Appendix A: Phase Cards

Phase Cards, used for scoring the Pediatric Neuromuscular Recovery Scale, are based on Ages 1-2, Ages 3-5, and Ages 6-12 years.

There are items which are the same for all three ages, however there are five items (In-Hand Manipulation, Static Standing, Dynamic Standing, Step Retraining and Step Adaptability) that are different based on age. The cards are presented in order as they are performed with the specific ages of children.

Supine to Sit (Ages 1-12)
Sit Inside BOS (Ages 1-12)
Sit Outside BOS (Ages 1-12)
Object to Mouth (Ages 1-12)
In-Hand Manipulation (Ages 1-3)
In-Hand Manipulation (Ages 4-12)
Reach Overhead (Ages 1-12)
Sit to Stand (Ages 1-12)
Static Standing (Ages 1-2)
Static Standing (Ages 3-5)
Static Standing (Ages 6-12)
Dynamic Standing (Ages 1-2)
Dynamic Standing (Ages 3-5)
Dynamic Standing (Ages 6-12)
Walking (Ages 1-12)
Stand Adaptability (Ages 1-12)
Step Retraining (Ages 1-2)
Step Retraining (Ages 3-5)
Step Retraining (Ages 6-12)
Step Adaptability (Ages 1-2)
Step Adaptability (Ages 3-5)
Step Adaptability (Ages 6-12)
Score Card for Ages 1-2 years
Score Card for Ages 3-12 years
How to Calculate Overall Phase Score

This supplemental digital material accompanies
*Top Spinal Cord Inj Rehabil* 2019:25(2):120-129

www.scijournal.com

# Pediatric Neuromuscular Recovery Scale

# Phase Cards

# Supine-to-Sit
## Age 1-12 years

Verbal Cue: “Sit-up”.

| | | |
|---|---|---|
| 1A) **Unable** to initiate roll by lifting head off surface | 1B) **Able to initiate roll** by **lifting head** off surface | 1C) Initiate roll by lifting head and **unilateral scapula** off surface |
| 2A) **Able to roll trunk into side-lying** | 2B) Able to roll **entire body from supine to side-lying.** In side-lying, arms are trapped under trunk and unavailable for weight-bearing | 2C) Able to roll from supine to side-lying. In side-lying, **arms are free and available for weight-bearing** |
| 3A) Able to roll from supine to side-lying. In side-lying**, push up onto forearm**, maintaining upright head position | 3B) Able to roll from supine to side-lying. In side-lying **push up onto hand with extended elbow,** maintaining upright head position | 3C) Able to roll from supine to side-lying. **Transitions into upright modified ring sit with assist at pelvis and used of arms to obtain position** |
| 4A) Able to roll from supine to side-lying and transition into upright modified ring sit, **independently** with **minimal** use of arms | 4B) **From supine, flexes neck and trunk to initiate sit-up and may use** trunk rotation and/or brief push through arms to achieve modified ring sit | 4C) From supine and parallel to the edge of the mat, **transitions to short sit** using neck and trunk flexion, trunk rotation, rolling, and brief push through arms, swinging legs off mat |

Start Position: Supine with legs extended to maximal available range.

End Position: Short sit on edge of mat.

Start Phase: **4B.** If child cannot perform 4B, assess the performance using phases 1A through 4A to determine capacity and score per guidelines.

# Sit - Inside Base of Support

## Age 1-12 years

Verbal Cue: “Sit up tall at all times”.

| | | |
|---|---|---|
| 1A) **Unable** to maintain sit with head in appropriate alignment, arms on table (may give support at acromions) and support for neutral, vertical pelvis | 1B) **Able** to maintain sit with **appropriate head alignment, arms on table** (may give support at acromions) and support at pelvis x5 seconds and then rotate head to right and left | 1C) Able to maintain appropriate head alignment **without arms weight bearing on any surface with support at axillae** and pelvis x5 seconds and then rotate head to right and left |
| 2A) Able to maintain appropriate alignment above level of support (i.e. axillae and pelvis) with **perturbations** | 2B) Able to maintain appropriate alignment above level of support **(i.e. inferior angles of scapula and pelvis)** x5 seconds and then rotate head to right and left | 2C) Able to maintain appropriate alignment above level of support (i.e. inferior angles of scapula and pelvis) **with perturbations** |
| 3A) Able to maintain appropriate alignment above level of support **(i.e. at low rib cage and pelvis)** x5 seconds and then rotate head to right and left | 3B) Able to maintain appropriate alignment above level of support (i.e. at low rib cage and pelvis) **with perturbations** | 3C) Able to maintain appropriate alignment above level of support **(i.e. pelvis)** x5 seconds and then rotate head to right and left |
| 4A) Able to maintain appropriate alignment above level of support (i.e. pelvis) with **perturbations** | 4B) Able to maintain appropriate alignment **without support** x5 seconds and then **rotate head to right, then left** | 4C) Able to maintain appropriate alignment without support and with **perturbations** |

Start Position: Sit on bench in 90/90/90 position and pelvis in neutral relative to vertical with manual support as required by the phase item.

End Position: Independent upright sit maintaining normal alignment with perturbations.

Start Phase: **4B**

**1B:** If child cannot attain and maintain normal kinematics for upright sitting posture including pelvis in neutral position relative to vertical (as in 4B), then starting phase is 1B.

# Sit - Outside Base of Support
## Age 1-12 years

Verbal Cue: “Sit up tall at all times.”

| | | |
|---|---|---|
| 1A) With support at rib cage and pelvis, **unable** to maintain appropriate head alignment with manual **forward and backward tilt** outside base of support | 1B)With support at rib cage and pelvis, **able** to maintain appropriate head alignment with manual **forward and backward tilt** outside base of support | 1C) With support at rib cage and pelvis, able to maintain appropriate head alignment during manual **lateral tilt** outside base of support to right and left |
| 2A) With **support below ribs** and at pelvis, position child at 20 degrees of trunk flexion, perform active **trunk extension** to upright with appropriate kinematics | 2B) With support below ribs and at pelvis, perform active **lateral lean** so that acromion moves beyond ipsilateral hip to right and left with appropriate kinematics | 2C) With support below ribs and at pelvis, actively **rotate trunk at least 45 degrees** to right and left with appropriate kinematics |
| 3A) With **support at pelvis**, position child at 45 degrees of trunk flexion, perform active **trunk extension** to upright with appropriate kinematics | 3B) With support at pelvis, perform active **lateral lean** so that acromion moves beyond ipsilateral hip to right and left with appropriate kinematics | 3C) With support at pelvis, actively **rotate trunk at least 45 degrees** to right and left with appropriate kinematics |
| 4A) With **no support**, perform active **lateral lean** so that acromion moves beyond ipsilateral hip to right and left with appropriate kinematics | 4B) With no support, actively **rotate trunk at least 45 degrees** to right and left with appropriate kinematics | 4C) With no support, perform active **trunk flexion to rest trunk on lap (full flexion)and return to upright sit (start position) without use of arms** |

Start Position: Sit on bench in 90/90/90 position and pelvis in neutral relative to vertical with manual support as required by the phase item.

End Position: Independently sit upright and symmetrical at 90/90/90 on pediatric bench with pelvis neutral relative to vertical.

Start Phase: **4A**: If child demonstrated competency through 4C on “Sit - Inside Base of Support”, start at 4A.

**1B:** If child did not demonstrate competency at 4C on “Sit - Inside Base of Support then start at 1B.

# Object to Mouth

## Age 1-12 years

Verbal Cue: “Pick up juice box. Pretend to drink and place back on table.”
Test right arm fully, then left arm. Support should be provided to the child to attain and maintain appropriate trunk and pelvis position during the task.

| | | |
|---|---|---|
| 1A) **Unable** to initiate shoulder forward flexion toward table with inappropriate kinematics | 1B) Start with hand in lap, **initiate shoulder forward flexion** toward table with inappropriate kinematics | 1C) Start with hand in lap, **perform** shoulder forward flexion and **initiate elbow flexion and achieve hand on table** with appropriate kinematics |
| 2A) Start with **arm on table**, **Perform elbow flexion to bring hand to mouth, using elbow flexors.** | 2B) Start with **hand in lap**, perform shoulder & elbow flexion to place hand on table with **forearm neutral**, fully **extend elbow toward juice box** (sliding along table) with appropriate kinematics | 2C) **Arm on table, reach toward half full (3 oz) juice box & extend fingers and thumb to width of juice box**. Wrist and finger extension may be with inappropriate kinematics (e.g. tenodesis grasp). Cannot grasp juice box |
| 3A) Hand in lap, reach forward and **grasp** half full juice box with **appropriate wrist. Finger kinematics may be inappropriate**. May be able to lift to mouth with inappropriate kinematics | 3B) Hand in lap, reach forward & grasp half full juice box with **appropriate wrist & finger kinematics**. May be able to lift to mouth with inappropriate wrist kinematics | 3C) Hand in lap, **grasp and lift half full juice box** using appropriate kinematics of wrist and fingers |
| 4A) Hand in lap, grasp and Lift half full juice box to mouth with appropriate kinematics of wrist and fingers. **Place box back on table and release with inappropriate kinematics** | 4B) Hand in lap, grasp and Lift half full juice box to mouth with appropriate kinematics of wrist and fingers. Place box back on table and release with **appropriate kinematics** | 4C) Hand in lap, grasp and Lift **full juice box (6 oz.)** to mouth with appropriate kinematics of wrist and fingers. Place box back on table and release with appropriate kinematics |

*__Support should be provided to the child to attain and maintain appropriate trunk and pelvis position during the task. This item is not testing trunk control but only arm function.__

Start Position: Sit on bench in 90/90/90 position and pelvis in neutral relative to vertical and trunk supported as required to maintain a stable and aligned trunk. Support should not be provided to the scapulae. If child achieved 4C for “Sit - Outside base of Support” then child can sit independently for testing this item.

End Position: Same as start position.

Start Phase: **4C:** If child cannot perform 4C, assess the performance using phases 1A through 4B to determine capacity for Object to Mouth and score per guidelines.

# In-Hand Manipulation
## Ages 1-3 years

*Verbal Cue*: “I am going to ask you to pick up and use some objects.”

Test right arm fully, then left arm. Support should be provided to the child to attain and maintain appropriate trunk and pelvis position during the task.
Note: For age 1-3, test only items 1A-2C.

| | | |
|---|---|---|
| 1A) **Unable** to rotate 1"block on table top, with inappropriate kinematics | 1B) **Able** to **rotate** 1"block on table top, **inappropriate** kinematics | 1C) Able to **rotate**1" block placed on table top with **appropriate kinematics** using pads of fingers and thumb |
| 2A) Able to pick up 1" block with pads of fingers and **move block from finger pads to palm** | 2B) When 1" block is placed in **palm, able to move block to finger\thumb pads**, hold and then **drop** in bucket | 2C)With non-tested hand holding bottle of bubbles, able to **unscrew** loosened cap with tested hand |
| 3A) When “**fat” magic marker** is placed horizontally on table in line with axilla of arm being tested and felt tip pointing away from midline. Able to pick up marker with tested hand and **position it** to draw | 3B) When **“skinny”** magic marker is placed horizontally on table in line with axilla of arm being tested and felt tip pointing away from midline. Able to pick up marker with tested hand and **position it** to draw | 3C) Able to **pick up three crayons, one at a time**. **Maintains** first in palm **while picking** up second and maintains first and second while picking up third |
| 4A) **Able to pick up three pennies, one at a time**. **Holds** first penny in palm and picks up second, holds first and second in palm and **picks up** third | 4B) When three pennies are held in palm, able to **release one-at a-time** into container | 4C) Able to pick up double sided marker, draw circle, **rotate marker** and use other side to draw second circle |

***Support should be provided to the child to attain and maintain appropriate trunk and pelvis kinematics. This item is not testing trunk control but only arm function.**

Start Position: Sit on bench in 90/90/90 position and pelvis in neutral relative to vertical and trunk supported as required to maintain a stable and aligned trunk. Support should not be provided to the scapulae. If child achieved 4C for “Sit - Outside base of Support” then child can sit independently for testing this item.
End Position: Same as start position
Start Phase: **1C**

# In-Hand Manipulation
## Ages 4-12 years

*Verbal Cue*: "I am going to ask you to pick up and use some objects."

Test right arm fully, then left arm. Support should be provided to the child to attain and maintain appropriate trunk and pelvis position during the task.

| | | |
|---|---|---|
| 1A) **Unable** to rotate 1"block on table top, with inappropriate kinematics | 1B) **Able** to **rotate** 1"block on table top, **inappropriate** kinematics | 1C) Able to **rotate** 1" block placed on table top with **appropriate kinematics** using pads of fingers and thumb |
| 2A) Able to pick up 1" block with pads of fingers and **move block from finger pads to palm** | 2B) When 1" block is placed in **palm, able to move block to finger\thumb pads**, hold and then **drop** in bucket | 2C) With non-tested hand holding bottle of bubbles, able to **unscrew** loosened cap with tested hand |
| 3A) When "**fat" magic marker** is placed horizontally on table in line with axilla of arm being tested and felt tip pointing away from midline. Able to pick up marker with tested hand and **position it** to draw | 3B) When **"skinny"** magic marker is placed horizontally on table in line with axilla of arm being tested and felt tip pointing away from midline. Able to pick up marker with tested hand and **position it** to draw | 3C) Able to **pick up three crayons, one at a time**. **Maintains** first in palm **while picking** up second and maintains first and second while picking up third |
| 4A) **Able to pick up three pennies, one at a time**. **Holds** first penny in palm and picks up second, holds first and second in palm and **picks up** third | 4B) When three pennies are held in palm, able to **release one-at a-time** into container | 4C) Able to pick up double sided marker, draw circle, **rotate marker** and use other side to draw second circle |

***Support should be provided to the child to attain and maintain appropriate trunk and pelvis kinematics. This item is not testing trunk control but only arm function.**

Start Position: Sit on bench in 90/90/90 position and pelvis in neutral relative to vertical and trunk supported as required to maintain a stable and aligned trunk. Support should not be provided to the scapulae. If child achieved 4C for "Sit - Outside base of Support" then child can sit independently for testing this item.

End Position: Same as start position

Start Phase: **1C**

# Reach Overhead
## Age 1-12 years

Verbal Cue: “Put your hand in your lap with your palm up. Bend your elbow, turn your arm, and reach up and touch my hand.”

Test right arm, then left arm. Support should be provided to the child to attain and maintain appropriate trunk and pelvis position during the task.

| | | |
|---|---|---|
| 1A) With hand in lap, **unable** to initiate elbow flexion, pronate forearm, extend elbow and reach overhead | 1B) With hand in lap, **able to initiate elbow flexion**, and **unable to pronate forearm without shoulder abduction** | 1C) With hand in lap, able to **fully flex elbow, pronate forearm without shoulder abduction, and is able to initiate overhead reach (shoulder flexion)** |
| 2A) With hand in lap, able to fully flex elbow, pronate forearm without shoulder abduction, and **able to flex shoulder greater than 90 degrees with inappropriate kinematics** | 2B) With hand in lap, able to fully flex elbow, pronate forearm without shoulder abduction, and **flex shoulder fully to reach overhead toward tester’s hand with inappropriate kinematics** | 2C) With hand in lap, able to fully flex elbow, pronate forearm without shoulder abduction, and flex shoulder fully to reach overhead toward tester’s hand with **appropriate kinematics** |
| 3A) With hand in lap holding a **½ lb**. weight, able to fully flex elbow, pronate forearm, flex shoulder fully to reach overhead toward tester’s hand with appropriate kinematics **except for wrist and fingers** | 3B) With hand in lap holding a **½ lb**. weight, able to fully flex elbow, pronate forearm, flex shoulder fully to reach overhead toward tester’s hand **with appropriate kinematics including wrist and fingers** | 3C) With hand in lap holding a **1 lb.** weight, able to fully flex elbow, pronate forearm, flex shoulder fully to reach overhead toward tester’s hand with appropriate kinematics including wrist and fingers |
| 4A) With hand in lap holding a 1 lb. weight, able to fully flex elbow, pronate forearm, flex shoulder fully reaching overhead toward tester’s hand with appropriate kinematics including wrist and fingers **3 times** | 4B) With hand in lap, able to **reach across midline (within base of support) and touch tester’s hand** held slightly above child’s eye level **with appropriate kinematics of the upper extremity (UE)** | 4C) With hand in lap **holding 1 lb.** weight, able to reach across midline (within base of support) and touch tester’s hand held slightly above child’s eye level with appropriate kinematics of the upper extremity (UE) |

Start Position: Sitting on bench at table with full support of trunk unless child achieved 4C in “Sit - Outside base of support”, then child can sit independently.

End Position: Same as starting position.

Start Phase: **3B:** If child is able to maintain grasp on ½ lb weight start at 3B
**2C**: If child is unable to maintain grasp on ½ lb weight start at 2C.

# Sit-to-Stand
## Age 1-12 years

Verbal cue: “Stand up without using your arms.”

| | | |
|---|---|---|
| 1A) **Unable** to actively initiate forward trunk weight shift enough to unweight ischial tuberosities with support at trunk, pelvis and lower extremities (LEs) | 1B) **Able** to actively initiate forward trunk weight shift enough to unweight ischial tuberosities with support at trunk, pelvis and LEs | 1C) Able to actively initiate forward trunk weight shift enough to unweight ischial tuberosities with **support at pelvis and LEs with inappropriate trunk kinematics** |
| 2A) **Able to lift buttocks** enough to clear surface with support at the **trunk** and LEs | 2B) **Able to transition 50% of the way into standing** with support at the trunk and LEs | 2C) **Able to come to stand** with support at the trunk, **pelvis** and LEs with appropriate kinematics |
| 3A) Able to come to stand with support at the **pelvis and LEs** with appropriate kinematics at the trunk | 3B) Able to come to stand with support at the **LEs and appropriate kinematics at trunk and pelvis** | 3C) Able to come to stand **with inappropriate kinematics and no support** |
| 4A) Able to come to stand **with appropriate kinematics** and no support | 4B) Able to come to stand from sit with **100 degrees hip flexion with significant effort and inappropriate kinematics** | 4C) Able to come to stand from sit with 100 degrees hip flexion **without** significant effort and appropriate kinematics |

Start Position: Seated at 90/90/90 on adjustable bench, except for 4B and 4C seated with 100 degrees of hip flexion.

End Position: Standing without support.

Start Phase: **4A**

**1B:** If child is unable to perform task as in 4A, begin assessment at 1B.

# Static Standing
## Ages 1-2 years

Verbal Cue: “Stand up tall”.

| | | |
|---|---|---|
| 1A) **Unable** to maintain head upright in standing with support at trunk, pelvis and legs | 1B) **Able** to maintain standing with support at the trunk, pelvis, and legs | 1C) Able to maintain standing with **support at the pelvis, and legs, with inappropriate kinematics at the trunk** |
| 2A) Able to maintain standing with support at the pelvis, and legs, **with appropriate kinematics at the trunk** | 2B) Able to maintain standing with **support at the legs, with inappropriate kinematics at the trunk and pelvis** | 2C) Able to maintain standing with support at the legs, with **appropriate kinematics at the trunk and pelvis** |
| 3A) Able to maintain standing **without support and appropriate kinematics at trunk, pelvis, and legs, with use of arms as counterbalance** | 3B) Able to maintain standing for **5 seconds** without support and **inappropriate kinematics at trunk, pelvis, and legs**, **without use of arms as counterbalance** | 3C) Able to maintain standing for 5 seconds without support and **appropriate kinematics at trunk, pelvis, and legs**, without use of arms as counterbalance |
| 4A) Able to maintain **stride position** with either leg forward for ≥ 2 seconds | 4B) Able to maintain **tandem stance** with either leg forward for ≥ 2 seconds | 4C) Able to maintain **single limb stance** bilaterally for up to ≥ 2 seconds |

Starting position: Standing with feet shoulder width apart

Ending position: Same as starting position

Starting phase: **3C**

**1B**: If child cannot perform task at 3C, begin assessment at 1B.

# Static Standing

## Ages 3-5 years

Verbal Cue: “Stand up tall”.

| | | |
|---|---|---|
| 1A) **Unable** to maintain head upright in standing with support at trunk, pelvis and legs | 1B) **Able** to maintain standing with support at the trunk, pelvis, and legs | 1C) Able to maintain standing with **support at the pelvis, and legs, with inappropriate kinematics at the trunk** |
| 2A) Able to maintain standing with support at the pelvis, and legs, **with appropriate kinematics at the trunk** | 2B) Able to maintain standing with **support at the legs, with inappropriate kinematics at the trunk and pelvis** | 2C) Able to maintain standing with support at the legs, with **appropriate kinematics at the trunk and pelvis** |
| 3A) Able to maintain standing **without support and appropriate kinematics at trunk, pelvis, and legs, with use of arms as counterbalance** | 3B) Able to maintain standing for **20 seconds** without support and **inappropriate kinematics at trunk, pelvis, and legs**, **without use of arms as counterbalance** | 3C) Able to maintain standing for 20 seconds without support and **appropriate kinematics at trunk, pelvis, and legs**, without use of arms as counterbalance |
| 4A) Able to maintain **stride position** with either leg forward for 10 seconds | 4B) Able to maintain **tandem stance** with either leg forward for 7 seconds | 4C) Able to maintain **single limb stance** bilaterally for 5 seconds |

Starting position: Standing with feet shoulder width apart

Ending position: Same as starting position

Starting phase **3C**

**1B**: If child cannot perform task at 3C, begin assessment at 1B.

# Static Standing

## Ages 6-12 years

Verbal Cue: “Stand up tall”.

| | | |
|---|---|---|
| 1A) **Unable** to maintain head upright in standing with support at trunk, pelvis and legs | 1B) **Able** to maintain standing with support at the trunk, pelvis, and legs | 1C) Able to maintain standing with **support at the pelvis, and legs, with inappropriate kinematics at the trunk.** |
| 2A) Able to maintain standing with support at the pelvis, and legs, **with appropriate kinematics at the trunk** | 2B) Able to maintain standing with **support at the legs, with inappropriate kinematics at the trunk and pelvis** | 2C) Able to maintain standing with support at the legs, with **appropriate kinematics at the trunk and pelvis** |
| 3A) Able to maintain standing **without support and appropriate kinematics at trunk, pelvis, and legs, with use of arms as counterbalance** | 3B) Able to maintain standing without support and **inappropriate kinematics at trunk, pelvis, and legs**, **without use of arms as counterbalance for 30 seconds** | 3C) Able to maintain standing without support and **appropriate kinematics at trunk, pelvis, and legs**, without use of arms as counterbalance for 30 seconds |
| 4A) Able to maintain **stride position** with either leg forward for 30 seconds | 4B) Able to maintain **tandem stance** with either leg forward for 13-30 seconds | 4C) Able to maintain **single limb stance** bilaterally for 10 seconds |

Starting position: Standing with feet shoulder width apart

Ending position: Same as starting position

Starting phase **3C**

**1B**: If child cannot perform task at 3C, begin assessment at 1B.

# Dynamic Standing
## Ages 1-2 years

Verbal cue: “Stand up tall and do as I ask”.

| | | |
|---|---|---|
| 1A) **Unable** to maintain standing with support at the trunk, pelvis, and legs while handing a ball forward to another person | 1B) **Able** to maintain standing with support at the trunk, pelvis, and legs while handing a ball to another person | 1C) Able to maintain standing with **support at the pelvis, and legs, with inappropriate kinematics at the trunk** while handing a ball to another person |
| 2A) Able to maintain standing with support at the pelvis, and legs, **with appropriate kinematics at the trunk** while handing a ball to another person | 2B) Able to maintain standing with **support at the legs, with inappropriate kinematics at the trunk and pelvis** while handing a ball to another person. | 2C) Able to maintain standing **with support at the legs with appropriate** kinematics at the trunk and pelvis while handing a ball to another person |
| 3A) Able to maintain standing **with support at the legs while reaching forward and then laterally** to the left and right slightly outside BOS | 3B) Able to **maintain standing with appropriate** kinematics of the trunk, pelvis, and legs while handing a ball to another person | 3C) Able to reach laterally right and left, **shifting body weight outside base of support** with appropriate kinematics at trunk, pelvis, and legs |
| 4A) Able to maintain standing during **moderate perturbations at the trunk**, with appropriate kinematics at the trunk, pelvis, and legs | 4B) Able to shift body weight onto **single limb and lift contralateral leg to kick a stationary ball** without loss of balance. Assess with either leg | 4C) Able to **maintain standing while reaching forward and then laterally outside BOS** with **appropriate** kinematics of the trunk, pelvis, and legs |

Starting Position: Standing with feet shoulder width apart

Ending Position: Same as starting position

Starting Phase: **3B**

**1B**: If unable to perform task as in 3B, begin assessment at 1B.

# Dynamic Standing

## Ages 3-5 years

Verbal cue: “Stand up tall and do as I ask”.

| | | |
|---|---|---|
| 1A) **Unable** to maintain standing with support at the trunk, pelvis, and legs while handing a ball forward to another person | 1B) **Able** to maintain standing with support at the trunk, pelvis, and legs while handing a ball to another person | 1C) Able to maintain standing with **support at the pelvis, and legs, with inappropriate kinematics at the trunk** while handing a ball to another person |
| 2A) Able to maintain standing with support at the pelvis, and legs, **with appropriate kinematics at the trunk** while handing a ball to another person | 2B) Able to maintain standing with **support at the legs, with inappropriate kinematics at the trunk and pelvis** while handing a ball to another person | 2C) Able to maintain standing **with support at the legs with appropriate** kinematics at the trunk and pelvis while handing a ball to another person |
| 3A) Able to maintain standing **with support at the legs while reaching forward at least 5” then laterally at least 4”** to the left and right | 3B) Able to **maintain standing with appropriate** kinematics of the trunk, pelvis, and legs while handing a ball to another person | 3C) Able to reach laterally right and left, **shifting body weight outside base of support** with appropriate kinematics at trunk, pelvis, and legs |
| 4A) Able to maintain standing during **moderate perturbations at the trunk**, with appropriate kinematics at the trunk, pelvis, and legs | 4B) Able to shift body weight onto **single limb and lift contralateral leg to kick a stationary ball** without loss of balance. Assess with either leg | 4C) Able to **maintain standing while reaching forward at least 5”and laterally at least 4”** with **appropriate** kinematics of the trunk, pelvis, and legs |

Starting Position: Standing with feet shoulder width apart

Ending Position: Same as starting position

Starting Phase: **3B**

**1B**: If unable to perform task as in 3B, begin assessment at 1B.

# Dynamic Standing

## Ages 6-12 years

Verbal cue: “Stand up tall and do as I ask”.

| | | |
|---|---|---|
| 1A) **Unable** to maintain standing with support at the trunk, pelvis, and legs while handing a ball forward to another person | 1B) **Able** to maintain standing with support at the trunk, pelvis, and legs while handing a ball to another person | 1C) Able to maintain standing with **support at the pelvis, and legs, with inappropriate kinematics at the trunk** while handing a ball to another person |
| 2A) Able to maintain standing with support at the pelvis, and legs, **with appropriate kinematics at the trunk** while handing a ball to another person | 2B) Able to maintain standing with **support at the legs, with inappropriate kinematics at the trunk and pelvis** while handing a ball to another person | 2C) Able to maintain standing **with support at the legs with appropriate** kinematics at the trunk and pelvis while handing a ball to another person |
| 3A) Able to maintain standing **with support at the legs while reaching forward at least 6” then laterally at least 5”** to the left and right | 3B) Able to **maintain standing with appropriate** kinematics of the trunk, pelvis, and legs while handing a ball to another person | 3C) Able to reach laterally right and left, **shifting body weight outside base of support** with appropriate kinematics at trunk, pelvis, and legs |
| 4A) Able to maintain standing during **moderate perturbations at the trunk**, with appropriate kinematics at the trunk, pelvis, and legs | 4B) Able to shift body weight onto **single limb and lift contralateral leg to kick a stationary ball** without loss of balance. Assess with either leg | 4C) Able to **maintain standing while reaching forward at least 6”then laterally at least 5”** with **appropriate** kinematics of the trunk, pelvis, and legs |

Starting Position: Standing with feet shoulder width apart

Ending Position: Same as starting position

Starting Phase: **3B**

**1B:** If unable to perform task as in 3B, begin assessment at 1B.

# Walking
## Age 1-12 years

Verbal cue: "Please walk from here to there".

| | | |
|---|---|---|
| 1A) **Unable** to **perform weight shift when placed in stride with *either* leg** forward with assist at trunk, pelvis and legs | 1B) **Able** to **perform weight shift when placed in stride with *either* leg** forward with assist at trunk, pelvis and legs | 1C) Able **to initiate a step using *either* leg** with assist at trunk, pelvis and legs (from stride position). Child may perform with feet parallel if able |
| 2A) Able to initiate a step using *either* leg with **inappropriate kinematics at trunk**, with assist at pelvis and legs | 2B) Able to initiate a step using *either* leg with **appropriate** kinematics at trunk, with assist at pelvis and legs | 2C) Able to take **4 consecutive steps** with appropriate kinematics at trunk, with assist at pelvis and legs |
| 3A) Able to **initiate a step using *either* leg with appropriate kinematics at trunk**, inappropriate kinematics at the pelvis, and with assist at legs | 3B) Able to initiate a step using *either* leg with appropriate kinematics at trunk **and pelvis**, with assist at legs | 3C) **Able to take 4 steps consecutively with appropriate kinematics at trunk and pelvis, with assist at legs, arms are unsupported but may be used for balance** |
| 4A) Able to initiate a step using *either* leg with inappropriate kinematics, and **no assist at any body segment** | 4B) Able **to take ≥ 4 consecutive steps** with inappropriate kinematics and speed without assist | 4C) **Able to ambulate ≥ 10 feet with age-appropriate kinematics and speed over level surface** |

Starting Position: Standing in stride.

Ending Position: Standing with feet parallel shoulder width apart.

Starting Phase: **4C:** Begin assessment at 4C if the child walks without devices or braces.

**1B:** If unable to achieve 4C, begin assessment at 1B.

# Stand Adaptability
## Age 1-12 years

Verbal Cue: “Stand up tall and do as we ask”.

| | | |
|---|---|---|
| 1A) **≥ 60% BWS** is required to maintain proper posture at head and trunk with support at pelvis and legs | 1B) **40-59% BWS**, **able** to maintain proper posture at head and trunk with support at pelvis and legs | 1C) **20-39% BWS**, able to maintain proper posture at head and trunk with support at pelvis and legs |
| 2A) **10-19% BWS**, able to maintain proper posture at head and trunk with support at pelvis and legs | 2B) 10-19% BWS, **able to perform trunk extension from 20 degrees forward flexed position,** with support at pelvis and legs | 2C) **At BWS ≤ baseline and ≥ 40%**, able to maintain proper posture at **head,trunk and pelvis** with support at legs |
| 3A) **10-39% BWS**, able to maintain proper posture at head/trunk and pelvis with support at legs | 3B) **10-19% BWS,** able to maintain proper posture of trunk and pelvis during anterior, posterior and lateral **perturbations** initiated at trunk with support at legs | 3C) **<10% BWS**, able to maintain proper posture at head, trunk, pelvis and legs |
| 4A) <10% BWS, able to maintain proper posture of head, trunk, pelvis, and legs during anterior, posterior and lateral **perturbations** initiated at trunk | 4B) <10% BWS, able to maintain proper posture of head, trunk, pelvis, and legs **during 3 squats** | 4C) <10% BWS, able to maintain proper posture of head, trunk, pelvis and legs while **handing a ball forward to another person using full elbow extension but staying within base of support** |

Starting Position: Standing on the treadmill with feet parallel and hip width apart.

Ending Position: Same as starting position.

Starting Phase: **2A**: If child achieved 2A on “Static Standing”, begin assessment at 2A.

**1A:** If child does not demonstrate competency at 2A **or** did not achieve a score of 2A on “Static Standing”, begin at 1A.

# Step Retraining
## Ages 1-2 years

Verbal Cue: "Stand up straight. Get ready to walk."
Target speed ≥1.0 mph

| | | |
|---|---|---|
| 1A) **≥ 60% BWS required to generate best stepping pattern**. At BWS 60% or below, trainers are unable to maintain proper kinematics | 1B) **55–59% BWS**, able to generate best stepping pattern. At BWS 54% or below, trainers are unable to maintain proper kinematics | 1C) **50-54% BWS**, able to generate best stepping pattern. At BWS 49% or below, trainers are unable to maintain proper kinematics |
| 2A) **45-49% BWS**, able to generate best stepping pattern. At BWS 44% or below, trainers are unable to maintain proper kinematics | 2B) **40-44% BWS**, able to generate best stepping pattern At BWS 39% or below, trainers are unable to maintain proper kinematics | 2C) **35-39% BWS**, able to generate best stepping pattern BWS. At BWS 34% or below, trainers are unable to maintain proper kinematics |
| 3A) **30-34% BWS**, able to generate best stepping pattern BWS. At BWS 29% or below, trainers are unable to maintain proper kinematics | 3B) **20-29% BWS**, able to generate best stepping pattern. At BWS 19% or below, trainers are unable to maintain proper kinematics | 3C) **0-19% BWS**, able to generate best stepping pattern |
| 4A) **<10% BWS**, **step over 1" in height object** leading with right and left leg at **≥ 1.0 mph** | 4B) <10% BWS, able to adjust to **varying random speeds (0.6-2.0 mph)** | 4C) **<25% BWS, at lowest speed to achieve running pattern** *(not applicable for 0-2 years)* |

Starting position: Upright stance on treadmill with child in plumb with treadmill cable and positioned in stride in preparation for stepping.

Ending position: Same as starting position

Starting Phase: **1A**

# Step Retraining
## Ages 3-5 years

Verbal Cue: "Stand up straight. Get ready to walk."
Target speed ≥1.5 mph

| | | |
|---|---|---|
| 1A) **≥ 60% BWS required to generate best stepping pattern**. At BWS 60% or below, trainers are unable to maintain proper kinematics | 1B) **55–59% BWS**, able to generate best stepping pattern. At BWS 54% or below, trainers are unable to maintain proper kinematics | 1C) **50-54% BWS**, able to generate best stepping pattern. At BWS 49% or below, trainers are unable to maintain proper kinematics |
| 2A) **45-49% BWS**, able to generate best stepping pattern. At BWS 44% or below, trainers are unable to maintain proper kinematics | 2B) **40-44%BWS**, able to generate best stepping pattern At BWS 39% or below, trainers are unable to maintain proper kinematics | 2C**) 35-39% BWS**, able to generate best stepping pattern BWS. At BWS 34% or below, trainers are unable to maintain proper kinematics |
| 3A) **30-34% BWS**, able to generate best stepping pattern BWS. At BWS 29% or below, trainers are unable to maintain proper kinematics | 3B) **20-29% BWS**, able to generate best stepping pattern. At BWS 19% or below, trainers are unable to maintain proper kinematics | 3C) **0-19% BWS**, able to generate best stepping pattern |
| 4A) **<10% BWS**, **step over 2" in height object** leading with right and left leg at **≥ 1.5 mph** | 4B) <10% BWS, able to adjust to **varying random speeds (0.8-3.0 mph)** | 4C) **< 25% BWS, at lowest speed to achieve running pattern** |

Starting position: Upright stance on treadmill with child in plumb with treadmill cable and positioned in stride in preparation for stepping.

Ending position: Same as starting position

Starting Phase: **1A**

# Step Retraining
## Ages 6-12 years

Verbal Cue: “Stand up straight. Get ready to walk”.
Target speed ≥2.0 mph

| | | |
|---|---|---|
| 1A) **≥ 60% BWS required to generate best stepping pattern.** At BWS 60% or below, trainers are unable to maintain proper kinematics | 1B) **55–59% BWS**, able to generate best stepping pattern. At BWS 54% or below, trainers are unable to maintain proper kinematics | 1C) **50-54% BWS**, able to generate best stepping pattern. At BWS 49% or below, trainers are unable to maintain proper kinematics |
| 2A) **45-49% BWS**, able to generate best stepping pattern. At BWS 44% or below, trainers are unable to maintain proper kinematics | 2B) **40-44%BWS**, able to generate best stepping pattern At BWS 39% or below, trainers are unable to maintain proper kinematics | 2C**) 35-39% BWS**, able to generate best stepping pattern BWS. At BWS 34% or below, trainers are unable to maintain proper kinematics |
| 3A) **30-34% BWS**, able to generate best stepping pattern BWS. At BWS 29% or below, trainers are unable to maintain proper kinematics | 3B) **20-29%BWS**, able to generate best stepping pattern. At BWS 19% or below, trainers are unable to maintain proper kinematics | 3C) **0-19% BWS**, able to generate best stepping pattern |
| 4A)**<10% BWS**, **step over 4” in height object** leading with right and left leg at **≥ 2.0 mph** | 4B) <10% BWS, able to adjust to **varying random speeds (1.0-3.0 mph)** | 4C) **<25% BWS, at lowest speed to achieve running pattern** |

Starting position: Upright stance on treadmill with child in plumb with treadmill cable and positioned in stride in preparation for stepping.

Ending position: Same as starting position

Starting Phase: **1A**

# Step Adaptability

## Age 1-2 years

Verbal Cue: “Stand up straight. Get ready to walk”.

| | | |
|---|---|---|
| 1A) With **BWS ≥ 60%** and treadmill speed **0.2-0.7 mph**, **unable to maintain proper head/trunk kinematics with assist at pelvis and legs** | 1B) With **BWS 40-59%** and treadmill speed 0.2-0.7 mph, **able to maintain proper head/ trunk kinematics** with assist at pelvis and legs | 1C) With **BWS 20-39%** and treadmill speed 0.2-0.7 mph, able to maintain proper head/trunk kinematics with assist at pelvis and legs |
| 2A) With **BWS< 20%** and treadmill speed 0.2-0.7 mph, able to maintain proper head/trunk kinematics with assist at pelvis and legs | 2B) With **BWS 40-59%** and treadmill speed 0.2-0.7 mph, able to maintain proper head/trunk **and pelvis kinematics** with assist at legs | 2C) With **BWS 20-39%** and treadmill speed 0.2-0.7 mph, able to maintain proper head/trunk and pelvis kinematics with assist at legs |
| 3A) With **BWS < 20%** and **treadmill speed 0.4-1.1 mph**, able to maintain proper head/trunk and pelvis kinematics with assist at legs | 3B) With **BWS < 10%** and treadmill speed 0.4 -1.1 mph, able to maintain proper head/ trunk, pelvis and **leg kinematics, and improper arm kinematics (arm swing)** | 3C) With BWS <10% and treadmill speed **≥ 1.0 mph**, able to maintain proper head/trunk, pelvis and leg kinematics, and **proper arm kinematics (arm swing)** |
| 4A) With BWS < 10% and treadmill speed **0.6 mph**, patient can always **step over one object (1” high) leading with right leg, then left leg and proper kinematics** | 4B) With BWS <10%, patient can adjust to **varying random speeds (0.6-2.0 mph)** in at least 0.5 mph increments and able to maintain proper head/trunk, pelvis, leg and arm kinematics (arm swing) | 4C) With BWS <10% and treadmill speed necessary to **initiate running**, able to maintain proper head/trunk, pelvis, leg, arm kinematics (arm swing) |

Starting position: Upright stance on treadmill with child in plumb with treadmill cable and positioned in stride in preparation for stepping.

Ending position: Same as starting position

Starting Phase: **1A**

# Step Adaptability

## Age 3-5 years

Verbal Cue: “Stand up straight. Get ready to walk”.

| | | |
|---|---|---|
| 1A) With **BWS ≥ 60%** and treadmill speed **0.5-0.9 mph**, **unable to maintain proper head/trunk kinematics with assist at pelvis and legs** | 1B) With **BWS 40-59%**and treadmill speed 0.5-0.9 mph, **able to maintain proper head/ trunk kinematics** with assist at pelvis and legs | 1C) With **BWS20-39%**and treadmill speed 0.5-0.9mph, able to maintain proper head/ trunk kinematics with assist at pelvis and legs |
| 2A) With **BWS <20%** and treadmill speed 0.5-0.9mph, able to maintain proper head/ trunk kinematics with assist at pelvis and legs | 2B) With **BWS 40-59%** and treadmill speed 0.5-0.9mph, able to maintain proper head/ trunk **and pelvis kinematics** with assist at legs | 2C) With **BWS 20-39%**and treadmill speed 0.5-0.9 mph, able to maintain proper head/trunk and pelvis kinematics with assist at legs |
| 3A) With **BWS<20%**and treadmill speed **1.0- 1.8 mph**, able to maintain proper head/trunk and pelvis kinematics with assist at legs | 3B) With **BWS<10%**and treadmill speed 1.0-1.8 mph, able to maintain proper head/trunk, pelvis and **leg kinematics, and improper arm kinematics (arm swing)** | 3C) With BWS <10% and treadmill speed **≥ 1.5 mph**, able to maintain proper head/trunk, pelvis and leg kinematics, and **proper arm kinematics (arm swing)** |
| 4A) With BWS <10% and treadmill speed **0.8 mph**, patient can always **step over one object (2” high) leading with right leg, then left leg and proper kinematics** | 4B) With BWS <10%, patient can adjust to **varying random speeds** (**0.8-3.0 mph**) in at least 0.5 mph increments and able to maintain proper head/trunk, pelvis, leg and arm kinematics (arm swing) | 4C) With BWS <10% and treadmill speed as necessary to **initiate running**, able to maintain proper head/trunk, pelvis, leg, arm kinematics (arm swing) |

Starting position: Upright stance on treadmill with child in plumb with treadmill cable and positioned in stride in preparation for stepping.

Ending position: Same as starting position

Starting Phase: **1A**

# Step Adaptability

## Age 6-12 years

Verbal Cue: “Stand up straight. Get ready to walk”.

| | | |
|---|---|---|
| 1A) With **BWS ≥ 60%** and treadmill speed **0.6-1.2mph**, **unable to maintain proper head/trunk kinematics with assist at pelvis and legs** | 1B) With **BWS 40-59%**and treadmill speed 0.6-1.2 mph, **able to maintain proper head/ trunk kinematics** with assist at pelvis and legs | 1C) With **BWS 20-39%**and treadmill speed 0.6-1.2 mph, able to maintain proper head/ trunk kinematics with assist at pelvis and legs |
| 2A) With **BWS<20%**and treadmill speed 0.6-1.2mph, able to maintain proper head/ trunk kinematics with assist at pelvis and legs | 2B) With **BWS 40-59%** and treadmill speed 0.6-1.2 mph, able to maintain proper head/ trunk **and pelvis kinematics** with assist at legs | 2C) With **BWS 20-39%** and treadmill speed 0.6-1.2 mph, able to maintain proper head/trunk and pelvis kinematics with assist at legs |
| 3A) With **BWS<20%** and treadmill speed **1.3- 1.9mph**, able to maintain proper head/trunk and pelvis kinematics with assist at legs | 3B) With **BWS<10%** and treadmill speed 1.3-1.9 mph, able to maintain proper head/trunk, pelvis and **leg kinematics, and improper arm kinematics (arm swing)** | 3C) With BWS<10% and treadmill speed **≥ 2.0 mph,** able to maintain proper head/trunk, pelvis and leg kinematics, and **proper arm kinematics (arm swing)** |
| 4A) With BWS <10% and treadmill speed **1.0 mph,** patient can always **step over one object (4” high) leading with right leg, then left leg and proper kinematics** | 4B) With BWS <10%, patient can adjust to **varying random speeds** (**1.0-3.0 mph**) in at least 0.5 mph increments and able to maintain proper head/trunk, pelvis, leg and arm kinematics (arm swing) | 4C) With BWS <10% and treadmill speed as necessary to **initiate running**, able to maintain proper head/trunk, pelvis, leg, arm kinematics (arm swing) |

Starting position: Upright stance on treadmill with child in plumb with treadmill cable and positioned in stride in preparation for stepping.

Ending position: Same as starting position

Starting Phase: **1A**

Age 1-2 years

ID#_____ Date_____

| Supine Transition into Sitting | Sit Inside BOS | Sit Outside BOS | Object to Mouth | | In-Hand Manipulation | | Reaching Overhead | | Sit to Stand | Static Stand | Dynamic Stand | Walk | Stand Adapt | Step Retrain | Step Adapt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | R | L | R | L | R | L | | | | | | | |
| 1A | 1A | 1A | 1A | 1A | 1A | 1A | 1A | 1A | 1A | 1A | 1A | 1A | 1A | 1A | 1A |
| 1B | 1B | 1B | 1B | 1B | 1B | 1B | 1B | 1B | 1B | 1B | 1B | 1B | 1B | 1B | 1B |
| 1C | 1C | 1C | 1C | 1C | 1C | 1C | 1C | 1C | 1C | 1C | 1C | 1C | 1C | 1C | 1C |
| 2A | 2A | 2A | 2A | 2A | 2A | 2A | 2A | 2A | 2A | 2A | 2A | 2A | 2A | 2A | 2A |
| 2B | 2B | 2B | 2B | 2B | 2B | 2B | 2B | 2B | 2B | 2B | 2B | 2B | 2B | 2B | 2B |
| 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C |
| 3A | 3A | 3A | 3A | 3A | 3A | 3A | 3A | 3A | 3A | 3A | 3A | 3A | 3A | 3A | 3A |
| 3B | 3B | 3B | 3B | 3B | 3B | 3B | 3B | 3B | 3B | 3B | 3B | 3B | 3B | 3B | 3B |
| 3C | 3C | 3C | 3C | 3C | 3C | 3C | 3C | 3C | 3C | 3C | 3C | 3C | 3C | 3C | 3C |
| 4A | 4A | 4A | 4A | 4A | 4A | 4A | 4A | 4A | 4A | 4A | 4A | 4A | 4A | 4A | 4A |
| 4B | 4B | 4B | 4B | 4B | 4B | 4B | 4B | 4B | 4B | 4B | 4B | 4B | 4B | 4B | 4B |
| 4C | 4C | 4C | 4C | 4C | 4C | 4C | 4C | 4C | 4C | 4C | 4C | 4C | 4C | 4C | 4C |

# Pediatric Neuromuscular Recovery Scale

## Scoring Sheet

### Age 3-12 years

ID#_____ Date_____

| Supine Transition into Sitting | Sit Inside BOS | Sit Outside BOS | Object to Mouth | | In-Hand Manipulation | | Reaching Overhead | | Sit to Stand | Static Stand | Dynamic Stand | Walk | Stand Adapt | Step Retrain | Step Adapt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | R | L | R | L | R | L | | | | | | | |
| 1A | 1A | 1A | 1A | 1A | 1A | 1A | 1A | 1A | 1A | 1A | 1A | 1A | 1A | 1A | 1A |
| 1B | 1B | 1B | 1B | 1B | 1B | 1B | 1B | 1B | 1B | 1B | 1B | 1B | 1B | 1B | 1B |
| 1C | 1C | 1C | 1C | 1C | 1C | 1C | 1C | 1C | 1C | 1C | 1C | 1C | 1C | 1C | 1C |
| 2A | 2A | 2A | 2A | 2A | 2A | 2A | 2A | 2A | 2A | 2A | 2A | 2A | 2A | 2A | 2A |
| 2B | 2B | 2B | 2B | 2B | 2B | 2B | 2B | 2B | 2B | 2B | 2B | 2B | 2B | 2B | 2B |
| 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C |
| 3A | 3A | 3A | 3A | 3A | 3A | 3A | 3A | 3A | 3A | 3A | 3A | 3A | 3A | 3A | 3A |
| 3B | 3B | 3B | 3B | 3B | 3B | 3B | 3B | 3B | 3B | 3B | 3B | 3B | 3B | 3B | 3B |
| 3C | 3C | 3C | 3C | 3C | 3C | 3C | 3C | 3C | 3C | 3C | 3C | 3C | 3C | 3C | 3C |
| 4A | 4A | 4A | 4A | 4A | 4A | 4A | 4A | 4A | 4A | 4A | 4A | 4A | 4A | 4A | 4A |
| 4B | 4B | 4B | 4B | 4B | 4B | 4B | 4B | 4B | 4B | 4B | 4B | 4B | 4B | 4B | 4B |
| 4C | 4C | 4C | 4C | 4C | 4C | 4C | 4C | 4C | 4C | 4C | 4C | 4C | 4C | 4C | 4C |

**Pediatric Neuromuscular Recovery Scale**

**Calculate Overall Phase**

1. Rate as 1A-4C each individual item (Supine to Sit, Sit - Inside Base of Support, Sit -Outside Base of Support, Object to Mouth, In-Hand Manipulation, Reach Overhead, Sit-to-Stand, Static Standing, Dynamic Standing, Walking, Stand Adaptability, Step Retraining, Step Adaptability).

2. To calculate the overall phase score, note the number of times each sub-phase score appears in the rated items. If an item has a left and right score, score as 0.5 for each. Add the "# times appears" column to achieve the ITEM TOTAL. Then multiply the number of times each score appears by its numeric value using the table below. Then add the numeric totals for each sub-phase value to achieve an overall NUMERIC TOTAL.

| Subphase Value | # times appears | Numeric value | Numeric Total |
|---|---|---|---|
| 1A | | X 1 | |
| 1B | | X 2 | |
| 1C | | X 3 | |
| 2A | | X 4 | |
| 2B | | X 5 | |
| 2C | | X 6 | |
| 3A | | X 7 | |
| 3B | | X 8 | |
| 3C | | X 9 | |
| 4A | | X 10 | |
| 4B | | X 11 | |
| 4C | | X 12 | |
| ITEM TOTAL | | NUMERIC TOTAL | |

Numeric Total / Item Total = GRAND AVERAGE

3. Divide the overall numeric total by the item total to achieve the GRAND AVERAGE.
4. Use the table below to determine the overall phase based on the average found in Step 3 (GRAND AVERAGE).

| GRAND AVERAGE | 1 – 1.99 | 2 – 2.99 | 3 – 3.99 | 4 – 4.99 | 5 – 5.99 | 6 – 6.99 | 7 – 7.99 | 8 – 8.99 | 9 – 9.99 | 10 – 10.99 | 11-11.99 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Overall Phase | 1A | 1B | 1C | 2A | 2B | 2C | 3A | 3B | 3C | 4A | 4B | 4C |