UNB TEST OF PROSTHETICS
FUNCTION
A Test for Unilateral Upper Limb Amputees
Revised 2012
Purpose

The UNB test of Prosthetics Function is designed to assist therapists in the fields of research and rehabilitation for upper limb loss. The test consists of a series of tasks and age-appropriate activities of daily living which can be used to determine an amputee’s level of function and progress using their prosthesis. The scores are based on the therapist’s observations of the child’s skill and spontaneity in using the prosthesis while performing the activities, and can be compared with his or her earlier results, thereby providing a score correlating to the level of function. It is the first known assessment of prosthetics function developed using a dual rating scale, and was designed with multiple subtests of apparent equal difficulty for every age group, offering a choice to the child and the therapist. By compiling and discussing items with clinicians internationally, we hope that the test demonstrates the validity and reliability expected by the current standards of practice and that the items and tasks used are not culturally biased.

The UNB test is comprised of activities of daily living, categorized by age groups. The tasks presented in each subtest were selected to be age appropriate and readily available in a clinical setting. All items are normally carried out with two hands performing either symmetrical or unilateral functions. A unique feature to the UNB test is the creation of a relaxed atmosphere with no time constraints. The examining therapist should focus on determining the level of skill and the willingness to engage the use of the prosthesis (spontaneity) when performing the activities of daily living. The test is not timed, since most activities are normally executed under non-stressful conditions.

Test Population

This test can be used with amputees from the ages of 2 to 21 years. It has been subdivided into four age groupings, as follows; 2-4, 5-7, 8-12, 13-21 years. The modified version of the current test has seen alterations to tasks and items of all age groups, as well as an extension of the last group from 11-13 to 13-21. These are necessary modifications to allow for a larger population to be tested. It is designed for unilateral amputees who have either a congenital or traumatic amputation level, below or above the elbow.
The test is designed to be used with children wearing both conventional (body-powered) and externally powered (myoelectric) prostheses. All tasks and items have been deemed suitable for both types of prostheses.

**Dual rating scale**

The dual rating scale is an important and unique feature of the UNB test of Prosthetics Function used to determine level of skill and spontaneity of prosthetics function. The use of this rating scale helps measure an individual’s functional capacity. In determining a person’s level of skill, it may be evident that the person is able to perform the requested task but demonstrates the need for additional training or motivation to refine their abilities when using their prosthesis. The measure of spontaneity defines a person’s tendency and impulse to use their prosthesis effectively when attempting a two-handed task. An amputee is unlikely to continue training or extensive use if they are unconvinced and unmotivated to do so despite therapists’ recommendations otherwise. We need to determine if an issue exists in the motivation or willingness to use the prosthesis or in the control or skill in using the prosthesis. The dual rating scale distinguishes measures of skill and spontaneity and helps addresses this issue.

<table>
<thead>
<tr>
<th><strong>Spontaneity of prosthetics function</strong></th>
<th><strong>Score A</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate, automatic, consistent use of terminal device for active grasp</td>
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the prosthesis and they should be requested to avoid instructing during this session. In cases involving young children, the room should be one in which they feel comfortable. A variety of objects and activities should be available so that test items can be integrated and transitioned from one activity to the next. The pace should be unhurried, and the individual should be allowed to manipulate each object for a reasonable amount of time if he or she wishes.

With older individuals, it is understandably more difficult to reduce awareness that they are being observed by a therapist. Their conscious desire to please you may increase the frequency of prosthesis use during any session when you are present, thus obtaining a misrepresentative score for spontaneity. It may be necessary to vocally reinforce the tasks at hand and maintain conversation throughout their actions as to increase chances of obtaining a natural reaction from the participant. Ask them to perform the task as they would at home while refraining from any approving or disapproving gestures. This is an alternative approach to the one recommended to younger populations but is an attempt to regain validity which has been lost because of their awareness of the testing situation.

**Choosing a subtest**

For the scientific purpose of reviewing the current UNB test, clinicians will be asked to perform all three subtests based on the user’s age. By referring to the list of the randomized order for subtest administration, clinicians should anticipate completing all three subtests within the shortest period; preferably within a day or two, but no more of a spread than two weeks. If it is not possible to complete all three subtests, we would still appreciate the data from the subtests that have been completed.

**Order of Presentation**

Each subtest consists of ten tasks and they should be presented during one session, although they may be given in any order chosen by the examiner. Some activities are grouped together to form a meaningful activity, e.g. Make a necklace (cut length of string, thread small beads to make bracelet, tie knot in string to complete), and these should be presented as a unit. Other such as dressing activities, may be observed most naturally as the participant enters or leaves the clinic. Any items involving eating may be carried out part way as a “break”, or at the end as a reward. If a participant refuses an activity, move on to another task and attempt another try later in the
session. If they are still unwilling to try, or show no interest in completing the activity, record a (-) on the Score Sheet. (Note that the total score should be adjusted so that the uncompleted items do not influence the overall score). Make sure to note and justify the score and associated task in the comments section of the score sheet.

**Instructions**

The examiner must administer the item without any expectation of how the participant will perform it. Only explanations directed towards capturing an interest in the activity may be necessary, e.g. “Let’s play with Lego. What would you like to build?” It would not be appropriate to add “Don’t forget to use your prosthesis” until after you have marked your score for spontaneity. If the participant does not initiate using the prosthesis initially, you may request that he/she tries it again using two hands. The scoring of spontaneity should be based on the initial approach to the task, but scoring of skill can then be done based on the request to use the prosthesis.

<table>
<thead>
<tr>
<th>Spontaneity</th>
<th>Skill</th>
<th>Implications for Therapy</th>
</tr>
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<tbody>
<tr>
<td>High</td>
<td>High</td>
<td>No need for training in prosthesis skills and one can assume the prosthesis will be used outside of clinical environment, to assist with bimanual tasks of daily living.</td>
</tr>
<tr>
<td>High</td>
<td>Low</td>
<td>Individuals who are willing to engage the use of their prosthesis but lack the proficiency to use it skillfully. These candidates need further prosthetic training.</td>
</tr>
<tr>
<td>Low</td>
<td>High</td>
<td>Individual displays a high level of functional skill when using their prosthesis, however demonstrates a low recognition of approach. These candidates require support and direction to help reinforce habitual prosthesis use for accomplishing tasks of daily living.</td>
</tr>
<tr>
<td>Low</td>
<td>Low</td>
<td>Individuals who receive low scores in both ratings require additional prosthetics training. Furthermore, the clinician should investigate any underlying factors related to poor use and habits outside of the clinical environment. This candidate should be encouraged to follow home training programs and attend follow ups, marking their progression.</td>
</tr>
</tbody>
</table>
UNB Test Score Sheet

Participant's Name: ____________________________

Gender: Male     Female       Other

Date of Birth (M/D/Y): ________________________

Date of Testing (M/D/Y): ________________________

Cause of Amputation: Acquired        Congenital

Prosthetic Level: Transhumeral       Transradial

Year of First Fitting: ________________________

Type of Prosthesis Used for Assessment: Body Powered       Myoelectric

Age Category: 2-4        5-7       8-12       13-21

<table>
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<td>Totals</td>
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Notes: ________________________________________

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1. **Item:** Steer ride on toy  
   **Equipment:** Any age appropriate ride on toy  
   **Score:** Maintain grasp of handle while in motion  
   **Special Instructions:** Evaluate user’s ability to turn left, right and steer straight

2. **Item:** Pull apart links  
   **Equipment:** Minimum of 6 plastic links to fit in TD  
   **Score:** Method of stabilizing links with TD while pulling apart with sound hand  
   **Special Instructions:** Clinician may show how links work prior to attempt

3. **Item:** Tear sheet of paper into several pieces  
   **Equipment:** One sheet of construction paper  
   **Score:** Method of stabilizing paper with TD throughout tearing motion  
   **Special Instructions:** Clinician may begin rips in paper if this proves too difficult for user

4. **Item:** Open zippered pouch to remove scissors and glue  
   **Equipment:** Zippered pouch (pencil case), scissors, and glue  
   **Score:** Method of stabilizing pouch with TD during unzipping and removal of content  
   **Special Instructions:** N/A

5. **Item:** Snip paper with scissors  
   **Equipment:** Construction paper and blunt scissors  
   **Score:** Repeated grasp and release of paper with TD while moving along with snips  
   **Special Instructions:** User may cut out small pieces to be glued on larger construction paper

6. **Item:** Open glue bottle  
   **Equipment:** Glue bottle small enough to fit TD  
   **Score:** Method of stabilizing glue bottle with TD while opening top with sound hand  
   **Special Instructions:** Can be twist top liquid glue or pull off cap from glue stick. User may glue pieces cut out earlier to larger sheet for artwork

7. **Item:** Put scissors and glue back in zippered pouch from item 4  
   **Equipment:** Zippered pouch (pencil case), scissors, and glue  
   **Score:** Method of stabilizing pouch with TD during insertion of content and zipping process  
   **Special Instructions:** N/A

8. **Item:** Hang up artwork with magnet  
   **Equipment:** Magnet, artwork from items 3-6, magnetic surface (cabinet, fridge)  
   **Score:** Maintain grasp in motion of artwork or magnet with TD  
   **Special Instructions:** N/A

9. **Item:** Remove clothing from a stuffed animal or doll  
   **Equipment:** Toy doll/animal, loose fitting clothes  
   **Score:** Maintain grasp in motion with TD while pulling clothes off  
   **Special Instructions:** N/A

10. **Item:** Carry stuffed toy and zippered pouch across room  
    **Equipment:** Zippered pouch and stuffed toy  
    **Score:** Maintain grasp in motion  
    **Special Instructions:** N/A
1. **Item:** Carry two items across room using both hands  
   **Equipment:** Bubble container and Play Doh  
   **Score:** Maintain grasp in motion  
   **Special Instructions:** N/A

2. **Item:** Open bag of Play Doh  
   **Equipment:** Bag (can be Ziploc) and Play Doh  
   **Score:** Method of stabilizing bag with TD while sound hand opens bag up  
   **Special Instructions:** Open up the bag in order to retrieve Play Doh for item 3

3. **Item:** Remove Play Doh from open bag  
   **Equipment:** Content from item 2  
   **Score:** Method of stabilizing bag with TD while sound hand reaches in to retrieve Play Doh  
   **Special Instructions:** N/A

4. **Item:** Use rolling pin to flatten Play Doh  
   **Equipment:** Play Doh and rolling pin  
   **Score:** Maintain grasp of handle during rolling motion  
   **Special Instructions:** Focus on rolling action, not how well Play Doh is flattened

5. **Item:** Pull apart pieces of Play Doh  
   **Equipment:** Stringy piece of Play Doh  
   **Score:** Repeated grasp and release of Play Doh with TD while pinching pieces away with sound hand  
   **Special Instructions:** Should take place above table, not pinching off surface with one hand

6. **Item:** Blow bubbles  
   **Equipment:** Small container of bubbles  
   **Score:** Maintain grasp of container or bubble wand with TD for blowing bubbles  
   **Special Instructions:** Focus on grasp throughout dipping and blowing, not just opening container

7. **Item:** Pull apart Duplo blocks  
   **Equipment:** Set of large blocks (Lego style)  
   **Score:** Method of grasping blocks with TD while sound hand pulls in opposite direction  
   **Special Instructions:** Pre-stack the blocks together so user can take them apart

8. **Item:** Ride a tricycle  
   **Equipment:** Tricycle  
   **Score:** Maintaining grasp on handle while in motion  
   **Special Instructions:** Evaluate user’s ability to turn left, right and steer straight

9. **Item:** Put on loose pair of pants or skirt  
   **Equipment:** Oversized pants or skirt  
   **Score:** Use of prosthesis to assist in pulling up clothing to waist  
   **Special Instructions:** Clothes with elastic waist bands can be oversized and stay up on user

10. **Item:** Open small box of raisins  
    **Equipment:** Regular small size raisin box  
    **Score:** Method of stabilizing box with TD while using sound hand to open top and reach in  
    **Special Instructions:** N/A
1. **Item:** Push toy grocery cart or doll carriage  
   **Equipment:** Any carriage style toy with a push bar at mid-height  
   **Score:** Maintain grasp on handlebar with TD while pushing cart around room  
   **Special Instructions:** N/A

2. **Item:** Play a two-handed musical instrument  
   **Equipment:** Bimanual instrument (triangle, maracas, cymbals, etc)  
   **Score:** Maintain grasp of instrument or objects in motion  
   **Special Instructions:** Avoid instruments that may be played unilaterally

3. **Item:** Open box of crayons  
   **Equipment:** Box of Crayola wax crayons, construction paper  
   **Score:** Method of stabilizing box with TD  
   **Special Instructions:** Can be asked to draw a shape on paper for a short time only

4. **Item:** Remove adhesive sticker from sheet  
   **Equipment:** Suitable sticker size >2cm in diameter  
   **Score:** Method of stabilizing sheet with TD so that sound hand can peel off sticker  
   **Special Instructions:** Sticker can be applied to drawing from item 3

5. **Item:** Thread beads on pipe cleaners to make bracelet or keychain  
   **Equipment:** Pipe cleaners and beads (~2cm in diameter)  
   **Score:** Repeated grasp and release of beads or pipe cleaner while threading with TD  
   **Special Instructions:** N/A

6. **Item:** Snip pieces of straw with scissors  
   **Equipment:** Straws and pair of blunt scissors  
   **Score:** Repeated grasp and release of straw with TD  
   **Special Instructions:** N/A

7. **Item:** Hang up artwork at shoulder height  
   **Equipment:** Artwork from items 3-4 and push-pin or magnet for magnetic surface  
   **Score:** Maintain grasp in motion, then maintain grasp at shoulder height with TD while pressing pin with sound hand  
   **Special Instructions:** N/A

8. **Item:** Ride on a swing  
   **Equipment:** Indoor or outdoor swing  
   **Score:** Maintain heavy grasp throughout swinging motion  
   **Special Instructions:** If noticeable, suggest user to relax their prosthetic side’s shoulder

9. **Item:** Wipe hands with cloth  
   **Equipment:** Wet hand cloth  
   **Score:** Maintain grasp in TD to clean sound hand  
   **Special Instructions:** N/A

10. **Item:** Put on loose pair of pants or skirt  
    **Equipment:** Oversized pants or skirt  
    **Score:** Use of prosthesis to assist in pulling up clothing to waist  
    **Special Instructions:** Clothes with elastic waist bands can be oversized and stay up on user
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<tbody>
<tr>
<td>1 Item: Ride a tricycle</td>
<td>Tricycle</td>
<td>Maintaining grasp on handle while in motion</td>
<td>Evaluate user’s ability to turn left, right and steer straight</td>
</tr>
<tr>
<td>2 Item: Skip with skipping rope</td>
<td>Skipping rope</td>
<td>Maintain grasp of rope in motion</td>
<td>Handles on rope should be large enough to fit TD to maintain grasp</td>
</tr>
<tr>
<td>3 Item: Put toothpaste on a toothbrush</td>
<td>Tube of toothpaste and toothbrush</td>
<td>Method of stabilizing brush when squeezing toothpaste on</td>
<td>Child stands around sink area</td>
</tr>
<tr>
<td>4 Item: Squeeze out a wet cloth</td>
<td>Dish/face cloth</td>
<td>Maintain grasp with TD during twisting motion</td>
<td>Ask user to clean up any spills in/or around the sink after item 3</td>
</tr>
<tr>
<td>5 Item: Put on dress-up clothes</td>
<td>Skirt or pants</td>
<td>Maintain grasp in upward motion</td>
<td>N/A</td>
</tr>
<tr>
<td>6 Item: Play a game of cards</td>
<td>Deck of cards, card holder to fit TD (if necessary)</td>
<td>Maintain grasp of cards in TD (~5 cards)</td>
<td>N/A</td>
</tr>
<tr>
<td>7 Item: Cut length of string for bracelet</td>
<td>Spool of string and scissors</td>
<td>Method of stabilizing the string with TD while cutting</td>
<td>N/A</td>
</tr>
<tr>
<td>8 Item: Thread beads on string to make bracelet</td>
<td>String from item 6, beads (~1cm wide)</td>
<td>Repeated grasp and release of beads with TD</td>
<td>N/A</td>
</tr>
<tr>
<td>9 Item: Tie knot in string to complete bracelet</td>
<td>Threaded beads from item 7</td>
<td>Use of TD to assist with manipulating string to accomplish knot</td>
<td>N/A</td>
</tr>
<tr>
<td>10 Item: Unwrap gum or candy</td>
<td>One stick of paper-wrapped gum or one twist-wrapped candy</td>
<td>Method of stabilizing to open</td>
<td>N/A</td>
</tr>
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1. **Item:** Ride a three-wheeled scooter  
   **Equipment:** Three-wheeled scooter  
   **Score:** Method of stabilizing TD on handle  
   **Special Instructions:** N/A

2. **Item:** Peel banana once started with a slit at the top  
   **Equipment:** One banana (not too soft)  
   **Score:** Method of holding banana while peeling  
   **Special Instructions:** Therapist may start first section of peel, if necessary

3. **Item:** Dismantle a Lego construction  
   **Equipment:** Pre-built Lego construction  
   **Score:** Repeated grasp and release motion with TD  
   **Special Instructions:** N/A

4. **Item:** Peel back paper on Crayola crayon (wax)  
   **Equipment:** Used/broken tip of Crayola wax crayon  
   **Score:** Stabilize crayon with TD while peeling off layer with sound hand  
   **Special Instructions:** N/A

5. **Item:** Use a handheld pencil sharpener  
   **Equipment:** Any crayon or pencil handheld sharpener  
   **Score:** Method of stabilizing sharpener with TD  
   **Special Instructions:** Ask to draw a simple specific shape (square, trapeze, must be ~8cm in diameter)

6. **Item:** Cut out a shape with scissors  
   **Equipment:** Heavy construction paper, left or right handed scissors  
   **Score:** Ability to manipulate paper in TD while cutting out shape drawn in task #5  
   **Special Instructions:** N/A

7. **Item:** Remove stickers from adhesive sheet  
   **Equipment:** Suitable sticker approx. 1” (2.5cm) diameter on paper backing  
   **Score:** Method of grasping backing to lift off decal/sticker  
   **Special Instructions:** Can be asked to apply sticker to cut out drawing

8. **Item:** Open bottle of glitter glue for art project  
   **Equipment:** Bottle of glitter glue (Twist top)  
   **Score:** Method of stabilizing bottle with TD while twisting cap off  
   **Special Instructions:** N/A

9. **Item:** Hang up artwork at shoulder height  
   **Equipment:** Completed artwork  
   **Score:** Maintain grasp throughout motion, pin up artwork at shoulder  
   **Special Instructions:** Can be drawing with stickers or just picture

10. **Item:** Unwrap gum or candy  
    **Equipment:** One stick of paper-wrapped gum or one twist-wrapped candy  
    **Score:** Method of stabilizing to open  
    **Special Instructions:** N/A
1 Item: Open zippered pencil case  
**Equipment:** School pencil case with zipper  
**Score:** Method of stabilizing case with TD while pulling zipper with sound hand  
**Special Instructions:** N/A

6 Item: Blow bubbles  
**Equipment:** Small container of bubbles  
**Score:** Maintain grasp of container or bubble wand with TD for blowing bubbles  
**Special Instructions:** Focus on grasp throughout dipping and blowing, not just opening container

2 Item: Uncap large marker  
**Equipment:** Marker (~2cm in diameter)  
**Score:** Method of stabilizing marker with TD to remove cap  
**Special Instructions:** Marker is taken out of pencil case from item 1

7 Item: Wind-up toy  
**Equipment:** Small toy with wind up mechanism (car, spinning top)  
**Score:** Method of stabilizing toy with TD while winding up with sound hand  
**Special Instructions:** N/A

3 Item: Ball and parachute/blanket game  
**Equipment:** Light ball and parachute or blanket  
**Score:** Method of holding fabric in motion  
**Special Instructions:** Two players facing each other hold the fabric open and wave their hands up and down making the ball jump in the middle. Avoid dropping the ball on the ground.

8 Item: Build a simple construction  
**Equipment:** Use any construction play set (Lego, K’Nex, etc)  
**Score:** Repeated grasp and release of pieces with TD while manipulating pieces together  
**Special Instructions:** N/A

4 Item: Extract sleeve of cookies and remove one  
**Equipment:** Box of Oreos, crackers, etc  
**Score:** Maintain grasp of cookie box or inside tray with TD to access snacks  
**Special Instructions:** Must be a box with a pull-out tray of cookies or snacks

9 Item: Tie shoelaces  
**Equipment:** Sneaker with laces of adequate length  
**Score:** Repetitive grasp and release when tying knot  
**Special Instructions:** Performed from user’s point of view. Preferably with their shoe, if not, provide one. Score on use of prosthesis rather than quality of end knot

5 Item: Remove coins from change purse  
**Equipment:** Small twist top, clip, or zippered coin purse  
**Score:** Method of stabilizing coin pouch with TD  
**Special Instructions:** N/A

10 Item: Put on loose pair of pants or skirt  
**Equipment:** Oversized pants or skirt  
**Score:** Use of prosthesis to assist in pulling up clothing to waist  
**Special Instructions:** Clothes with elastic waist bands can be oversized and stay up on user
1. **Item:** Start a zipper on a sweatshirt or jacket  
   **Equipment:** Zippered clothing (type with opening at the bottom)  
   **Score:** Use of prosthesis to stabilize one side of zipper  
   **Special Instructions:** N/A

2. **Item:** Hang jacket on coat hanger  
   **Equipment:** Jacket or coat and a hanger  
   **Score:** Method of holding the top while hanging  
   **Special Instructions:** N/A

3. **Item:** Put on a pair of drawstring pants  
   **Equipment:** A pair of drawstring pants  
   **Score:** Method of holding the pants  
   **Special Instructions:** N/A

4. **Item:** Tie the string on a pair of drawstring pants while wearing them  
   **Equipment:** A pair of drawstring pants  
   **Score:** Method of grasping the strings with the TD while tying them  
   **Special Instructions:** N/A

5. **Item:** Carry tray with several items on it  
   **Equipment:** Tray with items used for tasks 4 to 8  
   **Score:** Method of stabilizing tray while in motion across room  
   **Special Instructions:** If tray is too heavy, remove certain items and score method of carrying tray

6. **Item:** Put temporary tattoo on sound arm  
   **Equipment:** Water tattoo  
   **Score:** Delicate grasp and manipulation of wet tattoo and application to sound arm with TD  
   **Special Instructions:** N/A

7. **Item:** Play a game of cards  
   **Equipment:** Deck of cards, card holder to fit TD (if necessary)  
   **Score:** Maintain grasp of cards in TD (~5 cards)  
   **Special Instructions:** N/A

8. **Item:** Put cards away in Ziploc bag  
   **Equipment:** Ziploc bag with slide seal and seal  
   **Score:** Method of stabilizing bag with TD when inserting objects in and then while closing seal with sound hand  
   **Special Instructions:** N/A

9. **Item:** Open small sealed container of jam/butter  
   **Equipment:** Restaurant style butter pack, jam pack (restaurant small size)  
   **Score:** Method of stabilizing small packet with TD while peeling off the top without crushing or spilling content  
   **Special Instructions:** N/A

10. **Item:** Spread content from item 9 onto crackers or bread  
    **Equipment:** Butter or jam, knife, crackers or bread  
    **Score:** Method of stabilizing butter/jam and then cracker/bread  
    **Special Instructions:** N/A
**Item:** Carry laundry basket across the room  
**Equipment:** Laundry basket containing objects for upcoming items  
**Score:** Maintaining grasp of heavy object in motion  
**Special Instructions:** Basket should contain objects from items 2 to 5

**Item:** Put on buttoned top  
**Equipment:** Shirt, sweater, cardigan with buttons  
**Score:** Method of stabilizing button areas with TD to button up  
**Special Instructions:** N/A

**Item:** Unbutton top and remove  
**Equipment:** Same top from item 2  
**Score:** Method of stabilizing button areas with TD to unbutton, then grasping and holding cuff/sleeve with TD while slipping sound arm out  
**Special Instructions:** N/A

**Item:** Fold shirt and towels  
**Equipment:** T-shirt and towels of any size  
**Score:** Grasp and release while folding  
**Special Instructions:** Attempt to fold towels without using flat surface

**Item:** Hit ball with bat  
**Equipment:** Light ball and baseball bat  
**Score:** Method of grasping bat in motion  
**Special Instructions:** Can be a foam bat, cricket club, golf club (must simulate two-handed swinging motion)

**Item:** Fill paper cup with water  
**Equipment:** Styrofoam or paper cup, sink  
**Score:** Method of grasping cup without crushing it when filling it with water  
**Special Instructions:** Suggest to use both hands in conjunction if not used first try

**Item:** Make a “telescope” out of paper  
**Equipment:** Construction paper and elastic bands  
**Score:** Method of grasping delicate rolled paper to slip on the elastic bands on each end  
**Special Instructions:** N/A

**Item:** Open Band-Aid and apply to sound arm  
**Equipment:** Paper-wrapped Band-Aid strip  
**Score:** Method of tearing off adhesive layer off Band-Aid, then manipulating strip onto sound arm  
**Special Instructions:** N/A

**Item:** Open a twist top jar  
**Equipment:** Glass jar with twist lid (<4cm in diameter)  
**Score:** Method of stabilizing jar with TD  
**Special Instructions:** Jar can contain candies needed for next item

**Item:** Unwrap a candy with close-fitting wrapper  
**Equipment:** Any small individually wrapped candy  
**Score:** Method of grasping wrapper with TD  
**Special Instructions:** N/A
<table>
<thead>
<tr>
<th>Item:</th>
<th>Spread tablecloth on table</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equipment:</strong></td>
<td>Folded table cloth and table</td>
</tr>
<tr>
<td><strong>Score:</strong></td>
<td>Method of grasping cloth in motion</td>
</tr>
<tr>
<td><strong>Special Instructions:</strong></td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item:</th>
<th>Play a game of cards</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equipment:</strong></td>
<td>Deck of cards</td>
</tr>
<tr>
<td><strong>Score:</strong></td>
<td>Maintain grasp of cards in TD (~5 cards)</td>
</tr>
<tr>
<td><strong>Special Instructions:</strong></td>
<td>Card holder may be used, if necessary</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item:</th>
<th>Remove tissue from pocket-sized package</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equipment:</strong></td>
<td>Small pocket-sized Kleenex pouch</td>
</tr>
<tr>
<td><strong>Score:</strong></td>
<td>Method of stabilizing pouch while taking out facial tissue</td>
</tr>
<tr>
<td><strong>Special Instructions:</strong></td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item:</th>
<th>Tear pieces of masking tape off roll</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equipment:</strong></td>
<td>Roll of masking tape (~2cm thick)</td>
</tr>
<tr>
<td><strong>Score:</strong></td>
<td>Repeated grasp and release of roll with TD while tearing multiple pieces of tape with sound hand</td>
</tr>
<tr>
<td><strong>Special Instructions:</strong></td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item:</th>
<th>Lift end of table to help move</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equipment:</strong></td>
<td>Small table</td>
</tr>
<tr>
<td><strong>Score:</strong></td>
<td>Maintain grasp of heavy object while in motion</td>
</tr>
<tr>
<td><strong>Special Instructions:</strong></td>
<td>Table being moved to make room for upcoming badminton game</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item:</th>
<th>Perform badminton serve</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equipment:</strong></td>
<td>Badminton racket and birdie</td>
</tr>
<tr>
<td><strong>Score:</strong></td>
<td>Grasp and release of birdie for serve</td>
</tr>
<tr>
<td><strong>Special Instructions:</strong></td>
<td>Can be a combination of any type of racket and ball (Must simulate serving)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item:</th>
<th>Tie shoelaces</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equipment:</strong></td>
<td>Sneaker with laces of adequate length</td>
</tr>
<tr>
<td><strong>Score:</strong></td>
<td>Repetitive grasp and release when tying knot</td>
</tr>
<tr>
<td><strong>Special Instructions:</strong></td>
<td>Performed from user’s point of view. Preferably with their shoe, if not, provide one. Score on use of prosthesis rather than quality of end knot</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item:</th>
<th>Tie scarf around neck</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equipment:</strong></td>
<td>Wool or silk scarf (long enough to tie around neck)</td>
</tr>
<tr>
<td><strong>Score:</strong></td>
<td>Repeated grasp and release with TD while tying the scarf around neck</td>
</tr>
<tr>
<td><strong>Special Instructions:</strong></td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item:</th>
<th>Pull gloves on</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equipment:</strong></td>
<td>Pair of gloves</td>
</tr>
<tr>
<td><strong>Score:</strong></td>
<td>Method of grasping and pulling glove on sound hand</td>
</tr>
<tr>
<td><strong>Special Instructions:</strong></td>
<td>Can be any glove appropriate for activity (gardening, winter, user’s choice)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item:</th>
<th>Open bag of chips</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equipment:</strong></td>
<td>Small bag of snacks (chips, cookies)</td>
</tr>
<tr>
<td><strong>Score:</strong></td>
<td>Maintain grasp of bag with TD while pulling apart with sound hand</td>
</tr>
<tr>
<td><strong>Special Instructions:</strong></td>
<td>N/A</td>
</tr>
</tbody>
</table>
**Item:** Carry milk crate of tools/wood across room(s)
**Equipment:** Milk crate, items used for tasks 2 to 4
**Score:** Maintain grasp of heavy object in motion
**Special Instructions:** Begin in one room and move to workshop area

**Item:** Measure length of wood with measuring tape and mark the middle for item 4’s nail and hammer
**Equipment:** Narrow strip of wood (1”x2”), retractable measuring tape, pencil
**Score:** Method of pulling out length of tape and marking the cut with pencil
**Special Instructions:** N/A

**Item:** Place wood in a table vice
**Equipment:** Piece of wood and vice mounted on work station
**Score:** Method of stabilizing wood in place while tightening vice
**Special Instructions:** N/A

**Item:** Hammer nail in wood (pencil mark)
**Equipment:** Piece of wood from 2, hammer, nail (~5cm) long
**Score:** Method of stabilizing nail in place with TD for first few initial hits
**Special Instructions:** N/A

**Item:** Sweep up dust with handheld brush or regular broom and dust pan
**Equipment:** Broom, dust pan
**Score:** Method of stabilizing dust pan or brush with TD
**Special Instructions:** N/A

**Item:** Groom fingernails with nail file
**Equipment:** Nail file
**Score:** Method of stabilizing file with TD
**Special Instructions:** N/A

**Item:** Fold a letter and put it in envelope
**Equipment:** Piece of paper and regular size envelope
**Score:** Method of inserting paper in envelope
**Special Instructions:** N/A

**Item:** Chop up an apple (hard food)
**Equipment:** Any hard food
**Score:** Method of stabilizing food when cutting
**Special Instructions:** Can be any type of hard food for gripping

**Item:** Make kebobs alternating hard and soft foods
**Equipment:** Hard food used from item 8 and soft food (banana, marshmallow, grapes, etc)
**Score:** Method of delicately grasping soft food items with TD when cutting or inserting item on skewer
**Special Instructions:** N/A

**Item:** Put up an umbrella
**Equipment:** Umbrella
**Score:** Method of grasping handle or sliding part to open the umbrella
**Special Instructions:** N/A
1. **Item:** Carry laundry basket with clothing/towels and items for tasks to a different room  
   **Equipment:** Laundry basket, clothes, towels, box of objects for upcoming tasks  
   **Score:** Maintain a grasp on a heavy object  
   **Special Instructions:** Could use tablecloth or anything requiring two hands to hang on clothesline

2. **Item:** Hang clothes, towels  
   **Equipment:** Various linens, clothesline, clothespins  
   **Score:** Method of stabilizing fabrics while pinning onto clothesline  
   **Special Instructions:** Any small rope across room strung up at shoulder height is fine. If not, folding large cloth or sheet will simulate grasping at shoulder height

3. **Item:** Cut length of thread for needle  
   **Equipment:** Spool of thread and scissors  
   **Score:** Method of stabilizing spool/thread while cutting  
   **Special Instructions:** N/A

4. **Item:** Thread needle  
   **Equipment:** Sewing needle, thread  
   **Score:** Method of stabilizing needle  
   **Special Instructions:** N/A

5. **Item:** Sew button on shirt  
   **Equipment:** Threaded needle, shirt, button  
   **Score:** Grasp and release of shirt, needle, and thread  
   **Special Instructions:** N/A

6. **Item:** Open tube of hand cream and apply  
   **Equipment:** Tube of cream small enough to fit TD  
   **Score:** Method of using TD to assist with opening and application of cream  
   **Special Instructions:** Pay attention to delicate grasp as to avoid spilling

7. **Item:** Use Scotch tape dispenser  
   **Equipment:** Handheld tape dispenser  
   **Score:** Method of stabilizing dispenser  
   **Special Instructions:** User can fold button shirt from item 5 and place inside parcel box then tear a few pieces of tape to close box

8. **Item:** Tie up parcel with ribbon/string  
   **Equipment:** Small parcel box, twine/ribbon, scissors  
   **Score:** Method of stabilizing ribbon during cut, then use of prosthesis to assist with tying of parcel  
   **Special Instructions:** N/A

9. **Item:** Place money in billfold/wallet  
   **Equipment:** Billfold/wallet and paper money  
   **Score:** Method of placing money in wallet  
   **Special Instructions:** N/A

10. **Item:** Sweep floor and pile up dirt in dust pan  
    **Equipment:** Broom, dust pan  
    **Score:** Maintaining grasp of broom in motion, then stabilizing dust pan with TD while brushing dirt in with sound hand  
    **Special Instructions:** N/A
<table>
<thead>
<tr>
<th>Item</th>
<th>Task Description</th>
<th>Equipment</th>
<th>Score</th>
<th>Special Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Carry tray of items across the kitchen</td>
<td>Tray with items 2 to 7 present</td>
<td>Ability to maintain grasp and balance of heavy object while in motion</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Scrub carrot with vegetable brush</td>
<td>Vegetable with peel and sink area</td>
<td>Maintain grasp of vegetable while cleaning</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td>Peel carrot</td>
<td>Vegetable from item 2 and vegetable peeler (handle must fit in TD)</td>
<td>Use of prosthesis to hold vegetable or peeler</td>
<td>N/A</td>
</tr>
<tr>
<td>4</td>
<td>Open a bottle of salad dressing</td>
<td>Bottle of salad dressing (body or top of bottle must fit in TD)</td>
<td>Method of stabilizing bottle while opening</td>
<td>N/A</td>
</tr>
<tr>
<td>5</td>
<td>Slice a tomato (soft food)</td>
<td>Soft food and sharp knife</td>
<td>Repeated grasp and release of delicate object</td>
<td>Can be a banana or any other soft object for delicate manipulation</td>
</tr>
<tr>
<td>6</td>
<td>Cut meat (or simulated meat) with knife and fork</td>
<td>Piece of food to cut, knife, fork</td>
<td>Method of maintaining grasp while in resistive motion</td>
<td>Simulation can be any matter to cut (carrot, tomato, or even Play Doh)</td>
</tr>
<tr>
<td>7</td>
<td>Wash dishes</td>
<td>Any dirty items from current subtest</td>
<td>Method of stabilizing items or dish cloth/spoon while washing</td>
<td>N/A</td>
</tr>
<tr>
<td>8</td>
<td>Repackage leftovers</td>
<td>Plate with sliced foods and wrap (aluminum or saran/plastic)</td>
<td>Repeated grasp and release to complete wrapping process</td>
<td>N/A</td>
</tr>
<tr>
<td>9</td>
<td>Open a can with a tab</td>
<td>Can of soda or can of fruits (small enough to fit TD)</td>
<td>Use prosthesis to stabilize can without crushing it</td>
<td>N/A</td>
</tr>
<tr>
<td>10</td>
<td>Open creamer to make coffee or hot chocolate</td>
<td>Creamer (restaurant small size)</td>
<td>Method of stabilizing small packet with TD while peeling off the top without crushing or spilling content</td>
<td>Can prepare a hot drink for clinician</td>
</tr>
</tbody>
</table>