One of a series of materials developed by Project APT (Administrators, Parents, and Teachers/Assessment, Programming, and Training), a program designed to foster home/school coordination in educational planning and program implementation for severely mentally retarded and/or multiply handicapped students. The booklet provides the Developmental Achievement Wheel, an instrument designed to assess the functional level of multiply handicapped students. The wheel format gives an overview of the student's performance in the following six areas—cognition, language, gross motor, fine motor, self help, and socialization. Made up of five concentric rings (0 to 6 months, 6 months to 1 year, 1 to 2 years, 2 to 4 years, and 4 to 6 years) the wheel permits the recording of past, present, and future levels of performance with the use of developmental milestones. Suggested equipment to be used in each area at each age level is listed and the assessment instrument worksheet is included. (PHR)
Information

Cognition
Communication
Fine Motor
Gross Motor
Self Help
Socialization
The Developmental Achievement Wheel was devised in 1975 by members of the Lincolnia Center staff so that teachers might assess more adequately the functional level of multiply handicapped students. The wheel format gives an overview of the student’s performance in six major areas—cognition, language, gross motor, fine motor, self-help, and socialization. Made up of five concentric rings (0-6 months, 6 months-1 year, 1 year-2 years, 2 years-4 years, 4 years-6 years), the Developmental Achievement Wheel permits the recording of a student’s past, present, and future levels of performance with the use of developmental milestones. (By changing the recording colors for each assessment, it is possible to trace the student’s progress over the course of several years.)

Although the Developmental Achievement Wheel makes it possible to compare each student’s performance with normal development, the interrelationships and variations that appear among the six major areas of any student’s recorded performance are of much greater significance for diagnostic and programming purposes. Strengths, weaknesses, growth, regression, and splinter “kills” are immediately apparent. The Developmental Achievement Wheel suggests emphasis for programming, e.g., monitoring, maintenance, and selection of long-range goals.

The Developmental Achievement Wheel is an educational assessment device, and is not intended as a replacement for standardized psychological tests, physical therapy or occupational therapy evaluations, or in-depth speech and language testing. It is used as an indicator of current level of performance, not as a tool to diagnose disabilities or to predict future skills.

The Developmental Achievement Wheel is a compilation of data which have appeared in many formats in other assessment tools. The rearrangement of these items into the more efficient wheel was undertaken to simplify and clarify record-keeping for students. We wish to acknowledge the following sources:


General Directions

Because of the length of the Developmental Assessment (400 items), the initial assessment may be time consuming. The following steps in the administration process have been most helpful in making the assessment go as swiftly and smoothly as possible:

1. Read all of the items from birth to six, as listed in the booklet. The pupil may not pass all of the items, but it is important for the person doing the assessment to be knowledgeable of the total picture of normal growth and development.

2. Observe the pupil for a period of one day or two weeks before starting assessment. This enables the examiner to become familiar with the pupil and obtain a general idea of the pupil's functioning level. Pupils' strengths and weaknesses, as well as scatter of skills, may be considered during this observation period. The consistent performance of many skills will be displayed, thus enabling the examiner to easily check off these observed items on the Developmental Achievement Wheel when the assessment begins. During this time the examiner may also decide to use the alternate sequences for the Cognitive and Socialization scales for physically handicapped pupils. Once this decision has been made, the examiner must continue to use the alternate items for the total scale.

3. Before administering the Developmental Achievement Wheel, review the sequences to determine which items you are going to test. Remember, many of the Developmental Achievement Wheel items are observable in the pupil's natural environment and do not have to be checked in a formal test situation. For those items, however, which need to be checked in a more formal setting, please refer to the suggested equipment list in front of each section before beginning that assessment.

4. Consider the pupil's attention span and tolerance for a testing situation before asking the pupil to remain on task for long periods of time. Some pupils may tolerate only two or three minutes in a structured situation, while others may perform well for ten to twenty minutes. Never exhaust the pupil or yourself. Try to leave the task with a pleasant attitude as you will both be returning to do many more items.

5. It is important not to mark an item as achieved until consistent performance of the task has been observed, as this advantage has already been built in. The placement of items on the developmental sequence for each of the six areas was determined by the upper limits of the time span in which a given skill is likely to appear in normal development.

Administration and Scoring

In order for a pupil to pass an item, he or she should be able to perform the task 75% of the time, or three out of four trials. At this level the skill is considered to be within the pupil's repertoire. When each item is passed, it is so marked on the scoring sheet. After all the items are scored, they are to be transferred to the Developmental Achievement Wheel by using a colored pencil to color in the space corresponding to the item number in each sequence. If the pupil is visually impaired, mark with the symbol "VI" the items on the Developmental Achievement Wheel requiring the use of vision. An example of this type of item would be "Points to four colors." Using a different color pencil for each assessment will enable anyone looking at a pupil's wheel to see his or her progress at a glance.

Many pupils will be chronologically older than indicated by the age rings of the Developmental Achievement Wheel. In order to get a pupil's functional level, fill in any items the pupil passes regardless of his or her chronological age. This is true for previously acquired skills as well. For example, if a seven-year-old child learned to sit without support when he or she was two years old and not at the average age of six months, this item should still be colored in as passed, as the pupil had achieved this functional level during his or her development.

Much of the early years' information may come only from parental memory and past medical/school records. For example, a 14-year-old pupil who functions at approximately the four-year level has already passed through the 0-6 months, 6 months-1 year, and 1-2 years levels. He or she would no longer be producing infant-level sounds and noises but would be indicating his or her first and last names. If there is parental memory or records of early infant sounds, no matter at what age they occurred, the item should be colored as passed. If there is no such memory or record, the item should be left unmarked. We cannot assume that a student has mastered each skill at all levels of normal development merely because the pupil is showing a higher-level skill. Splinter skills, skills based upon task repetition rather than on acquisition of earlier skills, may be discovered in this way.
The examiner may record observable items from more than one area as they occur naturally. For instance:

Verbalization may occur during motor activities or while playing. Dressing skills may be demonstrated while preparing for gross motor tasks. Gross motor skills may be seen en route to another task—or during interfering behaviors.

Since this is not a “testing” situation, no tangible reinforcers, e.g., candy, toys, should be used. Praise the pupil in a low-key manner; overreaction to success or failure can give the pupil clues to the correct response to a given item. Verbally presented items, e.g., “Are you a boy or a girl?” should, likewise, be presented in an even, low-key voice, to avoid emphasis on the correct answer. Visually presented items, e.g., flash cards, should be presented for an equal amount of time.

**Interpretation**

The Developmental Achievement Wheel can be useful in gathering information, as follows:

1. It can establish a pupil’s functional level. By coloring in all the skills a pupil has mastered on the Developmental Achievement Wheel, it is possible to obtain an approximate functioning age level for each pupil. For example, if the first two rings of the Wheel are largely filled in, with minimal scatter above, the pupil may be considered to be functioning at approximately the one-year developmental age.

2. It can show progress by comparing previous skills with those newly acquired. These would be indicated by use of a new color for each assessment period.

3. It can make apparent the pupil’s strengths and weaknesses by comparing the pattern and number of skills acquired in each area.

4. It can point out areas that may need remediation, educational adaptations (communication system, special positioning, special adaptive equipment), maintenance therapeutic services, and areas of severe dysfunction requiring alternative modes of learning. For example: a ten-year-old pupil who scored in the 0-6 months level in the gross motor, fine motor, self-help, and verbal expressive areas, but much higher in the cognitive, socialization, and receptive language areas, indicates a picture of a nonverbal, severely physically handicapped pupil who has a lot to say (cognition and receptive language are high) but has no way to say it (verbal expressive language is low). Looking at the configuration of this pupil’s Wheel, one notes that he or she will need some alternate means of communication, as well as a program for maintaining his or her limited physical skills.

5. It can show splinter skills that may need to have some background skills filled in before further progress can be made and the skills built upon.

6. It can show whether a child is regressing in his or her skill level by comparing present with past patterns.

7. It can be a valuable tool for comparing a pupil’s home and school functioning. By having both the teacher and a parent complete a Developmental Achievement Wheel, team members obtain a more realistic picture of the whole child. Functioning in both settings may be similar, or drastically different, but in most cases similar patterns emerge.
Developmental Achievement Wheel Glossary

**Adduction** — Any movement or position away from the midline of the body.

**Alternation** — Use of first one and then the other, e.g., on going up stairs, one foot is placed on one step, the other foot on the step above it.

**Copies** — Reproduces an item or activity when shown a final product.

**Crawls** — Pulls self forward by using hands or arms. Abdomen is on the floor and legs may be extended.

**Creeps** — Moves forward on hands and knees in a reciprocal pattern. (See definition of reciprocal if necessary.)

**Demonstration** — Process of examiner showing child how to perform a given activity.

**Extension** — Movement which brings limbs and trunk into or toward a straight condition or the final position that the straightened limb/trunk assumes.

**Flexion** — Act of bending or the condition of being bent.

**Gallop** — A fast, bouncing gait in which the following foot is brought up even to the lead foot, but does not pass it. Either the right or left foot can lead in the gallop.

**Imitates** — Performs a given activity following demonstration by examiner.

**Midline** — A theoretical line which bisects the body longitudinally, dividing it into similar right and left portions.

**Model** — A finished product, presented to child by examiner, which child must then copy. (The child does not see the actual process leading to completion.)

**Opposition** — The art of using the thumb in conjunction with the fingers to pick up or hold a small object. The thumb is held approximately at a right angle to the fingers, e.g., picking up a raisin or a pellet. This movement is essential for refined, manipulative skills such as writing, holding a spoon or fork, or using tools.

**Palmar Grasp** — A primitive grasp in which the whole hand is used to retrieve an object which then rests in the palm of the hand.

**Pincer Grasp** — A mature grasp in which the thumb and the tip of the index finger are used to retrieve a small object, e.g., a raisin or a pellet.

**Pivot** — The center of gravity around which the body rotates. This point can be used to rotate the body in standing, sitting, or prone position.

**Pronation** — Hand is turned with palm down.

**Prone** — Lying flat on the stomach.

**Protective Extension** — A propping reaction of the arms. If a child who is sitting is moved off balance, he or she will catch self by extending an arm. A normal child is able to catch self when tipped forward at approximately 6 months, sideways at 8 months, and backwards at 10 months.

**Raking** — A primitive grasp in which the hand is pronated and the four fingers are extended as a unit, then curl around the object to be retrieved.

**Reciprocal Gait** — Alternating motion of limbs, e.g., right arm swings forward when left foot takes a step and vice versa.

**Reflex** — An involuntary response to a stimulus which is specific and predictable. Reflexes are essential in preparing a child for progressive development, e.g., rolling over, sitting, crawling, etc. Some are present in the newborn and decrease during the first 3 or 4 months. Others are modified into more mature balancing and protective reactions.

**Scissor Grasp** — An immature grasp in which the sides of the thumb and index finger are used in the same plane to pick up an object.

**Slide** — A rhythmic sideways gait to the right or left. Right slide—step out with the right foot, bringing the left foot along the floor to the right foot.

**Supination** — Hand turned with palm facing upward.

**Supine** — Lying flat on the back.

**All glossary words found in the sequences will be italicized.**
illustrations

15.

23.

30.

34.

39.

46 and 50.

53 and 62.

59.
Cognition
SUGGESTED EQUIPMENT LIST FOR COGNITION

0 - 6 Months

Unbreakable object

6 Months - 1 Year

Favorite toys
Cloth for hiding object and peek-a-boo
Bell or squeeze toy

1 - 2 Years

Picture book
3 boxes, identical in size, shape, color, etc.
Small object to place in box
Favorite toys

2 - 4 Years

Student's personal belongings, e.g., lunch box, bag, coat
2 blocks
5 familiar objects and 3 duplicate objects for matching
Picture book
Photograph of student

4 - 6 Years

Flash cards of 4 different colors or 4 objects that are identical except for color
Analogy flash cards (if necessary for nonverbal child)
4 blocks
Nesting boxes
Student's age and home address written on card
2 identical containers of different weight, e.g., plastic eggs, 1 filled and 1 empty
Number flash cards
Cognition

STANDARD SEQUENCE

0 - 6 Months
1. Anticipates being fed or picked up ("gets ready" to be picked up).
2. Looks in direction of fallen object.

6 Months - 1 Year
3. Tries for object out of reach.
4. Attempts to uncover partially hidden object.
5. Imitates adult (plays peek-a-boo or patty cake).
6. Rings a bell or squeezes a toy purposefully (cause and effect relationship).

1 - 2 Years
8. Imitates putting object in a box.
9. Understands and follows frequently heard one-part commands.
10. Points to 1 named body part.
11. Finds object hidden under 1 of 3 boxes on first trial (after seeing object being hidden).

2 - 4 Years
13. Recognizes own things.
14. Gives 2 blocks to examiner when requested.
15. Matches 3 familiar objects to 3 like objects (presented in a group of 5).
17. Attends to simple stories read from picture book or flannel board.
18. Recognizes self when shown photograph.

4 - 6 Years
19. Points to 4 colors by name.
20. Indicates knowledge of opposite analogies by pointing to pictures or responding verbally, e.g., "If Mother is a lady, Daddy is a ________." or boy-girl example.
21. Gives 3 or 4 blocks to examiner when requested.
22. Demonstrates concept of size by assembling nesting boxes (not by trial and error).
23. Indicates own age or home address by speech.
24. Selects the heavier of 2 objects upon request.
25. Knows left from right.
26. Recognizes numerals 1 to 10.

ALTERNATIVE SEQUENCE FOR THE PHYSICALLY HANDICAPPED

0 - 6 Months
1. Anticipates being fed or picked up ("gets ready" to be picked up).
2. Looks in direction of fallen object.

6 Months - 1 Year
3. Looks at object out of reach in anticipation.
4. Reacts to sight of partially hidden object.
5. Responds to name in a meaningful way.
6. Responds to "no-no".

1 - 2 Years
8. Looks in correct place for toys which fall or roll out of sight.
9. Understands and follows frequently heard one-part commands.
10. Correctly chooses proper name when offered 2 alternatives for body part.
11. Indicates to examiner which of 3 boxes covers a hidden object on first trial (after seeing object being hidden).
12. Indicates to examiner whether or not he/she is turning 1 page at a time.

2 - 4 Years
13. Recognizes own things.
14. Indicates to examiner whether or not he/she is holding 1 or 2 blocks.
15. Matches 3 familiar objects to 3 like objects (presented in a group of 5).
17. Attends to simple stories read from picture book or flannel board.
18. Recognizes self when shown photograph.

4 - 6 Years
19. Indicates to examiner correct name for each of 4 colors.
20. Indicates knowledge of opposite analogies by pointing to pictures or responding verbally, e.g., "If Mother is a lady, Daddy is a ________." or boy-girl example.
21. Indicates to examiner whether he or she is holding 3 blocks or 4 blocks.
22. Indicates knowledge of the concept of size, as examiner assembles nesting boxes (according to student's preference).
23. Indicates own age or home address by speech or by pointing to correct written age or address.
24. Indicates the heavier of 2 objects upon request.
25. Knows left from right.
26. Recognizes numerals 1 to 10.
Verbal
SUGGESTED EQUIPMENT LIST FOR COMMUNICATION - VERBAL EXPRESSIVE

None required
Communication — Verbal Expressive

0 — 6 Months
1. Exhibits different cries for pain, hunger, etc.

6 Months — 1 Year
3. Repeats own sounds over and over; uses inflectional and rhythmic vocal play.
4. Imitates own sounds and sounds of others (echolalic).
5. Produces more and different consonant sounds than vowel sounds.
6. Uses vocal tone expressively, e.g., laughs aloud, fusses, etc.

1 — 2 Years
7. Uses first meaningful word, e.g., “mama”, “dada”.
8. Uses 2 or 3 words meaningfully.
9. Practices talking while alone by playing with sounds and repeating words and phrases.
10. Uses one word as a general referent for all similar objects, e.g., “cookie” for all similar finger foods.
11. Indicates first name in response to “What’s your name?”.
12. Uses 2 or 3 word sentence in which nouns and verbs predominate, e.g., noun, verb, and object, “mama-go-car”.

2 — 4 Years
13. Learns and repeats sing-song sentences and rhythmic chants.
14. Indicates both first and last names in response to “What’s your name?”.
15. Uses pronoun, “I” to refer to self.
16. Is able to whisper to others.
17. Sings simple songs, e.g., verse to “Bingo”, “Mary Had a Little Lamb”, etc.

4 — 6 Years
19. Repeats nursery rhymes and/or simple stories accurately.
20. Defines words by use, e.g., “What is a spoon?”, “Eat”.
21. Achieves 5½ words per utterance as average number.
22. Intonation, rate and pauses are noticeably different when explaining something under stress. Is more cautious or slower as he or she attempts to make his or her point.
23. Uses adjectives to describe a person, picture, or thing during spontaneous conversation.
24. Repeats 1 sentence of 10 syllables, e.g., “I like to eat a big lunch at my school”, “Mary and John ride the bus to school every day”.
25. Repeats 1 set of 5 digits when given a model to imitate, e.g., 1-7-3-4-2, 5-1-3-6-4, 3-7-9-4-8.
26. Produces all speech sounds correctly with exception of /r/, /l/, /s/ blends, and dialectual/regional variations, e.g., toof for tooth, baf for bath.
Non-Verbal
SUGGESTED EQUIPMENT LIST FOR COMMUNICATION - NON-VERBAL EXPRESSIVE

0 - 6 Months
None required

6 Months - 1 Year
Favorite toy or object

1 - 2 Years
Cup or glass or jar with lid
Favorite toys or objects

2 - 4 Years
Preposition flash cards
Paper with 2 lines of different lengths drawn on it
7 pictures of items with specific uses, e.g., toothbrush, spoon, comb, cup, etc.

4 - 6 Years
4 items for counting
Same-different flash cards
Flash cards of 4 colors
3 objects, identical except for size, e.g., nesting boxes
Missing-part picture or flannel board
3 pictures or flannel board with absurdities
2 sets of nickels, pennies, and dimes
Communication — Non-Verbal Expressive

0 — 6 Months
1. Changes behavior when held, e.g., cuddles, resists, etc.
2. Shows awareness of new situations by facial expressions, moving, or becoming still and intent, or withdrawn.

6 Months — 1 Year
3. Indicates desire to participate in communication going on around self, e.g., looking toward, reaching out, making overtures to join in.
4. Repeats, in new context, movements or gestures that worked before. If reaching upward has resulted in being picked up, he or she may try it again to be picked up.
5. Reaches toward desired object.
6. Places adult hand on an object to communicate desire for that object.

1 — 2 Years
7. Solicits adult help to solve problems, e.g., hands jar to adult to open or empty glass to be filled.
8. Attempts to point to 4 of own facial features—eyes, ears, nose, mouth.
9. Uses true pointing to call attention to things and to share pleasure.
10. Leads adult to something wanted and not accessible to self.
11. Indicates preferences by independently selecting 1 object over another.
12. Uses communication to assert self, e.g., protests with definite “no” headshake, gestures or signs, may also kick and scream for demands.

2 — 4 Years
13. Communicates basic needs, e.g., feeding, toileting, etc. through gestures, signs, and/or facial expression.
14. Holds up correct number of fingers for age, or indicates when examiner has correct number of fingers raised.
15. Uses toy or play situation to express feelings that cannot be expressed verbally, e.g., scold or discipline a child.
16. Communicates prepositional relationships by using signs or gestures to indicate “on”, “to”, “in”.
17. Points to or indicates the longer of 2 lines.
18. Correctly identifies 7 picture items by indicating the use of each object, e.g., “Show me which one you ride on.”

4 — 6 Years
19. Understands three-step related commands, e.g., “Get the paper out, put it on the table, color on it.” May follow by physically doing the tasks or sequencing pictures or objects.
20. Counts 4 items with a one-to-one correspondence.
21. Given 3 pictures of familiar objects and 1 stimulus card that matches 1 picture, matches 1 picture that is the same as the stimulus card and 1 that is different (not same).
22. Communicates recognition of 4 colors (usually red, blue, green, and yellow).
23. Identifies a nickel, penny and dime by matching each to a sample of each coin.
24. Indicates big, bigger, biggest.
25. Indicate missing part in picture.
26. Indicates absurdities in 3 pictures which show something silly or impossible, e.g., a flying cow, etc.
"Shut the door and turn off the light—hmmmm."

Receptive
SUGGESTED EQUIPMENT LIST FOR COMMUNICATION - RECEPTIVE

0 - 6 Months
None required

6 Months - 1 Year
Favorite toys

1 - 2 Years
Manipulative sound toys, e.g., bell, whistle
Number flash cards
Preposition flash cards

2 - 4 Years
At least 6 rhythm instruments and noisemakers
Number flash cards
2 items, identical except for size

4 - 6 Years

Drum
Number flash cards
10 pictures of animals with tape of animal sounds
10 items for counting
Communication — Receptive

0 — 6 Months
1. Reacts to sounds in environment by increasing or decreasing body movements.
2. Turns to locate sounds in environment.

6 Months — 1 Year
3. Shows interest in communication around self; may show selective interest in familiar words.
4. Comprehends gesture language, e.g., ceases activity when adult shakes finger, etc.
5. Responds to “no-no”, own name, and 2 often repeated requests (must do all 3 to pass item).

1 — 2 Years
7. Is preoccupied with sounds and sound play. Drops, shakes, and manipulates environment to experiment with effect of sounds.
8. Indicates recognition of gross differences in mechanically produced sounds, e.g., with bell, whistle, ticking clock in front of him or her, by matching sound to object producing it.
9. Demonstrates understanding of more than 50 words, signs, or natural gestures in context.
10. Repeats 1 set of 2 digits, e.g., 2-5 or 1-4. May indicate correct response verbally or by use of flash cards.
11. Follows two-part related familiar commands, e.g., “Pick up the paper and put it in the wastebasket”.
12. Demonstrates understanding of “in”, “out”, “up”, “down”, “on”.

2 — 4 Years
13. Identifies sounds made by 5 rhythm instruments or noisemakers by matching sound to appropriate source.
14. Repeats 1 set of 3 digits, e.g., 2-5-3 or 3-7-2. May indicate correct response verbally or by use of flash cards.
15. Gives appropriate yes or no response to questions concerning name, sex, and basic facts (names of familiar items, etc.).
16. Follows two-part unrelated commands, e.g., “Close your eyes and clap your hands”.
17. Demonstrates understanding of at least 2 of the following prepositions by placing a block or toy in correct relationship: under, in front of, beside, in back of.
18. Differentiates between “big” and “little” objects.

4 — 6 Years
19. Distinguishes between loud and soft sounds, e.g., imitates a whisper with a whisper, loud noise with a loud noise.
20. Imitates a simple melody.
21. Claps in rhythm to song or beat of a drum.
22. Repeats 1 set of 4 digits, e.g., 3-7-2-4 or 6-4-8-5. May indicate correct response verbally or by use of flash cards.
23. Matches 10 animal sounds to appropriate picture.
24. Imitates tapping by examiner—3, 2, and 4 taps (must do all 3 to pass item).
25. Distinguishes left and right and follows simple directions, e.g., “Put your left hand on your left foot”.
26. Given 10 items, counts out requested number of items for 3 of the following: 5, 8, 3, 7.
Gross Motor
SUGGESTED EQUIPMENT LIST FOR GROSS MOTOR

0 – 6 Months

None required

6 Months – 1 Year

Favorite toy or object

1 – 2 Years

Stairs with railing
Large playground ball
Three-wheeled kiddie car

2 – 4 Years

Small ball, 3" diameter
Large playground ball
Door with doorknob
Tricycle
Stairs with railing
Chalk or tape for drawing circle on floor

4 – 6 Years

Step or stool with 12" riser
Small ball, 3" diameter
Stairs with railing
Ladder
Gross Motor

0 — 6 Months

1. Lies prone—holds head up off surface at about 45 degrees for 1 minute.
2. Bears weight on forearms with legs extended for 1 minute.
3. Holds midline head position when pulled to sitting.
4. Rolls prone to supine (shifting weight onto 1 forearm while legs are extended).
5. Rolls supine to prone.
6. Sits using extended arms and hands for support for 1 minute.

6 Months — 1 Year

7. Moves from prone to sitting position and back to prone position.
8. Sits unsupported, using arms for protective extension (pupil must pass a., b., c.): 
   a. Protective extension develops 6-8 months—forward.
   b. Protective extension develops 7-8 months—sideways.
   c. Protective extension develops 10 months—backward.
9. Pivots and rotates trunk while sitting (reaching for objects in front, to each side, to the back).
10. Crawls on abdomen with legs extended mostly pulling with arms.
11. Assumes all fours position by pushing feet against an object and then pushing up on his bottom or by sitting
    and progressing to all fours by going forward over flexed, abducted legs.
12. Creeps forward on all fours.
13. Pulls to a standing position initially using arms more than legs.
14. Walks, holding onto furniture (cruising sideways).
15. Walks with minimum assistance (forward stepping). Hands are held with wide base of support, and feet turned
    out, waddling for security.

1 — 2 Years

16. Creeps quickly with good coordination approximately 12'.
17. Climbs stairs on hands and knees.
18. Kneels on both knees without support.
19. Walks well unaided.
20. Rolls ball forward with push motion.
21. Goes up stairs holding rail, no alternation of feet.
22. Walks backwards at least 5 consecutive steps.
23. Jumps in place—in rhythm, using 2 feet together.
24. Rides 3 wheeled kiddie car controlling direction and speed.
25. Jumps forward using 2 feet together.

2 — 4 Years

26. Throws small ball (3” diameter) 3' to 5'.
27. Kicks ball forward from standing position.
28. Turns door knob—opens door.
29. Pedals tricycle 20'.
30. Balances on 1 foot for 1 second.
31. Alternates feet going upstairs (can use rail).
32. Broad jumps 8½”.
33. Bounces ball awkwardly and catches.
34. Walks on a line around periphery of circle.
35. Somersaults independently.
36. Hops 3 times on preferred foot.
37. Gallops and slides in rhythm.
4 — 6 Years

38. Broad jumps at least 24”.
39. Jumps from height of 12”, recovers to feet.
40. Skips on 1 foot (steps on the other).
41. Throws ball overhand—using 1 hand.
42. Descends steps with alternation of feet.
43. Catches small ball (3”)—elbows in front of body.
44. Stands on alternate feet for 5 seconds, eyes closed.
45. Jumps backwards.
46. Throws ball 14’-17’ with step and weight shift (tennis ball or small sponge ball).
47. Ascends large ladder alternating feet.
48. Walks well, swings arms and legs freely, in reciprocal pattern.
49. Skips, alternating feet.
50. Stands on 1 foot for 10 seconds.
51. Jumps from 12” height, landing on toes only.
SUGGESTED EQUIPMENT LIST FOR FINE MOTOR

0 - 6 Months
Penlight or favorite toy for fixation and tracking

6 Months - 1 Year
Small toys, 1 with yarn attached
Paper
Pellets, e.g., raisins, fruit loops
2 cubes
Bottle with small opening
Box or cup

1 - 2 Years
Pellets, e.g., raisins, fruit loops
Small toys
Four 2" alphabet blocks
Bottle with small opening
Three-shape geometric form board with forms
Crayon
Paper
Pegboard with large pegs
Book
Three 1" cubes

2 - 4 Years
Ten 1" cubes
Door with doorknob or jar with lid
3 large beads and plastic clothesline
Crayon
Paper
Three-shape geometric form board with forms
Scissors

4 - 6 Years
Ten 1" cubes
Crayon
Paper
Scissors
Spool with 6½' of thread
Paste
Hammer and large nails
20 coins
Box
Fine Motor

0 — 6 Months
1. Looks directly at object—prolonged fixation.
2. Follows object with eyes to midline.
3. Keeps hands open—plays with them and looks at them.
4. Visually scans immediate environment.
5. Keeps hands at midline predominantly.
6. Uses forearm pronation when reaching.

6 Months — 1 Year
7. Uses first voluntary grasp of palmar type (holds toy in center of palm with all fingers).
8. Crumples paper.
10. Passes toy from hand to hand.
11. Rakes pellet with whole hand.
12. Bangs toy up and down on table or floor.
13. Holds toy by string, if string is contacted by hand.
14. Bangs 2 cubes together (1 held in each hand).
15. Uses thumb and index finger in a scissor-like grasp. Thumb is used in the same plane as the fingers (uses sides of finger and thumb). See illustration.
16. Releases objects voluntarily.
17. Pokes at things with index finger.
18. Takes toy out of box or cup.

1 — 2 Years
19. Uses neat pincer-grasp—index finger in opposition to thumb, not resting arm or hands on table. (Use raisins or fruit loops.)
20. Controls supination when holding hand out to accept object from teacher. Controls pronation when picking up object from the table.
21. Attempts tower of 2 objects. (Use play items such as nesting boxes, building blocks, or 2” alphabet blocks.) The second block does not have to remain in position on top of first block.
22. Picks up 2 small toys in 1 hand at the same time deliberately.
23. Builds a 2 object tower. (Use play items such as nesting boxes, building blocks, or 2” alphabet blocks.) See illustration.
24. Begins to show strong hand preference 75% of the time.
25. Puts pellet in bottle when asked. (Use raisins, fruit loops, or similar small edible object.)
26. Inserts round shape in form board.
27. Dumps pellet from bottle spontaneously. (Use raisins, fruit loops, or similar small edible object.)
28. Scribbles with crayon on paper spontaneously.
29. Places pegs in peg board, and takes them out. (Use large pegs with bulbous heads.)
30. Builds tower of four 2” alphabet blocks. See illustration.
31. Places 2 or 3 geometric shapes in form board.
32. Turns pages of a book 1 at a time.
33. Imitates vertical and circular strokes on paper.
34. Imitates a train with 3 cubes (with demonstration). (Place three 1” cubes in a row.) See illustration.
2 – 4 Years

35. Builds a tower of five or six 1" cubes.
36. Turns doorknob demonstrating wrist rotation.
37. Strings beads—2 or 3 beads on plastic clothesline.
38. Holds crayon in fingers rather than fist.
39. Adds chimney to train—aligns three 1" cubes, then adds fourth cube for chimney (with demonstration). See illustration.
40. Builds tower of eight 1" cubes.
41. Imitates horizontal stroke on paper (with demonstration).
42. Imitates circle on paper (with demonstration).
43. Builds tower of nine or ten 1" cubes.
44. Copies circle on paper (present model).
45. Imitates cross (with demonstration).
46. Imitates bridge with three 1" cubes (with demonstration). See illustration.
47. Places forms in 3-shape geometric form board correctly.
48. Completes 3-shape geometric form board if board is rotated.
49. Snips with scissors. Cuts corners from paper—one cut only.
50. Copies bridge of 1" cubes (present model). See illustration.
51. Copies cross on paper (present model).
52. Imitates square on paper (with demonstration).

4 – 6 Years

53. Imitates gate with 1" cubes (with demonstration). See illustration.
54. Is aware of 2 sides of body; can name or point to body parts.
55. Copies square on paper (present model).
56. Imitates triangle on paper (with demonstration).
57. Tries to cut straight line with scissors.
58. Picks longer of 2 lines 3 out of 4 times. (Length must be markedly different.)
59. Imitates making steps with 1" cubes (present model). See illustration.
60. Draws a person with 3 parts—differentiated, head with nose, eyes; other facial features may be included; may draw arms and legs. (Paired parts count as “one”—2 arms, 2 legs, 2 ears, etc.)
61. Copies triangle on paper (present model).
62. Copies gate made with 1" cubes (present model). See illustration.
63. Touches each finger to thumb in succession.
64. Connects dots 8" apart with pencil or crayon on paper.
65. Winds 6½' of thread on a spool in 20 seconds.
66. Draws a person with 6 parts. (Paired parts count as “one”—2 arms, 2 legs, 2 ears, etc.)
67. Stabilizes paper with non-dominant hand when scribbling or drawing.
68. Cuts straight line with scissors; puts paste on back of picture, turns it over and presses down; hammers nail with a large head (may not do it well). Must do all 4 to pass item.
69. Draws simple house or prints first name.
70. Places 20 coins in a box in under 20 seconds with preferred and non-preferred hand. (Two tries with each hand. Must complete task with both hands.)
Self Help
Grooming/Toileting
SUGGESTED EQUIPMENT LIST FOR SELF-HELP - GROOMING AND TOILETING

0 - 6 Months
Water
Washcloth

6 Months - 1 Year
Baby pool, or large basin with water, toys, soap, and washcloth
Towel

1 - 2 Years
Water
Soap
Towel
Hairbrush

2 - 4 Years
Soap
Sink with water faucet
Toothbrush and toothpaste

4 - 6 Years
Hairbrush
Toothbrush and toothpaste
Sink with water faucet
Towel
Grooming and Toileting

0 - 6 Months
1. Resists washing of face.
2. Cries when wet.

6 Months - 1 Year
3. Stays dry for 2 hours at a time.
4. Permits washing and drying of face and hands.
5. Likes to splash with hands in basin or bath.
6. Plays with toys, soap, wash cloth in water.

1 - 2 Years
7. Assists by making washing and drying motions.
8. Stays dry for progressively longer periods of time—2-3 hours while awake.
9. Has bowel movement same time each day.
10. Attempts independent hand washing.
11. Imitates hair brushing.
12. Remains dry during nap, then urinates large amounts upon waking, either in diaper or in potty. (The concern is increase in bladder retention.)

2 - 4 Years
13. Uses soap appropriately.
14. Turns on water; is interested in fixtures.
15. Frequently urinates in potty. Has bowel movement in potty if placed there when he or she indicates need to go.
16. Washes hands with minimal assistance and turns water on and off.
17. Accepts assistance in brushing teeth.
18. Urinates in potty with reminder. Has bowel movement in potty with accidents less frequent.
19. Indicates need for potty by gesture or verbalization.
20. Attempts to wipe self after bowel movement.

4 - 6 Years
22. Attempts to brush teeth; needs some assistance.
23. Uses toilet with minimal assistance; sometimes goes alone without notifying adult.
24. Washes and dries hands and face without assistance.
25. Brushes hair without assistance.
27. Goes to toilet unattended—may need reminder to wipe after bowel movement.
28. Carries out toileting functions independently.
Dressing
SUGGESTED EQUIPMENT LIST FOR SELF-HELP - DRESSING

0 - 6 Months
Student's own clothes

6 Months - 1 Year
Student's own clothes
Hat
Socks
Shirt or sweater
Pants

1 - 2 Years
Shirt or sweater
Pants
Jacket
Clothing with zipper

2 - 4 Years
Shoes
Socks
Pants
Shirt
Poncho, apron, or oversized T-shirt
Coat or dress
Coat hook
Clothing with large buttons or button board

4 - 6 Years
Clothing with large buttons or button board
Shoes with laces
Student's own clothes
Self-Help — Dressing

0 — 6 Months
1. Resists dressing.
2. Raises hips for diaper change.

6 Months — 1 Year
3. Exhibits less resistance to being dressed and undressed.
4. Assists in undressing; helps in final motion.
5. Takes off hat and socks.
6. Cooperates in dressing—holds out arm for sleeve, extends leg for pants.

1 — 2 Years
7. Brings arm to sleeve in dressing.
8. Actively helps in undressing self.
10. Assists with dressing—helps with pants, shirt, sweater, jacket.
11. Undresses with adult assistance for one-half of clothing.
12. Unzips zipper.

2 — 4 Years
13. Removes shoes, socks, pants in appropriate sequence.
14. Attempts to put on some clothes independently—may put both legs in 1 pant leg or get shirt on backwards.
15. Pulls on simple garment independently (poncho, apron).
16. Finds sleeve independently when dressing and pushes arm through.
17. Removes coat or dress independently (may need some help with buttons).
18. Puts on shoes and socks (may put shoe on wrong foot).
19. Hangs coat on hook independently.
20. Attempts unbuttoning and buttoning, but doesn’t get button through hole.

4 — 6 Years
21. Unbuttons large buttons.
22. Attempts to lace shoes, usually incorrectly.
23. Dresses with little assistance if clothes are laid out (except for buttoning).
24. Distinguishes front from back of clothing.
25. Dresses self except for back fasteners.
26. Buckles shoes or laces them, but does not tie laces.
27. Buttons clothing.
Feeding
SUGGESTED EQUIPMENT LIST FOR SELF-HELP - FEEDING

0 - 6 Months

Textured, non-liquid food, e.g., cereal
Cup with milk or other liquid

6 Months - 1 Year

Non-liquid foods, e.g., cereal
Lumpy foods, e.g., cottage cheese, mashed foods
Finger foods, e.g., pretzels
Spoon
Bottle with milk or other liquid

1 - 2 Years

Cup with milk or other liquid
Spoon
Solid food, cut up

2 - 4 Years

Finger foods, e.g., pretzels
Spoon
Cup with milk or other liquid
Table food
Fork
Glass with milk or other liquid
Pitcher or carton with liquid for pouring
Cup with handle

4 - 6 Years

Fork
Glass
Pitcher or carton with liquid for pouring
Table food
Napkin
Knife
Sandwich
Bread and butter
Self-Help — Feeding

0 — 6 Months
1. Resists textured foods.
2. Sips from cup.

6 Months — 1 Year
3. Accepts some non-liquid foods (cereal), but not lumpy foods.
4. *Imitates* protrusion of tongue—a voluntary sticking out of tongue. (A cerebral palsy tongue thrust is not scored as passing.)
5. Accepts and swallows some lumpy foods (cottage cheese, mashed foods; no meat or raw vegetables). Eats some dry finger foods.
6. Holds spoon, holds own bottle; will pick bottle up, if desired, and finish it.

1 — 2 Years
7. Attempts to hold cup to drink, using 2 hands.
8. Allows adult to manipulate him or her through feeding while holding spoon.
9. Chews and swallows small pieces of solid food.
10. Fills spoon, inserts in mouth with considerable spilling.
11. Holds cup with both hands, apt to tip too quickly and spills liquid.
12. Uses spoon, spilling little.

2 — 4 Years
13. Eats finger foods independently.
15. Drinks from cup and returns it to table without spilling.
17. Begins to pierce food with fork rather than scooping.
18. Holds glass steadily in 1 hand. Pours from pitcher with assistance. (Must pass both items.)
20. Drinks from cup neatly. Holds cup by handle.

4 — 6 Years
21. Uses fork appropriately and easily.
22. Pours from another container, refilling glass.
23. Helps set table by placing silverware and napkin in close approximation to appropriate placement.
24. Conforms to appropriate table manners—uses napkin.
25. Uses knife to spread.
26. Accepts and chews table food of a variety of textures and temperatures (food may be cut up or fork-mashed, but not ground).
27. Eats most sandwiches with minimal loss of contents.
28. Prepares simple foods with minimal assistance if no measurement is required. (Puts cereal in bowl and adds in appropriate amount of milk; or, spreads butter on graham cracker or slice of bread.)
Socialization
SUGGESTED EQUIPMENT LIST FOR SOCIALIZATION

0 - 6 Months

Mirror

6 Months - 1 Year

Cloth for peek-a-boo
Small, soft toy
Mirror

1 - 2 Years

Favorite toys
Mirror
Toy box or carton

2 - 4 Years

Toys for domestic make-believe play, e.g., broom, pots and pans
Storybook
Tray with two unbreakable objects on it

4 - 6 Years

Adult clothes
Floor games, e.g., cars, construction toys
Table games, e.g., Bingo for matching, sorting games
Building blocks
Large clock
Socialization

STANDARD SEQUENCE

0 — 6 Months
1. Rotates head to inspect surroundings.
2. Smiles responsively.
3. Laughs aloud.
4. Responds to person-to-person contact (differentiates between being held or left alone).
5. Is shy with strangers; seeks protection of care giver. May cry when left.
6. Smiles and/or "talks" to self if put close to mirror.

6 Months — 1 Year
7. Plays peek-a-boo.
8. Likes to touch and explore other children.
9. Resists toy pull (when playing with toy).
10. Imitates pat-a-cake or other nursery games without understanding words.
11. Reaches for image in mirror.
12. Holds out arm or leg for dressing.
13. Is attentive to individual at close range.
15. Reaches for familiar persons.
16. Reacts meaningfully to the calling of his or her name.

1 — 2 Years
17. Perceives and communicates emotional states through facial expression and/or gesture.
18. Offers toy to own image in mirror or to other person's image.
19. Imitates simple actions (grooming, household tasks).
20. Repeats attention-getting behaviors.
22. Picks up and puts away toys in toy box or carton.
23. Enjoys going out for short walks.
24. Communicates desires by pointing and vocalizing.

ALTERNATIVE SEQUENCE FOR THE PHYSICALLY HANDICAPPED

0 — 6 Months
1. Reacts to paper placed on face.
2. Smiles responsively.
3. Laughs aloud.
4. Responds to person-to-person contact (differentiates between being held or left alone).
5. Is shy with strangers; seeks protection of care giver. May cry when left.
6. Smiles and/or "talks" to self if put close to mirror.

6 Months — 1 Year
7. Exhibits pleasure with care giver.
8. Likes to be touched and explored by other children.
9. Is comforted by particular object in stressful situation or when tired.
10. Enjoys game of creep-mouse with care giver (walk fingers up child's arm, over shoulder to neck).
11. Responds to image in mirror.
12. Responds socially with care giver when being fed or having diaper changed.
13. Is attentive to individual at close range.
15. Recognizes familiar persons approaching from 20' or more.
16. Reacts meaningfully to the calling of his or her name.

1 — 2 Years
Items 17-54 same for both sequence.
2 – 4 Years (Items same for both sequences)

25. Seeks out other children to play near but does not interact with them.
26. Separates from mother easily. Must be preceded by Socialization item #5.
27. Plays interactive games (ring around the rosy, etc.).
29. Listens attentively to stories (in small groups).
30. Indicates desire for favorite stories or songs.
31. Understands taking turns.
32. Shows affection for younger schoolmates.
33. Curries a tray with 1 or 2 unbreakable objects on it.
34. Tries to help with adult activities in house or garden.
35. Performs for others (singing, finger play, signing, etc.).
36. Engages in pretend play.
37. Understands sharing of toys.
38. Goes on errands outside room.

4 – 6 Years (Items same for both sequences)

39. Enjoys dressing up in adult clothes.
40. Plays competitive movement games or races.
41. Shows concern and sympathy for others by vocalization or by facial expression.
42. Begins to show assertiveness and standing-up for self. May become aggressive with playmates.
43. Calls attention to own performance.
44. Comforts playmates in distress by hugging and patting.
45. Understands simple rules and fair play.
46. Respects property.
47. Plays complicated floor games (cars, construction toys).
48. Chooses own friends.
49. Plays simple table games (sorting, matching).
50. Plans and builds constructively, e.g., house or road of blocks.
51. Explores neighborhood with parents.
52. Relates clocktime to daily schedule, e.g., lunchtime means both hands straight up on clock.
53. Plays constructively and cooperatively with minimal supervision.
54. Conforms to adult rules—exhibits acceptable behavior in lunch room, hall/class change, homeroom, bus, etc.
Recording Forms
DEVELOPMENTAL ACHIEVEMENT WHEEL

home/school assessment
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<th>GROSS MOTOR</th>
<th>FINE MOTOR</th>
<th>SELF HELP</th>
<th>SOCIALIZATION</th>
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**DEVELOPMENTAL ACHIEVEMENT WHEEL WORKSHEET**

**PUPIL:**

**SCHOOL YEAR:**

**COGIMON**

**Verbal Experiential**

**Non-Verbal Experiential**

**Receptive**

**Expressive**

**Expressive**

**GROSS MOTOR**

**FINE MOTOR**

**Grooming & Toileting**

**Dressing**

**Feeding**

**SOCIALIZATION**

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**50**

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**51**