TEST GLOSSARY

1. AUTISM DIAGNOSTIC OBSERVATION SCHEDULE (ADOS)

The ADOS is a semi-structured assessment to be used across ages, developmental levels and language levels. There are four modules (each with a specific set of activities that allow for the observation of social and communication behaviors related to the diagnosis of an autism spectrum disorder). The choice of module is based on the individual's expressive language level and chronological age. The activities in each module provide interesting, standard contexts in which interaction can occur.

2. BAYLEY SCALES OF INFANT AND TODDLER DEVELOPMENT-3RD EDITION (BSI&TD-III)

(Standardized developmental measure for children from birth to age 3 ½ years)

The Bayley-III assesses skills in cognitive, language and motor areas. The scores indicate how well a child performs compared to a group of children within the same age range from across the United States. Although the Bayley-III is a test of development, a child's scores on this test can be influenced by motivation, attention, interests and opportunities for learning.

The Cognitive Scale looks at how a child thinks, reacts and learns about the world around him or her.

- Infants are given tasks that measure their interest in new things, their attention to familiar and unfamiliar objects and how they play with different toys.
- Toddlers are given items that examine how they explore new toys and experiences, how they solve problems, and their ability to complete puzzles.
- Preschool-age children are given items that measure pretend play and activities, such as building with blocks, color matching, counting and solving more complex puzzles.

The Language Scale has a receptive and expressive part.

The Receptive Communication Scale looks at how well a child recognizes sounds and how much the child understands spoken words and directions.

- Infants are given items that measure their recognition of sounds, objects and people in the environment
- Toddlers are given items that ask them to identify pictures and objects, follow simple directions, and perform social routines, such as "wave bye."
- Preschool-age children are asked to follow more complex directions, identify action pictures and are given items that measure their understanding of basic grammar.

The Expressive Communication Scale looks at how well a child communicates using sounds, gestures or words.

- Infants are observed throughout the assessment for various forms of non-verbal expressions, such as smiling, jabbering expressively and laughing.
- Toddlers are given opportunities to use words by naming objects or pictures and answering questions.
- Preschool-age children are also given opportunities to use words and to answer more complex questions.

The Motor Scale has a fine motor and gross motor part.

The Fine Motor Scale looks at how well a child can use his or her hands and fingers to make things happen.

- Infants are assessed for muscle control such as following movement with their eyes, bringing a hand to their mouth and reaching for and/or grasping an object.

- Toddlers are given the opportunity to demonstrate their ability to perform such tasks as stacking blocks, drawing simple shapes and placing small objects such as coins in a slot.
- Preschool-age children are asked to draw more complex shapes, build simple block structures and use scissors to cut paper.

The Gross Motor Scale looks at how well a child can move his or her body.

- Infants are assessed for head control and their performance on activities such as rolling from side to side, sitting upright and crawling motions.
- Toddlers are given items that measure their ability to crawl, make stepping motions, support their own weight, stand and walk without assistance.
- Preschool-age children are given a chance to demonstrate their ability to climb stairs, run, maintain balance, kick a ball and other activities requiring full body control or coordination.

3. BEERY-BUKTENICA DEVELOPMENTAL TEST OF VISUAL-MOTOR INTEGRATION-5TH EDITION: SHORT FORM (VMI-V)

The child is required to copy geometric designs of increasing complexity. It is a measure of graphomotor and perceptual integration skills. The VMI measures graphomotor skill (normed for ages 3-0 to 17-11).

4. CHILDREN'S APPERCEPTION TEST-ANIMAL FIGURES (CAT-A)

The CAT-A is a projective personality test used to assess individual variations in children's responses to 10 standard picture cards of animals in common social situations. The theory is that a child's responses to a series of drawings of animals in familiar situations are likely to reveal significant aspects of his or her personality. Story responses are analyzed to uncover the child's underlying needs, conflicts, emotions, attitudes and behavioral patterns.

5. CHILDHOOD AUTISM RATING SCALE-2ND EDITION: STANDARD VERSION (CARS2-ST)

The CARS2-ST is a 15-item behavioral rating scale developed to identify children with autism and determine symptom severity through quantifiable ratings based on direct observation. The 15 behaviors rated are: relating to people, imitation, emotional response, body use, object use, adaptation to change, visual response, listening response, taste, smell and touch response and use, fear or nervousness, verbal communication, non-verbal communication, activity level, level and consistency of intellectual response and general impression. Each behavior is given a rating from 1 to 4 based on specific criteria (1 = within normal limits, 2 = mildly abnormal, 3 = moderately abnormal, 4 = severely abnormal). The overall score may range from a low of 15 to a high of 60. Scores of 30 and above are categorized in the autistic range.

6. CONNERS' CONTINUOUS PERFORMANCE TEST-2nd EDITION (CPT-II)

The CPT-II is a computerized assessment of sustained attention. During a 14 minute test interval, the child presses the space bar or clicks the mouse whenever any letter *except* the letter "X" appears on the screen. The speed at which the letters are presented varies during the test interval. The computer program then compares reaction times, hits, misses and errors to the performance of children with and without attentional difficulties. It also analyzes the child's response style.

7. CONNERS' CONTINUOUS PERFORMANCE TEST: KIDDIE VERSION (K-CPT)

The K-CPT follows the same basic paradigm as the CPT-II (see above), but it is tailored for children age 4-5. The test interval is 7 minutes long, and pictures of objects rather than letters are presented on screen.

8. CONNERS' RATING SCALES-REVISED (S) SHORT FORM (PARENT AND TEACHER FORM)

The Conners' Rating Scales use parent and teacher ratings to help assess attention deficit/hyperactivity (ADHD) and evaluate problem behavior in children and adolescents. The scales are: Opposition, Cognitive Problems/Inattention; Hyperactivity and ADHD Index.

9. CONTROLLED ORAL WORD ASSOCIATION

The child is required to name words within categories a quickly as possible within a time limit. There are two classes of categories within this task: 1) words beginning with a certain letter (**F, A, or S**) and 2) words naming items within a semantic category (**animals, types of foods, types of jobs**). This is an assessment of efficiency and flexibility in retrieving verbal information.

10. DELIS-KAPLAN EXECUTIVE FUNCTIONING SYSTEM (D-KEFS)

The D-KEFS is a standardized battery of executive functioning tests. Executive functioning is the ability to control and apply primary cognitive skills in a planned efficient fashion.

11. EXPRESSIVE ONE-WORD PICTURE VOCABULARY TEST (EOWPVT)

EOWPT requires the child to name the object, category of objects or actions depicted in a series of pictures. This is an assessment of expressive vocabulary skills.

12. FINGER TAPPING TEST

The child is required to tap a button as rapidly as possible within a time limit. This is an assessment of motor speed.

13. GRAY ORAL READING TEST

The child is required to read stories aloud and then answer multiple-choice comprehension questions. The **speed** and **accuracy** of the reading are scored individually and then combined to generate a **passage score**. The ability to answer **comprehension** scores correctly is also scored. GORT is a comprehensive measure of reading skills.

14. HOOPER VISUAL ORGANIZATION TEST

The child is shown fragmented pictures of common items. The child is required to name the item. This is a test of visual synthesis skills.

15. LEITER INTERNATIONAL PERFORMANCE SCALE: SUSTAINED ATTENTION

The child is required to find visual targets and cross them out within a time limit. This is an assessment of ability to sustain visual attention.

16. LEITER INTERNATIONAL PERFORMANCE SCALE-REVISED: VISUALIZATION AND REASONING BATTERY

The Leiter offers a completely non-verbal measure of intelligence (normed for ages 2-0 to 20-11) ideal for use with those who are cognitively delayed, disadvantaged, non-English speaking, hearing impaired, speech impaired, or autistic.

Ten subtests form the Visualization and Reasoning Battery and measure traditional intelligence constructs such as reasoning, visualization, and problem solving.

1. *Figure Ground:* Identification of embedded figures or designs within a complex stimulus.
2. *Design Analogies:* Classical "matrix analogies" items using geometric shapes, including 2 by 2, 4 by 2, and more complex matrices. Some of the more difficult items include mental rotation of figures; hence the relationship of this subtest to spatial ability.
3. *Form Completion:* Ability to recognize a "whole object" from a randomly-displayed array of its fragmented parts.
4. *Matching:* Discrimination and matching of visual stimuli; selection of response cards or manipulative shapes that match easel stimuli.
5. *Sequential Order:* Logical progressions of pictorial or figural objects; selection of related stimuli that progress in a corresponding order.
6. *Repeated Patterns:* Patterns of pictorial of figural objects which are repeated. Child supplies "missing" portion of pattern by moving response cards into alignment with easel.
7. *Picture Context:* Ability to recognize a pictured object that has been removed from a larger display using visual contextual clues.
8. *Classification:* Categorization of objects or geometric Designs.
9. *Paper Folding:* Ability to mentally "fold" an object displayed in 2-dimensions- unfolded- and to match it to a target.
10. *Figure Rotation:* Mental rotation of a 2- or 3-dimensional object or geometric figure.

17. PEABODY PICTURE VOCABULARY TEST-REVISED (PPVT-R)

The PPVT-R requires the child to identify an object or action from an array of four pictures. The PPVT-R measures single word vocabulary comprehension (normed for ages 2-6 to 40-11).

18. PURDUE PEGBOARD

The child is required to place pegs into a pegboard within a time limit. It is an assessment of fine motor control.

19. RAVENS

The child is shown incomplete visual patterns. The child is required to select the piece from an array that completes the pattern. This is a measure of non-verbal reasoning.

20. RECEPTIVE ONE-WORD PICTURE VOCABULARY TEST

ROWPT requires the child to listen to a word and indicate the matching image from an array of four. This is an assessment of receptive vocabulary skill.

21. RORSCHACH INKBLOT TEST (RORSCHACH)

The Rorschach is a projective personality test in which an individual's interpretations to 10 standard abstract designs (inkblots) are analyzed as a measure of emotional and intellectual functioning and integration. Each blot has a unique and specific form, color or texture that tends to evoke certain usual answers or call forth idiosyncratic responses. Because the blots all have some degree of ambiguity, the interpretation given to each card is assumed to derive from the respondent. What the respondent adds to the material through his or her associations serves as the basis for understanding defenses, as well as cognitive, affective and ego functioning.

22. SOCIAL LANGUAGE DEVELOPMENT TEST: ELEMENTARY

The Social Language Development Test is an assessment of social language skills. Tasks focus on language-based skills of social interpretation and interaction with friends.

23. STANFORD-BINET INTELLIGENCE SCALE-5th EDITION (SB-V)

The Stanford-Binet is a standardized instrument of cognitive function (normed for ages 2-0 to 85-0). An overall summary I.Q., non-verbal IQ, verbal IQ and five summary factor scores is generated (fluid reasoning, knowledge, quantitative reasoning, visual-spatial processing and working memory. The types of tests given on the Stanford-Binet vary by a child's age and ability.

Fluid Reasoning

Non-verbal Fluid Reasoning

Object Series: The child uses manipulatives to match shapes and to complete sequences and patterns. Measures non-verbal problem solving.

Matrices: The child looks at an incomplete pattern and selects the missing portion from response options. Measures inductive reasoning.

Verbal Fluid Reasoning:

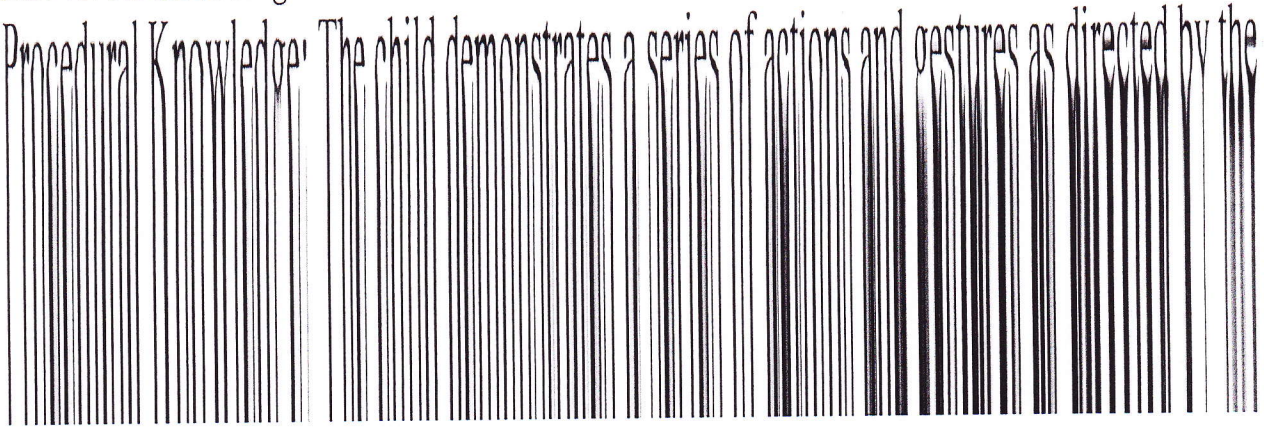
Early Reasoning: The child initially describes cause and effect relationships depicted in illustrations. Measures language development and problem solving.

Early Reasoning (Sorting): The child sorts pictorial objects by similarities in form and function and names the similarity within a time limit. Measures language development and ease of associative thinking.

Verbal Absurdities: The child has to explain what is "silly or impossible" about absurd premises read aloud to them. Measures language development.

Verbal Analogies: The child is read incomplete verbal analogies and has to supply the missing words. Measures language development and inductive reasoning.

Knowledge
Non-verbal Knowledge



Verbal Analogies: The child is read incomplete verbal analogies and has to supply the missing words. Measures language development and inductive reasoning.

Knowledge
Non-verbal Knowledge
Procedural Knowledge: The child demonstrates a series of actions and gestures as directed by the examiner. Measures language comprehension and development.

Picture Absurdities: The child describes what is wrong or silly about illustrations of absurd situations. Measures language development.

Verbal Knowledge
Vocabulary: The child points to body parts named by the examiner, names objects, illustrated actions, and, finally, printed word read aloud by the examiner. Measures word knowledge.

Quantitative Reasoning
Non-verbal Quantitative Reasoning: The child solves visually-presented problems involving number recognition, addition, estimation, completion of figural and numerical series and quantitative problems presented in illustrations. Measures mathematical knowledge and quantitative thinking skills.

Verbal Quantitative Reasoning: The child solves verbally-presented problems involving numbering, counting, addition, subtraction, mathematical reasoning, and multiplication. Measures mathematical knowledge and quantitative thinking skills.

Visual-Spatial Processing
Non-verbal Visual-Spatial Processing
Form Board: The child inserts geometric shapes into a form board. Measured visual-spatial skills.

Form Patterns: The child replicates pictures using geometric shapes. Measures visual-spatial skills.

Verbal Visual-Spatial Processing
Position and Direction: The child demonstrates comprehension of spatial and directional concepts by following instructions read by the examiner based on illustrations and maps. Measures language comprehension and development.

Working Memory
Non-verbal Working Memory
Delayed Response: The child recalls the location of hidden objects. Measures short-term visual memory.

Block Span: The child recalls and then sorts sequences of block taps. Measures the ability to retain and manipulate visual information.

Verbal Working Memory
Memory for Sentences: The child repeats sentences of increasing length and semantic complexity. Measures memory span.

Last Word: The child responds to a series of questions and then sorts the last word in question. Measures the ability to retain and manipulate auditory information.

24. THEMATIC APPERCEPTION TEST (TAT)

The TAT is a projective personality test intended to evaluate a person's patterns of thought, attitudes, observational capacity and emotional responses to a set of standard cards that portray human figures in a variety of settings and situations. The person is asked to tell a story about each card. In addition to assessing the content of the stories told, the examiner evaluates the respondent's manner, vocal tone, posture, hesitations and other signs of emotional response to a particular picture card.

25. TEST OF WRITTEN LANGUAGE-4th EDITION (TOWL-IV)

The TOWL-4 is a standardized assessment of written skills that measures conventional, conceptual and linguistic aspects of writing ability.

26. TOKEN TEST

The child is read instructions of increasing length and complexity. The child executes each instruction with tokens of varying shape, size, and color. This is a test of receptive language comprehension.

27. TRAIL MAKING

The child is required to draw a path connecting targets distributed across a page. In **Trails A**, the child connects numbered targets in numerical order. This is an assessment of visual scanning skill. In **Trails B**, the child connects numbered and lettered targets, alternating between numerical and alphabetic order (1, A, 2, B…). This is an assessment of efficiency and flexibility in switching between different types of information.

28. VINELAND ADAPTIVE BEHAVIOR SCALES-2ND EDITION (VABS-II)

The Vineland measures adaptive behavior skills in specific domains (communication, daily living skills, socialization, and motor) via a structured parent-based interview (normed for ages from infancy to adulthood). Adaptive behavior is the performance of the day to day activities necessary to take care of oneself and get along with others. It is age-based and defined by the expectations and standards of others. Adaptive behavior represents the typical performance rather than the potential ability of the person – what a person does as opposed to what a person is capable of doing.

29. WECHSLER INDIVIDUAL ACHIEVEMENT TEST-3RD EDITION (WIAT-III)

The WIAT-III is a standardized measure of academic skills for ages 4 through 85.

Reading Subtests

Word Reading: The child identifies letters, identifies and generates rhyming words, identifies beginning and ending sounds, matches sounds with letters and reads individual words. This is a measure of pre-reading skills and decoding ability.

Reading Comprehension: The child reads sentences and passages of increasing length and responds to questions about content. This is a measure of reading comprehension.

Pseudoword Decoding: The child reads nonsense words aloud. This is a measure of phonological awareness.

Mathematics Subtests

Numerical Operations: The child demonstrates knowledge of written numbers and solves written math facts. This is a measure of pre-calculation and calculation skills.

Math Reasoning: The child applies mathematical operations to solve illustrated and dictated mathematical problems. This is a measure of conceptual math skills.

Written Language Subtests

Spelling: The child writes dictated sounds, letters and words. This is a test of early spelling concepts and spelling skills.

Written Expression: The child writes the alphabet and conceptually related words within a time limit. The child also produces sentences, paragraphs and essays based on verbal and visual cues. This is a test of writing fluency, mechanics and concepts.

Oral Language Subtests

Listening Comprehension: The child listens to verbal information and demonstrates comprehension with verbal or motoric responses. This is a measure of receptive comprehension.

Oral Expression: The child generates words in response to a verbal prompt, repeats sentences of increasing length, creates stories based on cartoon-like pictures and gives verbal directions based on pictures. This is a measure of expressive language skill.

30. WECHSLER INTELLIGENCE SCALE FOR CHILDREN-4TH EDITION (WISC-IV)

The WISC-IV is a standardized measure of cognitive function designed to be used with children from age 6 to 16-11. Five I.Q. summary scores are generated: Verbal Comprehension Index., Perceptual Reasoning Index, Working Memory Index, Processing Speed Index and Full Scale I.Q.

Verbal Comprehension Index
Similarities: The child is presented with two words that represent common objects or concepts and describes how they are similar. Measures language development and problem solving.

Vocabulary: For Picture Items, the child names pictures. For Verbal Items, the child defines individual words read by the examiner. Measures word knowledge.

Comprehension: The child answers questions about general principals and social situations. Measures language development and learned knowledge.

Information (Supplemental): The child answers general knowledge questions. Measures knowledge acquired through academic and cultural experiences.
Word Reasoning (Supplemental): The child identifies the concepts described by increasingly specific clues. Measures language development and problem solving.

Perceptual Reasoning Index
Block Design: The child views a constructed model or a picture and uses red and white blocks to recreate the designs within a specified time limit. Measures the ability to perceive and manipulate visual patterns as well as motor control.

Picture Concepts: The child looks a two or three rows of pictures and chooses one picture from each row to form a group with a common characteristic. Measures inductive reasoning.

Matrix Reasoning: The child looks at an incomplete pattern and selects the missing portion from four or five response options. Measures inductive reasoning.

Picture Completion (Supplemental): The child names or points to important features missing from pictures within a time limit. Measures the ability to organize incomplete visual information into meaningful wholes.

Processing Speed Quotient
Coding: The child copies symbols paired with simple geometric shapes or numbers. Using a key, the child draws each symbol in its corresponding shape or box within a time limit. Measures speed of perception and processing.

Symbol Search: The child scans a group of symbols and indicates whether the target symbol(s) matches any of the symbols in the search group or not. Measures speed of perception and processing.

Cancellation (Supplemental): The scans arrangements of pictures and marks target pictures within a time limit. Measures speed of perception and processing.

Working Memory Index
Digit Span: For Digit Span Forward, the child repeats numbers in the same order presented aloud by the examiner. For Digit Span Backwards, the child repeats numbers in the reverse order presented by the examiner. Measures retention and manipulation of information.

Letter-Number Sequencing: The child is read sequences of numbers and letters and recalls the numbers in ascending orders and the letters in alphabetical order. Measures retention and manipulation of information.

Arithmetic: The child mentally solves a series of orally presented arithmetic problems within a time limit. Measures quantitative reasoning and problem solving skills.

31. WECHSLER PRESCHOOL PRIMARY SCALE OF INTELLIGENCE-3RD EDITION (WPPSI-III)

The WPPSI-III is a standardized measure of cognitive function designed to be used with children between 2 years, 6 months and 7 years, 3 months of age. Three WPPSI-III I.Q. summary scores are generated: Performance Scale I.Q., Verbal Scale I.Q., and Full Scale I.Q for all ages. A supplemental language score is also available for all ages (General Language Composite). Younger children receive a shorter core battery of subtests. Older children receive a longer battery with an additional composite score (Processing Speed Quotient).

Ages 2 years, 6 months – 3 years, 11 months

Verbal IQ

Receptive Vocabulary: The child looks at a group of four pictures and points to the one the examiner names aloud. Measures language comprehension.

Information: For Picture Items, the child responds to questions by choosing a picture from four response options. For Verbal Items, the child answers general knowledge questions. Measures knowledge acquired in school or through cultural immersion.

Performance IQ

Block Design: The child views a constructed model or a picture and uses one or two-color blocks to recreate designs within a specified time limit. Measures the ability to perceive and manipulate visual patterns as well as motor control.

Object Assembly: The child assembles puzzles within a time limit of 90 seconds. Measures ability to organize details into a meaningful whole and motor control.

General Language Composite (Supplemental)

Picture Naming: The child names pictures. Measures expressive language skills.

Ages 4 years, 0 months – 7 years, 3 months

Verbal IQ

Information: For Picture Items, the child responds to questions by choosing a picture from four response options. For Verbal Items, the child answers general knowledge questions. Measures knowledge acquired in school or through cultural immersion.

Vocabulary: For Picture Items, the child names pictures. For Verbal Items, the child defines individual words read by the examiner. Measures word knowledge.

Word Reasoning: The child identifies the concepts described by increasingly specific clues. Measures language development and problem solving.

Comprehension (Supplemental): The child answers questions about general principals and social situations. Measures language development and learned knowledge.

Similarities (Supplemental): The child is read incomplete sentences naming two concepts that share a characteristic. The child completes the sentences with the shared characteristic. Measures language development and problem solving.

Performance IQ

Block Design: The child views a constructed model or a picture and uses one or two-color blocks to recreate designs within a specified time limit. Measures the ability to perceive and manipulate visual patterns as well as motor control.

Matrix Reasoning: The child looks at an incomplete pattern and selects the missing portion from four or five response options. Measures inductive reasoning.

Picture Concepts: The child looks a two or three rows of pictures and chooses one picture from each row to form a group with a common characteristic. Measures inductive reasoning.

Picture Completion (Supplemental): The child names or points to important features missing from pictures. Measures the ability to organize incomplete visual information into meaningful wholes.

Object Assembly (Supplemental): The child assembles puzzles within a time limit of 90 seconds. Measures ability to organize details into a meaningful whole and motor control.

Processing Speed Quotient

Coding: The child copies symbols paired with simple geometric shapes. Using a key, the child draws each symbol in its corresponding shape. Measures ability to rapidly perform rote tasks.

Symbol Search (Supplemental): The child scans a group of symbols and indicates whether a target symbol is in the group or not. Measures speed of perception.

General Language Composite (Supplemental)

Receptive Vocabulary: The child looks at a group of four pictures and points to the one the examiner names aloud. Measures receptive language skills.

Picture Naming: The child names pictures. Measures expressive language skills.

32. WEPMAN'S AUDITORY DISCRIMINATION TEST (ADT)

The ADT is an assessment of children's ability to discriminate between commonly used phonemes in the English language. Word pairs are presented, and the child indicates whether the words are different or the same.

33. WEPMAN AUDITORY DISCRIMINATION TEST

ADT requires the child to listen to pairs of words and determine whether they are identical or not. The examiner's mouth is hidden from view as the pairs of words are dictated, so the child must discriminate between the words based upon their sound alone. This is an assessment of auditory processing and discrimination.

34. WIDE RANGE ACHIEVEMENT TESTING-REVISION-3RD EDITION (WRAT-III)

The WRAT-3 requires the child to identify and write letters, read a word list of increasingly difficult words, spell dictated words of increasing difficulty, count, and do arithmetic calculations. The WRAT-3 measures reading (word recognition, pronunciation), spelling, and arithmetic skills (normed for ages 5-0 to 74-11).

35. WIDE RANGE ASSESSMENT OF LEARNING AND MEMORY

WRAML is a standardized assessment of learning and memory skills designed for children ages 5 -3 through 17. Nine subtests generate three index scores (**Verbal Memory, Visual Memory, Learning**) and one composite score (**General Memory**). Supplemental scores of long term memory skills are also included.

Verbal Memory Scale: This scale assesses memory across tasks of increasing semantic complexity and meaningfulness.

Number/Letter: The child is required to repeat verbally delivered sequences of numbers and letters of increasing length. This is a measure of auditory attention and short-term memory of non-meaningful information.

Sentence Memory: This child is required to repeat verbally delivered sentences of increasing length. This is a measure of auditory attention and short-term memory of meaningful information

Story Memory: The child is read two short stories and is asked to recall as many parts of the story as possible. This is a measure of verbal memory. In addition, there are two supplemental tasks based on the stories: 1) *Delayed Recall*, a measure of long-term semantic memory, and 2) *Story Recognition*, a measure of long-term memory in a recognition (multiple choice) format

Visual Memory Scale: This scale measures visual memory skills across material of increasing meaningfulness.

Finger Windows: The examiner points to increasingly longer series of locations found on a card. The child is required to reproduce these sequences. This is a measure of visual attention and short-term visual memory.

Design Memory: The child is shown geometric designs. After a 10 second delay, the child is required to draw the remembered designs. This is a measure of visual memory skills with a motoric component.

Picture Memory: The child is shown a picture of a scene and then shown a second version which has been slightly altered. The child is required to indicate which elements have been altered from the first version to the second. This is a measure of meaningful visual memory skills.

Learning Scale: All subtests on the Learning Scale evaluate learning over multiple trials. *Verbal Learning:* The child is read a list of simple words and is required to repeat as many of them as possible. The same list is presented over four trials. This is a measure of verbal learning over multiple trials. There is a supplemental task, *Verbal Learning Delay*, in which the child is asked to repeat the list after a distracter task.

Visual Learning: The child is presented with visual designs in a particular position on a board. This child is then required to indicate which spatial location is associated with each design over four trials. The examiner gives feedback about the correctness of responses to facilitate learning. This is a measure of visual learning over multiple trials with correction. There is a supplemental task, *Visual Learning Delay*, in which the child is asked to recall all spatial locations after a distracter task.

Sound Symbol: The child is presented with novel words paired with abstract symbols. The child is then required to recall the word paired with each symbol four trials. The examiner gives feedback about the correctness of responses to facilitate learning. This is a measure of cross-modal (visual and verbal) learning over multiple trials with correction. There is a supplemental task, *Sound Symbol Delay*, in which the child is asked to recall all of the word-design pairs after a distracter task.

36. WIDE RANGE ASSESSMENT OF VISUAL MOTOR ABILITIES (WRAVMA)

The WRAVMA is a standardized measure of visual motor skills for ages 3 through 17-11.

Drawing: The child copies designs of increasing difficulty. It is a measure of visual-motor integration.

Matching: The child completes or matches images of increasing difficulty. This is a measure of visual-spatial skills.

Pegboard: The child inserts pegs into a pegboard as quickly as possible within a time limit. This is a measure of fine motor skills.

37. WOODCOCK-JOHNSON TESTS OF ACHIEVEMENT-3RD EDITION (WJR-III)

WJR - III is a standardized measure of academic skills designed to be used with children ages 2 - 21. It assesses skills in four broad areas of ability, reading, oral language, math, and written language. Items are arranged in order of ascending difficulty within subtests. The examiner starts the child at grade level, and establishes basal and ceilings on each task.

Written Language Skill Tests

Spelling: The child is first required to demonstrate pre-writing skills, such as drawing lines and tracing letters. The child is then required to write orally presented individual letters, and then words. This is a measure of the ability to write orally presented words.

Writing Fluency: The child is required to write sentences related to a stimulus picture and three target words within a time limit of seven minutes. This is a measure of the ability to formulate and write sentences quickly.

Writing Samples: The child is required to produce sentences that are evaluated in terms of quality of expression. It is a measure of the ability to write responses to a variety of demands.

Math Skills Tests

Calculation: The child is required to write individual number, then to solve written mathematics problems. This test covers the basic operations - addition, subtraction, division, and multiplication. It also involves negative numbers, percents, decimals, fractions and whole numbers. This is a measure of math achievement.

Math Fluency: The child is required to solve simple addition, subtraction, division, and multiplication problems within a three minute time limit. This is a measure of the ability to solve mathematical problems quickly.

Applied Problems: The child is required to solve pictorial and word problems. The child must recognize the operation(s) needed to solve the problem, and then perform the calculations. This is a measure of the ability to analyze and solve mathematical problems.

Oral Language Skills Tests

Story Recall: The child is required to remember increasingly complex stories. After listening to a story, the child is asked to recall as many details of the story as he or she can remember. This is a test of oral language development and meaningful verbal memory.

Understanding Directions: The child is required to listen to a sequence of instructions and then follow the instructions by pointing to items in a picture. The instructions increase in both length and linguistic complexity. This is a measure of oral comprehension.

Oral Comprehension: The child is required to listen to short, incomplete passages and then supply the missing word using syntactic and semantic cues. This is a test of listening, reasoning, and vocabulary skills.

Reading Skills Tests

Letter-Word Identification: The child is required to identify individual letters and then to read individual words of increasing difficulty. This is a measure of word identification skills.

Reading Fluency: The child is required to quickly read short sentences, decide if the statement is true or not, and then circle Yes or No. The child attempts to answer as many items as possible within a three-minute time limit. This is a measure of reading speed.

Passage Comprehension: The child is initially required to match a rebus (pictorial representation of a word) with a picture of an object. In the next phase, the child is required to point to the picture represented by a short phrase. In the remaining items, the child has to read a short passage and identify a missing word that makes sense in the context of the passage. This is a measure of reading comprehension.

Word Attack: The child is initially required to sound out individual letters, then nonsense words. These words are constructed to be phonically consistent with English. This is a test of phonic and structural analysis skills.