

# Woodcock Family of Tests

## Woodcock-Johnson III (WJ III) Tests of Cognitive Abilities

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### Organization

The **WJ III Tests of Cognitive Abilities** are based on the Cattell-Horn-Carroll (CHC) theory of cognitive abilities, which combines Cattell and Horn's *Gf-Gc* theory and Carroll's three-stratum theory. The CHC theory provides the most comprehensive framework available for understanding the structure of human cognitive abilities.

The Standard Battery consists of tests 1 through 10, and the Extended Battery includes tests 11 through 20. Depending on the purpose and extent of the assessment, examiners can use the Standard Battery alone or in conjunction with the Extended Battery.

### Features (compared to WJ-R Kits)

- 8 additional tests that measure information-processing abilities, including tests of working memory, planning, naming speed, and attention
- 5 additional cognitive clusters; 2 additional clusters available when cognitive and achievement batteries are used together
- Modified organization and interpretation plan that increases depth and breadth of coverage
- Expanded cognitive factor structure so that 2 to 3 tests clearly measure different narrow aspects of a broader ability
- Clusters and tests grouped into three broad cognitive areas: Verbal Ability, Thinking Ability, and Cognitive Efficiency
- Expanded procedures for evaluating ability/achievement discrepancies

### Brief Intellectual Ability

The *WJ III Tests of Cognitive Abilities* provide a brief measure of intelligence with the Brief Intellectual Ability (BIA) score, complete with its own test record. The BIA takes about 10 to 15 minutes to administer and is especially useful for screenings, re-evaluations that don't require a comprehensive intellectual assessment, or research that needs a short but reliable measure of intelligence. If examiners need to test a subject more thoroughly or focus on a specific area of concern, they can administer additional co-normed tests from the *WJ III Tests of Cognitive Abilities*. Because examiners don't have to start testing all over again, the BIA saves time and effort.

The BIA score is derived from three cognitive tests: Verbal Comprehension, Concept Formation, and Visual Matching. It provides a mixed measure of three abilities: Comprehension-Knowledge (Gc), Fluid Reasoning (Gf), and Processing Speed (Gs), which represent the best sample of an individual's verbal ability, thinking ability, and efficiency in performing cognitive tasks.

See page 11 for pricing.

### General Intellectual Ability

The *WJ III Tests of Cognitive Abilities* provide a more comprehensive assessment of general ability (g) than most other measures of intelligence. The General Intellectual Ability (GIA) score in the *WJ III* is based on a weighted combination of tests that best represents a common ability underlying all intellectual performance. Examiners can get a GIA-Std score by administering the first 7 tests in the Cognitive Battery or a GIA-Ext score by administering all 14 cognitive tests. Each of the cognitive tests represents a different broad CHC factor. These factor scores provide important diagnostic information and the best analysis of intra-individual variability. With the *WJ III* scoring software, practitioners can calculate both CHC broad factors scores and a GIA score.

### Clusters

The *WJ III Tests of Cognitive Abilities* provide interpretive information from 23 clusters to measure cognitive performance. Please refer to the chart on page 7.

### Improved Measures

The *WJ III Tests of Cognitive Abilities* include additional measures of executive functioning and working memory that provide an overall index of attention to cognitive tasks. Three cognitive tests – Planning, Pair Cancellation, and Concept Formation – measure aspects of executive functioning including mental control and forethought, interference control, and cognitive flexibility. Planning and Pair Cancellation are both new tests.

Attention problems and working memory also affect cognitive functioning and performance. The *WJ III* measures both attention and working memory with several additional tests and clusters. The additional Broad Attention cluster contains four tests – Numbers Reversed, Auditory Working Memory, Auditory Attention, and Pair Cancellation. These tests measure attentional capacity, ability to divide information in short-term memory into distinct sequences, attending to and discriminating speech sounds while dealing with auditory distortion, and how well a person can stay on task. Auditory Working Memory, Auditory Attention, and Pair Cancellation are all new tests. The Working Memory cluster measures the ability to hold information in awareness while performing a mental operation on it and includes the Numbers Reversed and Auditory Working Memory tests.

### Broad CHC Factors

The *WJ III* contains broad CHC factors, which include two qualitatively different narrow abilities in each. The broad factors allow scores to be generalized to more situations, making them more valid.

WJ III Tests of Cognitive Abilities

**Selective Testing Table - Clusters**

**WJ III Tests of Cognitive Abilities**

	Intellectual Ability				Cognitive Categories				CHC Factors				Clinical Clusters											
	Gen. Intell. - Std	Gen. Intell. - Ext	Brief Intell. Ability	Verbal Ability	Verbal Ability - Std	Verbal Ability - Ext	Thinking Ability - Std	Thinking Ability - Ext	Cog. Efficiency - Std	Cog. Efficiency - Ext	Compreh.-Knowl. (Gc)	Visual-Spatial Think (Gv)	Auditory Processing (Gy)	Fluid Reasoning (Ga)	Processing Speed (Gf)	Short-Term Mem. (Gsm)	Phonemic Awareness	Working Memory	Broad Attention	Cognitive Fluency	Executive Processes	Delayed Recall (note 1)	Knowledge (note 2)	
<b>Standard Battery</b>	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
1. Verbal Comprehension	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
2. Visual-Auditory Learning	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
3. Spatial Relations	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
4. Sound Blending	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
5. Concept Formation	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
6. Visual Matching	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
7. Numbers Reversed	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
8. Incomplete Words	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
9. Auditory Working Mem.	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
10. Vis-Aud. Learn. - Delayed	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
11. General Information	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
12. Retrieval Fluency	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
13. Picture Recognition	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
14. Auditory Attention	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
15. Analysis-Synthesis	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
16. Decision Speed	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
17. Memory for Words	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
18. Rapid Picture Naming	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
19. Planning	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
20. Pair Cancellation	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
<b>Extended Battery</b>	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆

Notes: (1) Also includes Test 12: Story Recall--Delayed from the WJ III Tests of Achievement; (2) Also includes Test 19: Academic Knowledge from the WJ III Tests of Achievement  
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