the child cannot maintain standing balance, do not perform this task, scoring will be 0.• Position yourself at the side of the child.• Use the palm of your hand to push firmly on the child’s sternum 3 times, quickly, with consistent pressure.• The child’s body weight should shift towards the heels, raising the toes.• Use your other hand behind the child’s back to prevent falling.
Instructions	“I will push you backward with my hand on your chest. You should try to stay standing when you are pushed.”
Scoring	<ol style="list-style-type: none">0. Begins to fall and requires the administrator’s assistance.1. Catches self, staggers, reaches for support or uses assistive device to maintain standing position.2. Remains steady while standing, free of assistive device.

Score: _____

TASK #13: STANDING WITH EYES CLOSED

Guidelines	<ul style="list-style-type: none">• Prepare a chair with a backrest for support in front of child.• Have a stopwatch ready to measure 30 seconds.• Have the child stand upright with feet 5-10 centimeters (2-4 inches) apart and eyes closed.
Instructions	“Stand with your eyes closed without support until I tell you to stop.” If unable, “Use the chair’s backrest or assistive device.”
Scoring	<ol style="list-style-type: none">0. Unable to stand steadily without using the chair’s backrest or an assistive device.1. Able to stand steadily for 30 seconds without using the chair’s backrest or an assistive device.

Score: _____

TASK #14: PICKING UP AN OBJECT OFF THE FLOOR

Guidelines	<ul style="list-style-type: none">• Prepare a chair with a backrest for support in front of child.• Have the child stand with feet 5-10 centimeters (2-4 inches) apart.• Measure the distance beyond the child’s toes with a ruler in accordance with the child’s age (see below).• Place the pencil or pen on the floor at the measured distance.• The distance of the pen/pencil beyond the child’s toes:<ul style="list-style-type: none">o 2-7 years: child’s shoe length.o 8-18 years: 30 centimeters (12 inches).
Instructions	“Pick up the object from the floor, without moving your feet and keep the knees as straight as possible.” If unable - “Use the chair’s backrest or an assistive device.”
Scoring	<ol style="list-style-type: none">0. Unable to pick up the object and return to a standing position.1. Able to pick the object with support (e.g., chair’s backrest or an assistive device).2. Able to pick up the object and return to a standing position without support.

Score: _____

TASK #15: SITTING DOWN ON THE CHAIR

Guidelines	<ul style="list-style-type: none">• Have the child stand with arms crossed over the chest in front of a chair.
Instructions	"Sit on the chair in a controlled manner, keeping your arms crossed over your chest." If unable, "You may use the chair or an assistive device."
Scoring	0. Falls on to the chair or requires contact guarding. 1. Cannot sit in a smooth and controlled manner, or uses support (e.g., chair or an assistive device). 2. Sits in a safe, smooth motion without support.

Score: _____

TASK #16: SITTING DOWN ON THE FLOOR FROM STANDING

Guidelines	<ul style="list-style-type: none">• Have the child transition from standing to sitting on the floor.
Instructions	"Sit down on the floor safely without assistance." If unable, "You may use the chair or an assistive device."
Scoring	0. Falls onto the floor or requires contact guarding. 1. Able to sit on the floor with support (e.g., a chair or an assistive device). 2. Able to sit on the floor without support (can use their hands or body).

Score: _____

TASK #17: STANDING UP FROM SITTING ON THE FLOOR

Guidelines	<ul style="list-style-type: none">• Have the child transition from sitting on the floor to standing.
Instructions	"Stand up from sitting on the floor without assistance." If unable, "You may use the chair backrest or an assistive device."
Scoring	0. Unable to stand or tries to and is unable to. 1. Able to stand up from the floor with support (e.g., a chair or an assistive device). 2. Able to stand up without support (can use their own hands or body).

Score: _____

Tasks #18-23: Impact of any assistive device the child uses will be factored/considered into item #26 if used for more than 2 walking tasks.

Tasks #18-21: Scores for these tasks are given when the child performs the walking task. If a single walking cycle is insufficient to score all tasks, have the child repeat the walk.

TASK #18: INITIATION OF WALKING

Guidelines	<ul style="list-style-type: none">• Place the 2 sturdy chairs with an 8 meter (~26 feet) distance between them.• Have the child walk from one chair to the other and back.
Instructions	"Walk to the other chair, turn around and walk back."
Scoring	0. Hesitates or requires multiple attempts to start walking. 1. Begins to walk with no hesitancy.

Score: _____

TASK #19: STEP LENGTH AND FOOT CLEARANCE

Guidelines

- Same as Task #18.
- Observe the step lengths during double limb support.
- 4 scores will be given, 2 for each leg (one for step length and one for foot clearance).
- **Intact step length (during double limb support):** the distance between the trailing (rear) affected toes and the leading (front) intact heel.
- **Affected step length (during double limb support):** the distance between the trailing (rear) intact toes and the leading (front) affected heel.
- Estimate the minimum distance in accordance with the child's age (see below):
 - o 2-7 years: child's shoe length.
 - o 8-18 years: 30 centimeters (12 inches).
- **Foot clearance:** Observe the motion of the leg and position of the foot during swing. Asses the presence of dragged foot or foot clearance with compensatory movements (e.g., hiking, vaulting, circumduction).

Instructions

Same as Task #18.

Scoring

Step length:

0. Does not advance the minimum distance according to the child's age.
1. Advances the minimum distance according to the child's age.

Intact Step Length Score: _____

Affected Step Length Score: _____

Scoring

Foot clearance:

0. Presence of dragged foot or compensatory movements.
1. Foot clears floor without compensatory movements.

Intact Foot Clearance Score: _____

Affected Foot Clearance Score: _____

TASK #20: STEP CONTINUITY

Guidelines

- Same as Task #18.
- Observe gait quality and assess presence of hesitation (e.g., marked differences in step length that require adjustment for loss of balance between steps) or difficulty maneuvering the assistive device sufficient to interrupt step continuity.

Instructions

Same as Task #18.

Scoring

0. Child present stopping or discontinuity between steps (stop & go gait).
1. Steps appear to be continuous.

Score: _____

TASK #21: TURNING AROUND

Guidelines	Same as Task #18. Count how many steps the child requires to perform a 180° turn.
Instructions	Same as Task #18.
Scoring	0. Unable to turn, requires support (beyond regularly used assistive device) to prevent from falling. 1. Needs more than 3 steps to complete the turn with or without an assistive device. 2. Able to turn in 3 or fewer steps.

Score: _____

TASK #22: VARIABLE CADENCE

Guidelines	<ul style="list-style-type: none">• Same as Task #18.• Instruct the child to change walking speed from slow to fast several times and assess ability and quality to varying cadence.• The instruction is repeated for each walking interval between the chairs, not when the child is about to turn.
Instructions	“Start walking between the 2 chairs. When I tell you to walk fast, walk as fast as you can; when I tell you to walk slowly, walk as slowly as you can.”
Scoring	0. Unable to vary cadence. 1. Able to vary cadence, resulting in differences in step length between legs and requiring balance to be re-established with each step. 2. Able to vary cadence without changing gait symmetry.

Score: _____

TASK #23: STEPPING OVER OBSTACLE

Guidelines	<ul style="list-style-type: none">• Place an obstacle measuring 6 centimeters (2.4 inches) tall, 11 centimeters (4.4 inches) wide, and 44 centimeters (17.6 inches) long (e.g., the size of 2 boxes of hygienic gloves) in the walking path between the 2 chairs.• Have the child walk and step over the obstacle, ensuring that both feet pass over it without circumduction.
Instructions	“Walk to the other chair while stepping over the obstacle with both feet.”
Scoring	0. Unable to step over the obstacle. 1. Able to step over the obstacle, but the foot cannot clear it, or stride is interrupted in front of the obstacle, or the leg is circumducted. 2. Able to step over the obstacle without interrupting the stride.

Score: _____

TASK #24: RUNNING

Guidelines	<ul style="list-style-type: none">Place the 2 sturdy chairs with an 8 meters (~26 feet) distance between them and instruct the child to run between them.Observe the child and assess if able to perform a flight phase (i.e., 2 limbs are off the ground simultaneously).
Instructions	"Run between the chairs."
Scoring	<ol style="list-style-type: none">0. Unable to run.1. Able to run, but not the whole distance (back and forth).2. Able to run the whole distance.

Score: _____

TASK #25: STAIRS

Guidelines	<ul style="list-style-type: none">Have the child stand at the bottom or top of a staircase and evaluate the child while going up or down 2-4 stairs.
Instructions	"Go up and down the stairs without holding on to the railing." If unable, "You may use the railing and/or assistive device."
Scoring	<ol style="list-style-type: none">0. Unsteady, cannot negotiate stairs or expresses fear of or inability to attempt the task.1. Able to negotiate one step at a time or must hold on to the railing or and/or assistive device.2. Able to negotiate stairs step-over-step without holding on to the railing and without using an assistive device.

Ascending Stairs Score: _____

Descending Stairs Score: _____

TASK #26: SELECTING AN ASSISTIVE DEVICE

Guidelines	Award points based on the assistive device used in more than 2 walking tasks (Tasks #18-23).
Scoring	<ol style="list-style-type: none">1. Wheelchair.2. Walker.3. Crutches (axillary or forearm).4. Cane (simple or quad).5. No assistive device.

Score: _____