

Cognitive content/stimulus dimensions

Cognitive operations

	Verbal (auditory-linguistic)		Numerical - Quantitative	Visual-figural
Acquired Knowledge domains or systems (Gc, Grw, Gq)	General Information Academic Knowledge Oral Comprehension Verbal Comprehension Picture Vocabulary Story Recall <i>Passage Comp</i> <i>Reading Vocabulary</i> <i>Applied Problems</i> <i>Memory for Sentences</i>	<u>Letter-Word ID</u> <u>Word Attack</u> <u>Editing</u> <u>Spelling</u> <u>Writing Samples</u> <u>Passage Comp</u> <u>Reading Vocabulary</u> <u>Spelling of Sounds</u>	<u>Calculation</u> <u>Applied Problems</u> <u>Quantitative Concepts</u>	
Cognitively Complex Reasoning - Verbal (Gf-I,RQ)	Sound Awareness Understanding Directions <i>Verbal Comprehension</i>			Concept Formation
Cognitively Complex Reasoning - Quantitative (Gf-RQ)			Number Series Number Matrices <u>Quantitative Concepts</u> <u>Applied Problems</u>	Analysis-Synthesis <i>Concept Formation</i>
Long-term storage & retrieval (Glr)	DR: Story Recall			Visual-Auditory Lrng DR: VAL Memory for Names DR: MN
Short-term & working memory (Gsm)	Memory for Words Memory for Sentences		Auditory Working Memory Numbers Reversed	Picture Recog (Gv)
Processing (auditory) (Ga)	Sound Blending Incomplete Words Sound Patterns			
Processing (Visual-spatial) (Gv)				Spatial Relations Block Rotation Planning ? Visual Closure
Speed (Gs)	Retrieval Fluency Rapid Picture Naming  <i>Decision Speed</i>	<u>Reading Fluency</u> <u>Writing Fluency</u>	<u>Math Fluency</u> <i>Numbers Reversed</i> <u>Calculation</u> <i>Visual Matching</i>	Pair Cancellation Cross Out  Visual Matching Decision Speed
Executive Functions (primarily attention & vigilance)	Auditory Attention			<i>Pair Cancellation</i> Planning ?

High g/  
Cognitive complexity

High

Medium

Low

Low g/  
Cognitive complexity

Cognitive efficiency *Italics font designates secondary and lower ability loading*  
? Designates tests with relatively equal loadings on different abilities  
underline designates "achievement" tests