

Psychoeducational Associates

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WISC-4 Verbal Comprehension Subtests

<u>Subtest</u>	<u>Directions</u>	<u>Processes Required</u>	<u>Possible Educational Implications</u>
Similarities	Child is asked to discern likeness between two items (e.g. BLACK & WHITE)	<ul style="list-style-type: none"> • Word retrieval • Ability to generate categories • Cognitive flexibility 	<ul style="list-style-type: none"> • Reading comprehension (seeing themes) • Precision in oral & written language
Vocabulary	Child defines vocabulary words	<ul style="list-style-type: none"> • Expressive language formulation • Word/fact retrieval • Long term memory 	<ul style="list-style-type: none"> • Precision in oral & written language • Comprehension of more complex texts
Comprehension	Child answers questions of social and practical judgment (“ <i>Why do we need police?</i> ”)	<ul style="list-style-type: none"> • Receptive language (some questions are linguistically complex) • Expressive language formulation • Cognitive flexibility 	<ul style="list-style-type: none"> • Following classroom discussions • Reading comprehension • Expression of ideas orally & written • Social skills
Information	Child answers questions about basic measurement, cultural, history and science facts (e.g. How many months in a year?)	<ul style="list-style-type: none"> • Long term memory • Word/fact retrieval 	<ul style="list-style-type: none"> • Reading comprehension (connecting to background knowledge)

WISC-4 Perceptual Reasoning Subtests

<u>Subtest</u>	<u>Directions</u>	<u>Processes Required</u>	<u>Possible Educational Implications</u>
Block Design	<p>Child copies geometric designs from component blocks</p>  <p>Time limits; Bonus for quick completion</p>	<ul style="list-style-type: none"> • Visuo-spatial part-to-whole analysis • Executive functions: organization and self-monitoring • ? Processing speed 	<p>Appreciation of number concepts and relationships</p> <p>Ability to plan and monitor tasks to reach a goal</p>
Picture Concepts	<p>Child views sets of pictures and has to select three which are related (e.g. a coat, sweater and gloves)</p> <p>No time limit</p>	<ul style="list-style-type: none"> • Ability to see categorical relationships • Ability to inhibit impulsive responses 	<p>Seeing connections and relationship between concepts</p> <p>Ability to “stop and think” and avoid careless errors</p>
Matrix Reasoning	<p>Child complete figural analogies and sequences (e.g.</p>  <p>Multiple choice; no time limits</p>	<ul style="list-style-type: none"> • Ability to see patterns and relationships in data • Visuo-spatial analysis • Visual working memory • Ability to inhibit so as not to choose the wrong answer too quickly 	<p>Ability to see patterns in numbers</p> <p>Appreciation of number concepts and relationships</p> <p>Ability to envision the “steps” of a math problem</p> <p>Ability to “stop and think” and avoid careless errors</p>
Picture Completion	<p>Child looks at pictures of common objects to find a missing detail (e.g. a guitar missing a string)</p> <p>Time limit</p>	<ul style="list-style-type: none"> • Attention to visual detail • Visuo-spatial analysis 	<p>Notice details on worksheets, pictures, etc.</p> <p>Awareness of visual and spatial surroundings</p>

Wechsler Intelligence Scale for Children-IV Working Memory Subtests

<u>Subtest</u>	<u>Directions</u>	<u>Processes Required</u>	<u>Possible Educational Implications</u>
Digit Span	Child recalls increasingly long number series forwards & reverse	<ul style="list-style-type: none"> •Sustained attention •Verbal memory span •Working memory (digits backwards) •Strategy planning (digits backwards) 	<ul style="list-style-type: none"> •Reading decoding •Memory/retrieval of arbitrary information such as spelling words • Attention
Letter-Number Sequencing	Letters& numbers are presented in random order & child must repeat/reorganize in ascending order: M 4 1 D would be 1 4 D M	<ul style="list-style-type: none"> •Sustained attention •Verbal memory span •Working memory 	<ul style="list-style-type: none"> •Reading decoding •Memory/retrieval of arbitrary information such as spelling words • Attention
Arithmetic	Word problems, some simple some multiple step; most presented orally, some presented in writing	<ul style="list-style-type: none"> •Understanding of syntax •Working memory & organization •Envisioning part-whole relationships 	<ul style="list-style-type: none"> • Mastery of math concepts or math facts •Language comprehension •Attention

WISC-IV Processing Speed subtests

<u>Subtest</u>	<u>Directions</u>	<u>Processes Required</u>	<u>Possible Educational Implications</u>
Coding	Child copies number-symbol pairs from a key to an answer sheet; for 6/7 year olds, only symbol pairs	<ul style="list-style-type: none"> • Visual motor integration • Efficient visual scanning • Memory for arbitrary information 	<ul style="list-style-type: none"> • Letter formation and hand writing • Beginning reading decoding • Spelling
Symbol Search	Child repeatedly scans symbols to determine if any match two target symbols e.g. Ÿ □ © μ □ ž þ	<ul style="list-style-type: none"> • Ability to inhibit impulsive responses • Sustained, focused attention • Efficient visual scanning (processing speed) 	<ul style="list-style-type: none"> • Reading rate • Spelling accuracy • Attention/ and impulsivity
Cancellation	Child scans an array of many pictures and quickly marks all of the animals in the array. One array is random; one is ordered	<ul style="list-style-type: none"> • Efficient visual scanning (processing speed) • Inhibition 	<ul style="list-style-type: none"> • Attention/ and impulsivity