A

PEDIATRIC BALANCE SCALE

Name: _____ Date: _____

Location: _____ Examiner: _____

Item Description		Score *0 - 4*	Seconds *optional*
1.	Sitting to standing	_____	
2.	Standing to sitting	_____	
3.	Transfers	_____	
4.	Standing unsupported	_____	_____
5.	Sitting unsupported	_____	_____
6.	Standing with eyes closed	_____	_____
7.	Standing with feet together	_____	_____
8.	Standing with one foot in front	_____	_____
9.	Standing on one foot	_____	_____
10.	Turning 360 degrees	_____	_____
11.	Turning to look behind	_____	
12.	Retrieving object from floor	_____	
13.	Placing alternate foot on stool	_____	_____
14.	Reaching forward with outstretched arm	_____	
	Total Test Score	_____	

General Instructions

1. Demonstrate each task and give instructions as written. A child may receive a practice trial on each item. If the child is unable to complete the task based on their ability to understand the directions, a second practice trial may be given. Verbal and visual directions may be clarified through the use of physical prompts.

2. Each item should be scored utilizing the 0 to 4 scale. Multiple trials are allowed on many of the items. The child's performance should be scored based upon the lowest criteria, which describes the child's best performance. If on the first trial a child receives the maximal score of 4, additional trials need not be administered. Several items require the child to maintain a given position for a specific time. Progressively, more points are deducted if the time or distance requirements are not met; if the subject's performance warrants supervision; or if the subject touches an external support or receives assistance from the examiner. Subjects should understand that they must maintain their balance while attempting the tasks. The choice, of which leg stand on or how far to reach, is left to the subject. Poor judgement will adversely influence the performance and the scoring. In addition to scoring items 4, 5, 6, 7, 8, 9, 10, and 13, the examiner may choose to record the exact time in seconds.

B

Equipment

The Pediatric Balance Scale was designed to require minimal use of specialized equipment. The following is a complete list of items required for administration of this tool:

adjustable height bench
chair with back support and arm rests
stopwatch or watch with a second hand
masking tape - 1inch wide
a step stool 6 inches in height
chalkboard eraser
ruler or yardstick
a small level

The following items are optional and may be helpful during test administration:

2 child-size footprints
blindfold
a brightly colored object of at least two inches in size
flash cards
2 inches of adhesive-backed hook Velcro
Two 1 foot strips of loop Velcro

****

1. **Sitting To Standing**

** **Special instruction**: Items #1 and #2 may be tested simultaneously if, in the determination of the examiner, it will facilitate the best performance of the child.*

INSTRUCTIONS: **Child is asked to "Hold arms up and stand up."** The child is allowed to select the position of his/her arms.

EQUIPMENT: A bench of appropriate height to allow the child's feet to rest supported on the floor with the hips and knees maintained in 90 degrees of flexion.

Best Of Three Trials

( ) 4 able to stand without using hands and stabilize independently
( ) 3 able to stand independently using hands
( ) 2 able to stand using hands after several tries
( ) 1 needs minimal assist to stand or to stabilize
( ) 0 needs moderate or maximal assist to stand

c

2. **Standing To Sitting**

** **Special instruction**: Items #1 and #2 may be tested simultaneously if, in the determination of the examiner, it will facilitate the best performance of the child.*

INSTRUCTIONS: **Child is asked to sit down slowly, without use of hands.** The child is allowed to select the position of his/her arms.

EQUIPMENT: A bench of appropriate height to allow the child's feet to rest supported on the floor with the hips and knees maintained in 90 degrees of flexion.

Best Of Three Trials

( ) 4	sits safely with minimal use of hands
( ) 3	controls descent by using hands
( ) 2	uses back of legs against chair to control descent
( ) 1	sits independently, but has uncontrolled descent
( ) 0	needs assistance to sit

3. **Transfers**

INSTRUCTIONS: Arrange chair(s) for a stand pivot transfer, touching at a forty-five degree angle. **Ask the child to transfer one way toward a seat with armrests and one way toward a seat without armrests.**

Equipment: Two chairs, or one chair and one bench. One seating surface must have armrests. One chair/bench should be of standard adult size and the other should be of an appropriate height to allow the child to conformably sit with feet supported on the floor and ninety degrees of hip and knee flexion.

Best Of Three Trials

( ) 4	able to transfer safely with minor use of hands
( ) 3	able to transfer safely; definite need of hands
( ) 2	able to transfer with verbal cueing and/or supervision (spotting)
( ) 1	needs one person to assist
( ) 0	needs two people to assist or supervise (close guard) to be safe

D

4. **Standing Unsupported**

INSTRUCTIONS: **The child is asked to stand for 30 SECONDS without holding on or moving his/her feet.** A taped line or footprints may be placed on the floor to help the child maintain a stationary foot position. The child may be engaged in non-stressful conversation to maintain attention span for thirty seconds. Weight shifting and equilibrium responses in feet are acceptable; movement of the foot in space (off the support surface) indicates end of the timed trial.

EQUIPMENT: a stop watch or watch with a second hand
a twelve inch long masking tape line or two footprints placed shoulder width apart

( ) 4 able to stand safely 30 SECONDS
( ) 3 able to stand 30 SECONDS with supervision (spotting)
( ) 2 able to stand 15 SECONDS unsupported
( ) 1 needs several tries to stand 10 SECONDS unsupported
( ) 0 unable to stand 10 SECONDS unassisted

_____**Time in seconds**

Special Instructions: If a subject is able to stand 30 SECONDS unsupported, score full points for sitting unsupported. Proceed to item #6

5. **Sitting With Back Unsupported And Feet Supported On The Floor**

INSTRUCTIONS: **Please sit with arms folded on your chest for 30 SECONDS**. Child may be engaged in non-stressful conversation to maintain attention span for thirty seconds. Time should be stopped if protective reactions are observed in trunk or upper extremities.

EQUIPMENT: a stop watch or watch with a second hand
a bench of appropriate height to allow the feet to rest supported on the floor with the hips and knees maintained in ninety degrees of flexion.

( ) 4 able to sit safely and securely 30 SECONDS
( ) 3 able to sit 30 SECONDS under supervision (spotting) or may require definite use of upper extremities to maintain sitting position
( ) 2 able to sit 15 SECONDS
( ) 1 able to sit 10 SECONDS
( ) 0 unable to sit 10 SECONDS without support

_____ **Time in seconds**

E

6. **Standing Unsupported With Eyes Closed**

INSTRUCTIONS: The child is asked to stand still with feet shoulder width apart and close his/her eyes for ten seconds. **Direction: "When I say close your eyes, I want you to stand still, close your eyes, and keep them closed until I say open."** If necessary, a blindfold may be used. Weight shifting and equilibrium responses in the feet are acceptable; movement of the foot in space (off the support surface) indicates end of timed trial. A taped line or footprints may be placed on the floor to help the child maintain a stationary foot position.

EQUIPMENT: a stop watch or watch with a second hand
a twelve-inch long masking tape line or two footprints placed shoulder width apart
blindfold

Best Of 3 Trials,

( ) 4 able to stand 10 seconds safely
( ) 3 able to stand 10 seconds with supervision (spotting)
( ) 2 able to stand 3 seconds
( ) 1 unable to keep eyes closed 3 seconds but stays steady
( ) 0 needs help to keep from falling

_____ **Time in seconds**

7. **Standing Unsupported With Feet Together**

INSTRUCTIONS: **The child is asked to place his/her feet together and stand still without holding on**. The child may be engaged in non-stressful conversation to maintain attention span for thirty seconds. Weight shifting and equilibrium responses in feet are acceptable; movement of the foot in space (off the support surface) indicates end of timed trial. A taped line or footprints may be placed on the floor to help the child maintain stationary foot position.

EQUIPMENT: a stop watch or watch with a second hand
a twelve inch long masking tape line or two footprints placed together

Best Of 3 Trials

( ) 4 able to place feet together independently and stand 30 seconds safely
( ) 3 able to place feet together independently and stand for 30 seconds with supervision (spotting)
( ) 2 able to place feet together independently but unable to hold for 30 seconds
( ) 1 needs help to attain position but able to stand 30 seconds with feet together
( ) 0 needs help to attain position and/or unable to hold for 30 seconds

_____ **Time in seconds**

F

8. **Standing Unsupported One Foot In Front**

INSTRUCTIONS: **The child is asked to stand with one foot in front of the other, heel to toe.** If the child cannot place feet in a tandem position (directly in front), they should be asked to step forward far enough to allow the heel of one foot to be placed ahead of the toes of the stationary foot. A taped line and/or footprints may be placed on the floor to help the child maintain a stationary foot position. In addition to a visual demonstration, a single physical prompt (assistance with placement) may be given. The child may be engaged in non-stressful conversation to maintain his/her attention span for 30 seconds. Weight shifting and/or equilibrium reactions in the feet are acceptable. Timed trials should be stopped if either foot moves in space (leaves the support surface) and/or upper extremities support is utilized.

EQUIPMENT: a stop watch or watch with a second hand
a twelve inch long masking tape line or two footprints placed heel to toe

Best Of Three Trials

( ) 4 able to place feet tandem independently and hold 30 seconds
( ) 3 able to place foot ahead of other independently and hold 30 seconds. *Note*: The length of the step must exceed the length of the stationary foot and the width of the stance should approximate the subject's normal stride width.
( ) 2 able to take small step independently and hold 30 seconds, or required assistance to place foot in front, but can stand for 30 seconds.
( ) 1 needs help to step, but can hold 15 seconds
( ) 0 loses balance while stepping or standing

_____ **Time in seconds**

9. **Standing On One Leg**

INSTRUCTIONS: **The child is asked to stand on one leg for as long as he/she is able to without holding on**. If necessary the child can be instructed to maintain his/her arms (hands) on his/her hips (waist). A taped line or footprints may be placed on the floor to help the child maintain a stationary foot position. Weight shifting and/or equilibrium reactions in the feet are acceptable. Timed trials should be stopped if the weight-bearing foot moves in space (leaves the support surface), the up limb touches the opposite leg or the support surface and/or upper extremities are utilized for support.

EQUIPMENT: a stop watch or watch with a second hand
a twelve inch long masking tape line or two footprints placed heel to toe

3 Trials Average Score

( ) 4 able to lift leg independently and hold 10 seconds
( ) 3 able to lift leg independently and hold 5 to 9 seconds
( ) 2 able to lift leg independently and hold 3 to 4 seconds
( ) 1 tries to lift leg; unable to hold 3 seconds but remains standing
( ) 0 unable to try or needs assist to prevent fall

G

10. **Turn 360 Degrees**

INSTRUCTIONS: **The child is asked to turn completely around in a full circle, STOP, and then turn a full circle in the other direction.**

EQUIPMENT: A stop watch or watch with a second hand

( ) 4 able to turn 360 degrees safely in 4 seconds or less each way (total of less than eight seconds)
( ) 3 able to turn 360 degrees safely in one direction only in 4 seconds or less completes turn in other direction requires more than four seconds
( ) 2 able to turn 360 degrees safely but slowly
( ) 1 needs close supervision (spotting) or constant verbal cueing
( ) 0 needs assistance while turning

_____ **Time in seconds**

11. **Turning To Look Behind Left & Right Shoulders While Standing Still**

INSTRUCTIONS: **The child is asked to stand with his/her feet still, fixed in one place. "Follow this object as I move it. Keep watching it as I move it, but don't move your feet."**

EQUIPMENT: a brightly colored object of at least two inches in size, or flash cards
a twelve inch long masking tape line or two footprints placed shoulder width apart

( ) 4 looks behind/over each shoulder; weight shifts include trunk rotation
( ) 3 looks behind/over one shoulder with trunk rotation; weight shift in the opposite direction is to the level of the shoulder; no trunk rotation
( ) 2 turns head to look to level of shoulder; no trunk rotation
( ) 1 needs supervision (spotting) when turning; the chin moves greater than half the distance to the shoulder
( ) 0 needs assist to keep from losing balance or falling; movement of the chin is less than half the distance to the shoulder

12. **Pick Up Object From The Floor From A Standing Position**

INSTRUCTIONS: **The child is asked to pick up a chalkboard eraser placed approximately the length of his/her foot in front of his/her dominant foot.** In children, where dominance is not clear, ask the child which hand they want to use and place the object in front of that foot.

EQUIPMENT: a chalkboard eraser
a taped line or footprints

( ) 4 able to pick up an eraser safetly and easily
( ) 3 able to pick up eraser but needs supervision (spotting)
( ) 2 unable to pick up eraser but reaches 1 to 2 nches from eraser and keeps balance independently
( ) 1 unable to pick up eraser; needs supervision (spotting) while attempting
( ) 0 unable to try, needs assist to keep from losing balance or falling

13. **Placing Alternate Foot On Step Stool While Standing Unsupported**

INSTRUCTIONS: **The child is asked to place each foot alternately on the step stool and to continue until each foot has touched the step/stool four times.**

EQUIPMENT: a step/stool of four inches in height
a stop watch or watch with a second hand.

( ) 4 stands independently and safely and completes 8 steps in 20 seconds
( ) 3 able to stand independently and complete 8 steps >20 seconds
( ) 2 able to complete 4 steps without assistance, but requires close supervision (spotting)
( ) 1 able to complete 2 steps; needs minimal assistance
( ) 0 needs assistance to maintain balance or keep from falling, unable to try

_____ **Time in seconds**

14. **Reaching Forward With Outstretched Arm While Standing**

General Instruction And Set Up: A yardstick affixed to a wall via Velcro strips will be used as the measuring tool. A taped line and/or footprints are used to maintain a stationary foot position. The child will be asked to reach as far forward without falling, and without stepping over the line. The MCP joint of the child's fisted hand will be used as the anatomical reference point for measurements. Assistance may be given to initially position the child's arm at 90 degrees. Support may not be provided during the reaching process. If 90 degrees of shoulder flexion cannot be obtained, then this item should be omitted.

INSTRUCTIONS: **The child is asked to lift his/her arm up like this. "Stretch out your fingers, make a fist, and reach forward as far as you can without moving your feet."**

3 Trials Average Results

EQUIPMENT: a yardstick or ruler
a taped line or footprints
a level

( ) 4 can reach forward confidently >10 inches
( ) 3 can reach forward >5 inches, safely
( ) 2 can reach forward >2 inches, safely
( ) 1 reaches forward but needs supervision (spotting)
( ) 0 loses balance while trying, requires external support

_____ **Total Test Score**
Maximum Score = 56