

Appendix B

CHC Broad and Narrow Ability Classification Tables for Tests Published Between 2001 and 2012

This information pertains to all CHC classifications included in this appendix.

- Tests printed in **BOLD, UPPERCASE LETTERS** are measures of the abilities as defined empirically via factor analysis.
- Tests printed in **bold, lowercase letters** are mixed measures of the abilities as defined empirically via factor analysis.
- Tests printed in **REGULAR FACE, UPPERCASE LETTERS** are measures of the abilities as classified empirically via an expert consensus process.
- Tests printed in **regular face, lowercase letters** are mixed measures of the abilities as classified empirically via an expert consensus process.

A number of listed subtests also measure a second narrow ability associated with the same broad ability or a second broad ability along with corresponding narrow abilities.

*Tests marked with an asterisk have a secondary broad and narrow ability classification via an expert consensus process over and above its primary classification as derived from factor analysis (see Table B.1 for results).

Note. For a more complete description of the subtests included herein, see Appendix C. Although confirmatory factor analyses for the KABC-II subtests were not conducted at age 3 years, the tables herein include the entire age range for which the KABC-II subtests are applicable.

CRYSTALLIZED INTELLIGENCE (Gc)	
The depth and breadth of knowledge and skills that are valued by one’s culture	

Communication Ability (CM)	
The ability to use speech to communicate thoughts clearly	
CELF-4 FORMULATED SENTENCES	5-21
DELV-NR PRAGMATICS (LD)	4-9
KBNA PICTURE DESCRIPTION ORAL	20-89
KTEA-II ORAL EXPRESSION (MY)	4:6-25
NAB ORAL PRODUCTION	18-97
OWLS-II ORAL EXPRESSION	3-21
SPELT-3 STRUCTURED PHOTOGRAPHIC EXPRESSIVE LANGUAGE TEST (LD)	4-9
PLAI 2 Expressive (VL;Gf:RG)	3-5
TNL Oral Narration (LD;Glr:MM)	5-11

Language Development (LD)	
General understanding of spoken language at the level of words, idioms, and sentences	
CELF-4 SENTENCE ASSEMBLY (MY)	9-21
D-KEFS PROVERB TEST: FREE INQUIRY (K0)	16-89
D-KEFS PROVERB TEST: RECOGNITION (K0)	16-89
ITPA-3 SPOKEN VOCABULARY	5-12
PLAI 2 REORDERING	3-5
TAPS-3 AUDITORY REASONING (K0)	4-18
TOLD-I:4 SENTENCE COMBINING (MY)	8-17
Word-2 FLEXIBLE WORD USE (VL)	6-17
CELF-Pre2 Word Classes (Receptive, Expressive, Total) (VL;Gf:I)	4-6
TOLD-I:4 Word Ordering (Gsm:MW)	8-17

Grammatical Sensitivity (MY)	
Awareness of the formal rules of grammar and morphology of words in speech	
DAB-3 GRAMMATIC COMPLETION	6-14
DELV-NR SEMANTICS (LD)	4-9
ITPA-3 MORPHOLOGICAL CLOSURE	5-12
TOLD-I:4 MORPHOLOGICAL COMPREHENSION (LS)	8-17
TOLD-P:4 MORPHOLOGICAL COMPLETION (LS)	4-8
TOAL-4 Sentence Combining (Grw:WA)	12-24
General Verbal Information (K0)	
The breadth and depth of knowledge of one's culture	
KABC-II STORY COMPLETION (5-6 YEARS) (Gf:RG)*	5-6
RIAS GUESS WHAT (VL;Gf:I)*	3-94
SB5 NONVERBAL KNOWLEDGE (LS;Gf:RG)*	2-85+
WECH COMPREHENSION	4-90
WECH INFORMATION	2:6-90
WJ III NU ACH ACADEMIC KNOWLEDGE (Gkn:K2)*	2-90+
WJ III NU COG GENERAL INFORMATION	2-90+
WECH Picture Concepts (Gf:I)	4-7:7
BSRA-3 LETTERS	3-6
BSRA-3 SHAPES	3-6
KBNA ORIENTATION	20-89
KBNA PRACTICAL PROBLEM SOLVING	20-89
LPT3 ASSOCIATIONS	5-11
LPT3 ATTRIBUTES	5-11
LPT3 CATEGORIZATION	5-11
NAB JUDGMENT	18-97
NAB ORIENTATION	18-97
NEPSY-II BODY PART NAMING AND IDENTIFICATION	3-4
TOC SIGNS AND SYMBOLS	6-17
WISC-IV Integrated COMPREHENSION MULTIPLE CHOICE	6-16
WISC-IV Integrated INFORMATION MULTIPLE CHOICE	6-16
APAT Sentence Absurdities (Gf:RG)	5-12
KBNA Clocks (Gv:Vz)	20-89
KBNA Praxis (Gp:P1)	20-89
NEPSY-II Clocks (Gv:Vz)	7-16
TOC Abbreviations (Grw:EU)	6-17

Listening Ability (LS)	
The ability to understand speech	
DAS-II VERBAL COMPREHENSION	2:6-6:6
WJ III NU ACH ORAL COMPREHENSION	2-90+
WJ III NU ACH Understanding Directions (Gsm:MW)	2-90+
APAT COMPLEX SENTENCES	5-12
CELF-4 CONCEPTS AND FOLLOWING DIRECTIONS	5-12
CELF-4 SENTENCE STRUCTURE	5-8
CELF-4 WORD STRUCTURE (MY)	5-8
CELF-Pre2 SENTENCE STRUCTURE (LD)	3-6
CELF-Pre2 WORD STRUCTURE (LD)	3-6
DAB-3 CHARACTERISTICS	6-14
DAB-3 STORY COMPREHENSION	6-14
DELV-NR SYNTAX (MY)	4-9
KBNA AUDITORY COMPREHENSION	20-89
KTEA-II LISTENING COMPREHENSION	4:6-25
LCT-2 DETAILS	6-11
LCT-2 MAIN IDEA	6-11
LCT-2 UNDERSTANDING MESSAGES	6-11
NAB AUDITORY COMPREHENSION	18-97
PLAI 2 SELECTIVE ANALYSIS (LD)	3-5
TAPS-3 AUDITORY COMPREHENSION	4-18
TNL NARRATIVE COMPREHENSION	5-11
TOLD-P:4 SYNTACTIC UNDERSTANDING (MY)	4-8
WJ III NU DRB ORAL COMPREHENSION	2-90+
WRMT-3 LISTENING COMPREHENSION	4:6-79
APAT Following Directions (Gsm:MW)	5-12
APAT Passage Comprehension (Gsm:MM)	5-12
CELF-4 Semantic Relationships (Gf:I)	9-21
CELF-4 Understanding Spoken Paragraphs (Gf:I)	5-21
CELF-Pre2 Concepts and Following Directions (VL;Gsm:MW)	3-6
LCT-2 Reasoning (Gf:RG)	6-11
NAB Bill Payment (Grw:RC,WA)	18-97
NEPSY-II Comprehension of Instructions (VL;Gsm:MW)	3-16
NEPSY-II Theory of Mind (K0;Gkn:BC)	3-16
PLAI 2 Receptive (VL;Gf:RG)	3-5
TTFC-2 Token Test For Children (Gsm:MW)	3-12
WMLS-R: NU Understanding Directions (Gsm:MW)	2-90+

Lexical Knowledge (VL)	
Extent of vocabulary that can be understood in terms of correct word meanings	
DAS-II NAMING VOCABULARY	2:6-6
DAS-II VERBAL SIMILARITIES (Gf:I)*	7-17
DAS-II WORD DEFINITIONS	7-17
KABC-II EXPRESSIVE VOCABULARY	3-18
KABC-II RIDDLES (Gf:RG)*	3-18
KABC-II VERBAL KNOWLEDGE (K0)	3-18
RIAS VERBAL REASONING (LD;Gf:I)*	3-94
SB5 VERBAL KNOWLEDGE (K0)	2-85
WECH SIMILARITIES (Gf:I)*	4-90
WECH PICTURE NAMING	2:6-7:7
WECH RECEPTIVE VOCABULARY	2:6-7:7
WECH VOCABULARY	4-90
WECH WORD REASONING (Gf:I)*	4-16
WJ III NU ACH PICTURE VOCABULARY	2-90+
WJ III NU COG VERBAL COMPREHENSION (Gf:I)*	2-90+
WJ III NU DS BILINGUAL VERBAL COMPREHENSION (Gf:I)*	2-90+
DAS-II Early Number Concepts (Gq:A3)	2:6-6
WJ III NU ACH Reading Vocabulary (Grw)	5-90+
BBCS-3:R DIRECTION/POSITION	3-6
BBCS-3:R SUBTESTS 1-5 (SRC) (LD)	3-6
BBCS-3:R TEXTURE/MATERIAL	3-6
BBCS-3:R TIME/SEQUENCE	3-6
BBCS-E DIRECTION/POSITION	3-6
BBCS-E SUBTESTS 1-5 (SRC) (LD)	3-6
BBCS-E TEXTURE/MATERIAL	3-6
BBCS-E TIME/SEQUENCE	3-6
BSRA-3 COLORS	3-6
BSRA-3 SIZE COMPARISONS	3-6
BVAT-NU ORAL VOCABULARY	4-90+
BVAT-NU PICTURE VOCABULARY	4-90+
CELF-4 EXPRESSIVE VOCABULARY	5-9
CELF-4 WORD DEFINITIONS	10-21
CELF-Pre2 BASIC CONCEPTS (LS)	3-4
CELF-Pre2 EXPRESSIVE VOCABULARY	3-6
CREVT-2 EXPRESSIVE VOCABULARY	5-89
CREVT-2 RECEPTIVE VOCABULARY	4-89
DAB-3 SYNONYMS	6-14
DWNB NAMING PICTURES OF OBJECTS	4-90+

EOWPVT-4 EXPRESSIVE ONE WORD VOCABULARY PICTURE TEST	2-80+
ERA RECEPTIVE VOCABULARY	4-7
EVT-2 EVT-2 (FORM A)	2:6-90+
EVT-2 EVT-2 (FORM B)	2:6-90+
GDRT-2 LISTENING VOCABULARY	6-13
KBIT-II VERBAL KNOWLEDGE (K0)	4-90
KBNA PICTURE NAMING	20-89
LCT-2 VOCABULARY	6-11
LPT3 MULTIPLE MEANINGS (LD)	6-11
NAB NAMING	18-97
OWLS-II LISTENING COMPREHENSION	3-21
PLS-5 AUDITORY COMPREHENSION (LS)	Birth-7
PLS-5 EXPRESSIVE COMMUNICATION (LD)	Birth-7
PPVT-4 PEABODY PICTURE VOCABULARY TEST	2-90+
ROWPVT-4 RECEPTIVE ONE-WORD PICTURE VOCABULARY TEST	2-80+
TOAL-4 WORD DERIVATIONS (MY)	12-24
TOAL-4 WORD OPPOSITES	12-24
TOAL-4 WORD SIMILARITIES	12-24
TOLD-I:4 MULTIPLE MEANINGS	8-17
TOLD-I:4 PICTURE VOCABULARY	8-17
TOLD-P:4 ORAL VOCABULARY	4-8
TOLD-P:4 PICTURE VOCABULARY	4-8
TOPEL DEFINITIONAL VOCABULARY	3-5
WASI-2 VOCABULARY	6-90
WIAT-III LISTENING COMPREHENSION (LS)	4-50
WISC-IV Integrated PICTURE VOCABULARY MULTIPLE CHOICE	6-16
WISC-IV Integrated VOCABULARY – MULTIPLE CHOICE	6-16
WJ III NU DRB ORAL VOCABULARY	3-90+
WMLS-R: NU PICTURE VOCABULARY	2-90+
Word-2 ANTONYMS	6-17
Word-2 ASSOCIATIONS (LD)	6-17
Word-2 DEFINITIONS	6-17
Word-2 SEMANTIC ABSURDITIES (LD)	6-17
Word-2 SYNONYMS	6-17
APAT Semantic Relationships (Gf:I)	5-12
BBCS-3:R Quantity (Gq:KM)	3-6
BBCS-3:R Self/Social Awareness (Gkn:BC)	3-6
BBCS-E Quantity (Gq:KM)	3-6
BBCS-E Self/Social Awareness (Gkn:BC)	3-6

BVAT-NU Verbal Analogies (Gf:I)	4-90+
CELF-4 Word Classes-Expressive (Gf:I)	5-21
CELF-4 Word Classes-Receptive (Gf:I)	5-21
ERA Written Word Vocabulary (Grw:RD)	4-7
ITPA-3 Spoken Analogies (Gf:I)	5-12
ITPA-3 Written Vocabulary (Grw:EU)	5-12
KBIT-II Riddles (Gf:RG)	4-90
LPT3 Differences (LD;Gf:RG)	5-11
LPT3 Similarities (Gf:I)	5-11
PLAI 2 Matching (K0;Gv:MV)	3-5
PTI-2 Verbal Abstractions (K0;Gf:I)	3-8
QPRT Qprt (Grw:RC)	8-89
TOAL-4 Spoken Analogies (Gf:I)	12-24
TOLD-I:4 Relational Vocabulary (Gf:I)	8-17
TOLD-P:4 Relational Vocabulary (Gf:I)	4-8
TOWL-4 Vocabulary (Grw:WA)	7-17
WASI-2 Similarities (Gf:I)	6-90
WIAT-III Oral Expression (Glr:FI)	4-50
WISC-IV Integrated Similarities Multiple Choice (Gf:I)	6-16
WJ III NU DRB Reading Vocabulary (Gf:I)	5-90+
WMLS-R: NU Verbal Analogies (Gf:I)	2-90+

FLUID INTELLIGENCE (Gf)

The deliberate but flexible control of attention to solve novel, on-the-spot problems that cannot be performed by relying exclusively on previously learned habits, schemas, and scripts

Induction (I)

The ability to observe a phenomenon and discover the underlying principles or rules that determine its behaviors

DAS-II MATRICES	3:6-17
DAS-II PICTURE SIMILARITIES	2:6-6
KABC-II PATTERN REASONING (7-18 YEARS) (Gv:Vz)*	7-18
SB5 NONVERBAL FLUID REASONING (Gv)*	2-85+
SB5 VERBAL FLUID REASONING (RG;Gc:CM)*	2-85+
WECH MATRIX REASONING	4-90
WISC-IV PICTURE CONCEPTS	6-16
WJ III NU COG CONCEPT FORMATION	4-90+
CTONI-2 GEOMETRIC ANALOGIES	6-89
CTONI-2 GEOMETRIC CATEGORIES	6-89
CTONI-2 PICTORIAL ANALOGIES	6-89
CTONI-2 PICTORIAL CATEGORIES	6-89
D-KEFS SORTING TEST: FREE SORTING	8-89
D-KEFS SORTING TEST: SORT RECOGNITION	8-89
KBIT-II MATRICES	4-90
NAB CATEGORIES	18-97
SHIPLEY-2 ABSTRACTIONS (RG)	7-89
TONI4 TEST OF NONVERBAL INTELLIGENCE-FOURTH EDITION	6-90
TVCF CLASSIFICATION	8-89
WASI-2 MATRIX REASONING	6-90
WNV MATRICES	4-21
D-KEFS Twenty Questions Test (Gc:LD)	8-89
NEPSY-II Animal Sorting (Gc:K0)	7-16

General Sequential Reasoning (RG)

The ability to reason logically using known premises and principles

KABC-II STORY COMPLETION (7-18 YEARS) (Gc:K0)*	7-18
WJ III NU COG ANALYSIS-SYNTHESIS	4-90+
CTONI-2 GEOMETRIC SEQUENCES	6-89
CTONI-2 PICTORIAL SEQUENCES	6-89
KBNA CONCEPTUAL SHIFTING	20-89
NNAT-2 NAGLIERI NONVERBAL ABILITY TEST-SECOND EDITION (I)	5-17
PLAI 2 REASONING	3-5
RIAS ODD-ITEM OUT	3-94
D-KEFS Word Context Test (Gc:LD)	8-89

Quantitative Reasoning (RQ)

The ability to reason, either with induction or deduction, with numbers, mathematical relations, and operators

DAS-II SEQUENTIAL & QUANTITATIVE REASONING	7-17
SB5 NONVERBAL QUANTITATIVE REASONING (Gq:A3)*	2-85+
SB5 VERBAL QUANTITATIVE REASONING (Gq:A3)*	2-85+
WAIS-IV FIGURE WEIGHTS	16-90
WJ III NU DS NUMBER MATRICES	4-90+
WJ III NU DS NUMBER SERIES	4-90+
WJ III NU ACH Applied Problems (Gq:A3)	2-90+
WJ III NU ACH Quantitative Concepts (Gq:KM,A3)	2-90+
KM3 APPLIED PROBLEM SOLVING	5-21
WIAT-III MATH PROBLEM SOLVING	4-50
WJ III NU ACH Form C Applied Problems (Gq:A3)	2-90+

AUDITORY PROCESSING (Ga)

The ability to detect and process meaningful nonverbal information in sound

Phonetic Coding (PC)

The ability to hear phonemes distinctly

WJ III NU ACH SOUND AWARENESS	4-90+
WJ III NU COG INCOMPLETE WORDS	6-90+
WJ III NU COG SOUND BLENDING	2-90+
APAT PHONEMIC AWARENESS	5-12
ASA BLENDING	5-6
CELF-4 PHONOLOGICAL AWARENESS	5-12
CELF-Pre2 PHONOLOGICAL AWARENESS	3-6
DAB-3 PHONEMIC ANALYSIS	6-14
DAS-II PHONOLOGICAL PROCESSING	5-12
ERA PHONOLOGICAL AWARENESS	4-7
GDRT-2 PHONOLOGICAL AWARENESS	6-13
ITPA-3 SOUND DELETION	5-12
KTEA-II PHONOLOGICAL AWARENESS	5-12
SCAN-3:A FILTERED WORDS	13-50
SCAN-3:C FILTERED WORDS	5-12
TAPS-3 PHONOLOGICAL BLENDING	4-18
TAPS-3 PHONOLOGICAL SEGMENTATIONS	4-18
TAPS-3 WORD DISCRIMINATION	4-18
TOLD-P:4 PHONEMIC ANALYSIS	4-8
TOPA-2+ PHONOLOGICAL AWARENESS	5-18
TOPAS INCOMPLETE WORDS	5-10
TOPAS PHONEME DELETION	5-10
TOPAS RHYMING	5-10
WJ III NU DRB SOUND AWARENESS	4-90+
WJ III NU DRB SOUND BLENDING	2-90+
WRMT-3 PHONOLOGICAL AWARENESS	4:6-8
GDRT-2 Phonetic Analysis (Grw:RD)	6-13
NEPSY-II Phonological Processing (US;Gsm:MW)	3-16
TOPA-2+ Letter Sounds (Grw:SG)	5-18
TOPAS Sound Sequencing (Gsm:MS)	6-10
TOPEL Phonological Awareness (Gsm:MW)	3-5
WIAT-III Early Reading Skills (Grw:RD)	4-9

Sound Localization (UL)

The ability to localize heard sounds in space

SCAN-3:A COMPETING SENTENCES	13-50
SCAN-3:A COMPETING WORDS-DIRECTED EAR (US)	13-50
SCAN-3:C COMPETING SENTENCES	5-12
SCAN-3:C COMPETING WORDS-DIRECTED EAR (US)	5-12

Resistance to Auditory Stimulus Distortion (UR)

The ability to hear words correctly even under conditions of distortion or loud background noise

WJ III NU COG AUDITORY ATTENTION	2-90+
SCAN-3:A AUDITORY FIGURE-GROUND AT 0Db	13-50
SCAN-3:A AUDITORY FIGURE-GROUND AT 12Db	13-50
SCAN-3:A AUDITORY FIGURE-GROUND AT 8Db	13-50
SCAN-3:C AUDITORY FIGURE-GROUND AT 0Db	5-12
SCAN-3:C AUDITORY FIGURE-GROUND AT 12Db	5-12
SCAN-3:C AUDITORY FIGURE-GROUND AT 8Db	5-12
SCAN-3:A Time Compressed Sentences (Gsm:MS)	13-50
SCAN-3:C Time Compressed Sentences (Gsm:MS)	5-12

Musical Discrimination and Judgment (U1 U9)

The ability to discriminate and judge tonal patterns in music with respect to melodic, harmonic, and expressive aspects (phrasing, tempo, harmonic complexity, intensity variations)

ASA TONAL DISCRIMINATION	5-6
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Speech Sound Discrimination (US)

The ability to detect and discriminate differences in speech sounds (other than phonemes) under condition of little or no distortion

WJ III NU DS SOUND PATTERNS-VOICE	6-90+
ASA RHYMING (UR)	5-6
KBNA AUDITORY SIGNAL DETECTION	20-89
SCAN-3:A COMPETING WORDS-FREE RECALL	13-50
SCAN-3:C COMPETING WORDS-FREE RECALL	5-12
TOLD-P:4 WORD DISCRIMINATION	4-8
WJ III NU DS SOUND PATTERNS-MUSIC	6-90+
ASA Speech Discrimination In Noise (UR;Gc:VL,K0)	3-6
ASA Tonal Patterning (UM; Gsm:MS)	5-6

LONG-TERM STORAGE AND RETRIEVAL (Glr)

The ability to store, consolidate, and retrieve information over periods of time measured in minutes, hours, days, and years

Naming Facility (NA)	
The ability to rapidly call objects by their names	
DAS-II RAPID NAMING (Gs:R9)*	5-17
WJ III NU COG RAPID PICTURE NAMING (Gs:R9)*	4-90+
D-KEFS COLOR-WORD INTERFERENCE: COLOR-NAMING	8-89
D-KEFS COLOR-WORD INTERFERENCE: INHIBITION	8-89
D-KEFS COLOR-WORD INTERFERENCE: WORD READING	8-89
CELF-4 Rapid Automatic Naming (Gs:R9)	5-21
D-KEFS Color-Word Interference: Inhibition/ Switching (Gsm:MW)	8-89
ERA Rapid Orthographic Naming (Grw:RD;Gs:R9)	4-7
GDRT-2 Rapid Naming (Gs:R9)	6-13
KTEA-II Naming Facility (Gs:R9)	4:6-25
NEPSY-II Speeded Naming (Gs:R9)	5-12
RAN/RAS Colors (Gs:R9)	5-18
RAN/RAS Letters (Gs:R9)	5-18
RAN/RAS Numbers (Gs:R9)	5-18
RAN/RAS Objects (Gs:R9)	5-18
RAN/RAS RAS 2-SET (Gs:R9)	5-18
RAN/RAS RAS 3-SET (Gs:R9)	5-18
WRMT-3 Rapid Automatic Naming (Gs:R9)	4-8

Figural Fluency (FF)	
The ability to rapidly draw or sketch as many things (or elaborations) as possible when presented with a non-meaningful visual stimulus	
D-KEFS DESIGN FLUENCY TEST: EMPTY DOTS ONLY	8-89
D-KEFS DESIGN FLUENCY TEST: FILLED DOTS	8-89
D-KEFS DESIGN FLUENCY TEST: SWITCHING	8-89

Ideational Fluency (FI)	
The ability to rapidly produce a series of ideas, words, or phrases related to a specific condition or object	
WJ III NU COG RETRIEVAL FLUENCY	6-90+
CELF-4 WORD ASSOCIATIONS	5-21
D-KEFS VERBAL FLUENCY TEST: CATEGORY FLUENCY	8-89
KTEA-II ASSOCIATIONAL FLUENCY (FW)	4:6-25
NAB WORD GENERATION	18-97
NEPSY-II WORD GENERATION (FW)	3-16
TVCF CATEGORICAL FLUENCY	8-89
D-KEFS Verbal Fluency Test: Category Switching (Gsm:MW)	8-89

Word Fluency (FW)	
The ability to rapidly produce words that share a non-semantic feature	
D-KEFS VERBAL FLUENCY TEST: LETTER FLUENCY	8-89
KBNA VERBAL FLUENCY (FA)	20-89
TVCF LETTER NAMING	8-89
KBNA Sequences (Gsm:MW)	20-89

Free-Recall Memory (M6)	
The ability to recall lists in any order	
DAS-II RECALL OF OBJECTS-IMMEDIATE	4-17
DAS-II RECALL OF OBJECTS-DELAYED	4-17
KBNA WORD LISTS 1	20-89
KBNA WORD LISTS 2 (MM)	20-89
NEPSY-II LIST MEMORY DELAYED	7-12
TOMAL-2 OBJECT RECALL	5-59
TOMAL-2 VISUAL SELECTIVE REMINDING	5-59
TOMAL-2 WORD SELECTIVE REMINDING	5-59
TOMAL-2 WORD SELECTIVE REMINDING-DELAYED	5-59
WRAML2 VERBAL LEARNING	5-85+
WRAML2 VERBAL LEARNING RECALL	5-85+
WRAML2 VERBAL LEARNING RECOGNITION	5-85+
NAB List Learning (Gsm:MW)	18-97
NEPSY-II Memory for Designs Delayed (Gv:MV)	3-16
NEPSY-II Memory for Faces Delayed (Gv:MV)	5-16

Meaningful Memory (MM)	
The ability to remember narratives and other forms of semantically related information	
APAT CONTENT MEMORY DELAYED	5-12
APAT CONTENT MEMORY IMMEDIATE	5-12
NAB STORY LEARNING	18-97
NEPSY-II NARRATIVE MEMORY	3-16

TOMAL-2 MEMORY FOR STORIES	5-59
TOMAL-2 MEMORY FOR STORIES-DELAYED	5-59
WJ III NU ACH STORY RECALL	2-90+
WJ III NU ACH STORY RECALL-DELAYED	3-90+
WMLS-R: NU STORY RECALL	2-90+
WMLS-4 LOGICAL MEMORY I	16-90
WMLS-4 LOGICAL MEMORY II DELAYED RECALL	16-90
WMLS-4 LOGICAL MEMORY II RECOGNITION	16-90
WRAML2 STORY MEMORY	5-85+
WRAML2 STORY MEMORY DELAY RECALL	5-85+
WRAML2 STORY MEMORY RECOGNITION	5-85+
NAB Daily Living Memory (Gsm:MS)	18-97

Associative Memory (MA)	
The ability to remember previously unrelated information as having been paired	
KABC-II ATLANTIS	3-18
KABC-II REBUS	4-18
WJ III NU COG DR: VISUAL AUDITORY LEARNING	4-90+
WJ III NU COG VISUAL-AUDITORY LEARNING	2-90+
WJ III NU DS MEMORY FOR NAMES	2-90+
WJ III NU DS MEMORY FOR NAMES DELAYED	4-90+
APAT (CUED RECALL)	5-12
KABC-II ATLANTIS DELAYED	5-18

KABC-II REBUS DELAYED	5-18
NEPSY-II MEMORY FOR NAMES	5-16
NEPSY-II MEMORY FOR NAMES DELAYED	5-16
TOMAL-2 PAIRED RECALL	5-59
WMS-4 VERBAL PAIRED ASSOCIATES I	16-90
WMS-4 VERBAL PAIRED ASSOCIATES II	16-90
WRAML2 SOUND SYMBOL	5-8
WRAML2 SOUND SYMBOL DELAY RECALL	5-8
WISC-IV/Integrated Coding Recall (Gv:MV)	6-16

SHORT-TERM MEMORY (Gsm)

The ability to encode, maintain, and manipulate information in one's immediate awareness

Memory Span (MS)

The ability to encode information, maintain it in primary memory, and immediately reproduce the information in the same sequence in which it was represented

DAS-II RECALL OF DIGITS FORWARD	6-17
KABC-II HAND MOVEMENTS (Gv:MV)*	3-18
KABC-II NUMBER RECALL	3-18
KABC-II WORD ORDER (MW)	3-18
SB5 NONVERBAL WORKING MEMORY(MW)	2-
SB5 VERBAL WORKING MEMORY (MW)	2-
WECH DIGIT SPAN (MW)	6-90
WJ III NU COG MEMORY FOR WORDS	4-
WJ III NU DS MEMORY FOR SENTENCES	6-
APAT SENTENCE MEMORY	5-12
APAT WORD SEQUENCES	5-12
ASA MIMICRY	3-6
CELF-4 FAMILIAR SEQUENCES (MW)	5-21
CELF-4 NUMBER REPETITION-FORWARD	5-21
CELF-4 RECALLING SENTENCES	5-21
CELF-Pre2 RECALLING SENTENCES	3-6
CELF-Pre2 RECALLING SENTENCES IN CONTEXT	3-6
DWNB EXPRESSIVE SPEECH	4-
ITPA-3 RHYMING SEQUENCES	5-12
ITPA-3 SYNTACTIC SENTENCES	5-12
KBNA NUMBERS	20-
KBNA REPETITION	20-
NAB DIGITS FORWARD	18-
NEPSY-II REPETITION OF NONSENSE WORDS	5-12
NEPSY-II SENTENCE REPETITION	5-6
NEPSY-II WORD LIST INTERFERENCE (MW)	7-16
RIAS VERBAL MEMORY	3-94
TAPS-3 NUMBER MEMORY FORWARD	4-18
TAPS-3 SENTENCE MEMORY	4-18
TAPS-3 WORD MEMORY	4-18
TOLD-P:4 SENTENCE IMITATION	4-8
TOMAL-2 DIGITS FORWARD	5-59
TOMAL-2 LETTERS FORWARD	5-59
TVPS3 SEQUENTIAL MEMORY	4-18

WISC-IV Integrated LETTER SPAN	6-16
WISC-IV Integrated SPATIAL SPAN FORWARD AND BACKWARD (MW)	6-16
WNV SPATIAL SPAN (MW)	8-21
WRAML2 NUMBER LETTER	5-
WRAML2 SENTENCE MEMORY	5-
NEPSY-II List Memory (Glr:M6)	7-12
TOMAL-2 Manual Imitation (Gv:MV)	5-59
TOMAL-2 Visual Sequential Memory (Gv:MV)	5-59
WISC-IV Integrated Visual Digit Span (Gv:MV)	6-16
WRAML2 Finger Windows (Gv:MV)	5-

Working Memory Capacity (MW)

The ability to direct the focus of attention to perform relatively simple manipulations, combinations, and transformations of information within primary memory while avoiding distracting stimuli and engaging in strategic/controlled searches for information in secondary memory

DAS-II RECALL OF DIGITS-BACKWARD	5-17
DAS-II RECALL OF SEQUENTIAL ORDER	5-17
WECH ARITHMETIC (Gf:RQ)*	6-90
WECH LETTER-NUMBER SEQUENCING	6-90
WJ III NU COG AUDITORY WORKING MEMORY	4-90+
WJ III NU COG NUMBERS REVERSED	4-90+
CELF-4 NUMBER REPETITION-BACKWARD	5-21
NAB DIGITS BACKWARD	18-97
NEPSY-II INHIBITION	5-16
TAPS-3 NUMBER MEMORY REVERSED	4-18
TOMAL-2 DIGITS BACKWARD	5-59
TOMAL-2 LETTERS BACKWARD	5-59
WISC-IV Integrated LETTER-NUMBER	6-16
WRAML2 SYMBOLIC WORKING MEMORY	9-85+
WRAML2 VERBAL WORKING MEMORY	9-85+
NEPSY-II Auditory Attention and Response	5-16
SIT Section D (Grw:RD)	6-17
SIT Section E (Grw:RD)	6-17
WISC-IV/Integrated Arithmetic – Process	6-16
WMS-4 Symbol Span (Gv:MV)	16-90

PROCESSING SPEED (Gs)

The ability to perform simple, repetitive cognitive tasks quickly and fluently

Number Facility (N)

The speed at which basic arithmetic operations are performed accurately

WJ III NU ACH MATH FLUENCY	7-90
WIAT-III MATH FLUENCY - ADDITION	6-50
WIAT-III MATH FLUENCY - MULTIPLICATION	8-50
WIAT-III MATH FLUENCY - SUBTRACTION	6-50
WJ III NU ACH Form C MATH FLUENCY	7-90

Rate of Test-Taking (R9)

The speed and fluency with which simple cognitive tests are completed

WECH CODING	6-90
WPPSI-IV ANIMAL CODING	4-7:7
CTMT TRIAL 1	11-74
D-KEFS TRAIL MAKING TEST: LETTER SEQUENCING	8-89
D-KEFS TRAIL MAKING TEST: NUMBER SEQUENCING	8-89
DTVP-A VISUAL-MOTOR SEARCH	11-74
DTVP-A VISUAL-MOTOR SPEED	11-74
GORT-5 RATE	6-23
TVCF TRAILS C	8-89
WISC-IV/Integrated CODING COPYING	6-16
WNV CODING	4-21
NEPSY-II Design Fluency (Gv:Vz)	5-12

Perceptual Speed (P)

The speed at which visual stimuli can be compared for similarity or difference

DAS-II SPEED OF INFORMATION	6-17
WECH CANCELLATION	4-69
WECH SYMBOL SEARCH	4-90
WJ III NU COG DECISION SPEED	4-90+
WJ III NU COG PAIR CANCELLATION	4-90+
WJ III NU COG VISUAL MATCHING	2-90+
WJ III NU DS CROSS OUT	4-90+
WPPSI-IV BUG SEARCH	4-7:7
CTMT TRIAL 2	11-74
CTMT TRIAL 3	11-74
CTMT TRIAL 4	11-74
D-KEFS TRAIL MAKING TEST: VISUAL SCANNING	8-89
ERA SILENT ORTHOGRAPHIC EFFICIENCY	4-7
KBNA SYMBOL CANCELLATION	20-89
NAB NUMBERS AND LETTERS	18-97
TOC GRAPHEME MATCHING	6-17
CTMT Trial 5 (Gsm:MW)	11-74
D-KEFS Trail Making Test: Number-Letter Switching (Gsm:MW)	8-89
TOC Letter Choice (Grw:SG)	6-17

VISUAL PROCESSING (Gv)

The ability to make use of simulated mental imagery (often in conjunction with currently perceived images) to solve problems

Flexibility of Closure (CF)

The ability to identify a visual figure or pattern embedded in a complex distracting visual pattern or array, when one knows in advance what the pattern is

RIAS What's Missing (Gc:K0)	3-94
WECH Picture Completion (Gc:K0)	4-90
DTVP-A FIGURE GROUND	11-74
NEPSY-II GEOMETRIC PUZZLES (Vz)	3-16
NEPSY-II PICTURE PUZZLES	7-16
NEPSY-II ROUTE FINDING	5-12
TVPS3 FIGURE GROUND	4-18

Closure Speed (CS)

The ability to quickly identify a familiar meaningful visual object from incomplete (e.g., vague, partially obscured, disconnected) visual stimuli, without knowing in advance what the object is

KABC-II GESTALT CLOSURE	5-18
WJ III NU DS VISUAL CLOSURE	6-90+
WPPSI-III OBJECT ASSEMBLY	2:6-7:7
WNV OBJECT ASSEMBLY	4-7

Spatial Scanning (SS)

The ability to visualize a path out of a maze or a field with many obstacles

KABC-II ROVER (Gf:RG)*	5-18
WJ III NU COG PLANNING (Gf:RG)*	6-90+
NAB MAZES	18-97
WISC-IV Integrated ELITHORN MAZES (EM) AND EM NO TIME BONUS	6-16

Visual Memory (MV)

The ability to remember complex visual images over short periods of time (less than 30 seconds)

DAS-II RECOGNITION OF PICTURES	2:6-13:5
KABC-II FACE RECOGNITION	3-5
RIAS NONVERBAL MEMORY	3-94
WJ III NU COG PICTURE RECOGNITION	6-90+
WPPSI-IV PICTURE MEMORY	2:6-7:7
WPPSI-IV ZOO LOCATIONS	2:6-7:7
DAS-II RECALL OF DESIGNS	7-17
KBNA COMPLEX FIGURE 2	20-89
KBNA PICTURE RECOGNITION	20-89
KBNA SPATIAL LOCATION	20-89
NAB DRIVING SCENES	18-97
NAB SHAPE LEARNING	18-97
NEPSY-II MEMORY FOR DESIGNS	3-16
NEPSY-II MEMORY FOR FACES	5-16
SIT SECTION A	6-17
TOMAL-2 ABSTRACT VISUAL MEMORY	5-59
TOMAL-2 FACIAL MEMORY	5-59
TOMAL-2 MEMORY FOR LOCATION	5-59
TVPS3 VISUAL MEMORY	4-18
WMS-4 VISUAL REPRODUCTION I	16-90
WMS-4 VISUAL REPRODUCTION II DELAYED RECALL	16-90
WMS-4 VISUAL REPRODUCTION II RECOGNITION	16-90
WNV RECOGNITION	4-7
WRAML2 DESIGN MEMORY	5-85+
WRAML2 DESIGN MEMORY RECOGNITION	5-85+
WRAML2 PICTURE MEMORY	5-85+
WRAML2 PICTURE MEMORY RECOGNITION	5-85+
NAB Dots (Gsm:MW)	18-97
SIT Section B (Grw:RD)	6-17
WMS-4 Designs I (Gsm :MW)	16-69
WMS-4 Designs II Delayed Recall (Gsm:MW)	16-69
WMS-4 Designs II Recognition (Gsm:MW)	16-69

Visualization (Vz)	
The ability to perceive complex patterns and mentally simulate how they might look when transformed (e.g., rotated, changed in size, partially obscured)	
DAS-II COPYING	3:6-6
DAS-II PATTERN CONSTRUCTION	2:6-17
KABC-II BLOCK COUNTING	5-18
KABC-II CONCEPTUAL THINKING (Gf:I)*	3-6
KABC-II PATTERN REASONING (5-6 YEARS) (Gf:I)*	5-6
KABC-II TRIANGLES	3-18
SB5 NONVERBAL VISUAL-SPATIAL PROCESSING	2-85+
SB5 VERBAL VISUAL-SPATIAL PROCESSING (Gc:VL,K0)*	2-85+
WAIS-IV VISUAL PUZZLES	16-90
WECH BLOCK DESIGN (BD) AND BD NO TIME	2:6-90
WJ III NU COG SPATIAL RELATIONS	6-90+
WJ III NU DS BLOCK ROTATION	6-90+
Beery VMI VISUAL PERCEPTION	2-99
DAS-II MATCHING LETTER-LIKE FORMS	4-6
DTVP-A FORM CONSTANCY (CF)	11-74
DTVP-A VISUAL CLOSURE	11-74
KBNA COMPLEX FIGURE 1 (MV)	20-89
NAB DESIGN CONSTRUCTION	18-97
NAB FIGURE DRAWING	18-97
NAB MAP READING	18-97
NAB VISUAL DISCRIMINATION	18-97
NEPSY-II ARROWS	5-16
NEPSY-II BLOCK CONSTRUCTION	3-6
NEPSY-II DESIGN COPYING	3-16
SHIPLEY-2 BLOCK PATTERNS	7-89
TVMS-3	3-90+
TVPS3 FORM CONSTANCY (CF)	4-18
TVPS3 SPATIAL RELATIONS	4-18
TVPS3 VISUAL CLOSURE	4-18
TVPS3 VISUAL DISCRIMINATION	4-18
WASI-2 BLOCK DESIGN	6-90
WISC-IV Integrated BLOCK DESIGN MULTIPLE CHOICE (BDMC) AND BDMC NO TIME BONUS	6-16
WISC-IV Integrated BLOCK DESIGN – PROCESS APPROACH	6-16
WMS-4 VISUAL REPRODUCTION II COPY	16-90

WMS-4 Spatial Addition (Gsm:MW)	16-69
Beery VMI Beery-VMI (Gp:P1)	2-99
D-KEFS Tower (Gf:RG)	8-89
DTVP-A Copying (Gp:P1)	11-74
MFVPT-3 Motor Free Visual Perception Test (Gsm:MW)	4-70
PTI-2 Form Discrimination (CS;Gf:I)	3-8
PTONI Primary Test Of Nonverbal Intelligence (Gf:RG)	3-9
WNV Picture Arrangement (Gc:K0)	8-21

TACTILE ABILITIES (Gh)

The abilities to detect and process meaningful information in haptic (touch) sensations

Tactile Sensitivity (TS)

The ability to make fine discriminations in haptic sensations

DWNB TACTILE EXAMINATION: FINGER IDENTIFICATION	4-90+
DWNB TACTILE EXAMINATION: OBJECT IDENTIFICATION	4-90+
DWNB TACTILE EXAMINATION: PALM WRITING	4-90+
DWNB TACTILE EXAMINATION: SIMULTANEOUS LOCALIZATION	4-90+

DOMAIN-SPECIFIC KNOWLEDGE (Gkn)

The depth, breadth, and mastery of specialized knowledge (knowledge not all members of society are expected to have)

Knowledge of Behavioral Content (BC)

The knowledge or sensitivity to nonverbal human communication/interaction systems

KBNA EXPRESSION OF EMOTION	20-89
NEPSY-II Affect Recognition (Gv:MV)	3-16
TOPL-2 Test of Pragmatic Language (Gc:CM)	6-18

PSYCHOMOTOR SPEED (Gps)

The speed and fluidity with which physical body movements can be made

Speed of Articulation (PT)

The ability to rapidly perform successive articulations with the speech musculature

NEPSY-II OROMOTOR SEQUENCES	5-12
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PSYCHOMOTOR ABILITIES (Gp)

The ability to perform physical body motor movements (e.g., movement of fingers, hands, legs) with precision, coordination, or strength

Manual Dexterity (P1)

The ability to make precisely coordinated movements of a hand or a hand and attached arm

Beery VMI MOTOR COORDINATION	2-99
D-KEFS TRAIL MAKING TEST: MOTOR SPEED	8-89
DWNB COORDINATION	4-90+
DWNB MIME MOVEMENTS	4-90+
KBNA MOTOR PROGRAMMING	20-89
NEPSY-II IMITATING HAND POSITIONS	3-12
NEPSY-II Manual Motor Sequences (Gsm:MS)	3-12
NEPSY-II Visual-Motor Precision (Gs:R9)	3-12

Finger Dexterity (P2)

The ability to make precisely coordinated movements of the fingers (with or without the manipulation of objects)

DWNB FINGER TAPPING	4-90+
NEPSY-II FINGER TAPPING	5-16

Static Strength (P3)

The ability to exert muscular force to move (push, lift, pull) a relatively heavy or immobile object

DWNB GRIP STRENGTH	4-90+
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Gross Body Equilibrium (P4)

The ability to maintain the body in an upright position in space or regain balance after balance has been disturbed

DWNB GAIT AND STATION	4-90+
DWNB ROMBERG	4-90+
NEPSY-II STATUE	3-6

READING AND WRITING (Grw)

The depth and breadth of knowledge and skills related to written language

Reading Decoding (RD)	
The ability to identify words from text	
WJ III ACH NU LETTER-WORD IDENTIFICATION	2-90+
WJ III ACH NU WORD ATTACK	4-90+
DAB-3 ALPHABET/WORD KNOWLEDGE	6-14
GDRT-2 LETTER/WORD RECOGNITION	6-13
GORT-5 ACCURACY	6-18
GORT-5 FLUENCY	6-18
ITPA-3 SIGHT DECODING	6:6-12
ITPA-3 SOUND DECODING	6:6-12
KBNA READING SINGLE WORDS	20-89
KTEA-II LETTER AND WORD RECOGNITION	4:6-25
KTEA-II NONSENSE WORD DECODING	6-25
PRT DECODING	6-12
SORT-R3 SORT-R3	5-99+
TERA 3 ALPHABET	3:6-8:6
TIWRE READING EFFICIENCY INDEX	3-94
WFAS WORD READING (FORM A & B)	5-50
WIAT-III PSEUDOWORD DECODING	6-50
WIAT-III WORD READING	6-50
WIST WORD IDENTIFICATION	7-18
WJ III NU DRB LETTER-WORD IDENTIFICATION	2-90+
WJ III NU DRB WORD ATTACK	4-90+
WJ III Form C LETTER-WORD IDENTIFICATION	2-90+
WMLS-R: NU LETTER-WORD IDENTIFICATION	2-90+
WRAT-Expanded READING (RC)	5-24
WRMT-3 WORD ATTACK	6-56+
WRMT-3 WORD IDENTIFICATION	6-56+
GDRT-2 Reading Vocabulary (Gc:VL)	6-13
KTEA-II Decoding Fluency (Gs:R9)	8-25
KTEA-II Word Recognition Fluency (Gs:R9)	8-25
SHIPLEY-2 Vocabulary (Gc:VL)	7-89
TOSWRF Silent Word Reading Fluency (Gs:R9)	6:6-17
TOWRE2 Phonemic Decoding Efficiency (Gs:R9)	6-24

TOWRE2 Sight Word Efficiency (Gs:R9)	6-24
WIST Sound-Symbol Knowledge (Ga:PC)	7-18
WRMT-3 Oral Reading Fluency (Gs:R9)	6-56+
WRMT-3 Word Comprehension (Gc:VL)	6-56+

English Usage (EU)	
Knowledge of the mechanics of writing (e.g., capitalization, punctuation, and word usage)	
WJ III NU ACH EDITING	6-90+
WJ III NU ACH PUNCTUATION AND CAPITALIZATION	6-90+
DAB-3 CAPITALIZATION	6-14
DAB-3 PUNCTUATION	6-14
KTEA-II WRITTEN EXPRESSION (WA)	4:6-25
NAB WRITING	18-97
TERA 3 CONVENTIONS	3:6-8:6
TEWL3 BASIC WRITING (SG)	3-10
TOC PUNCTUATION	6-17
TOWL-4 CONTEXTUAL CONVENTIONS	7-17
TOWL-4 LOGICAL SENTENCES	7-17
TOWL-4 PUNCTUATION	6-17
WIAT-III SENTENCE COMPOSITION (WA)	6-50
WMLS-R: NU DICTATION	2-90+
TOAL-4 Orthographic Usage (Gc:MY)	12-24

Reading Comprehension (RC)	
The ability to understand written discourse	
WJ III NU ACH PASSAGE COMPREHENSION	2-90+
DAB-3 READING COMPREHENSION	6-14
GDRT-2 MEANINGFUL READING	6-13
GORT-5 COMPREHENSION	6-18
ITPA-3 SENTENCE SEQUENCING	6:6-12
KTEA-II READING COMPREHENSION	6-25
NAB READING COMPREHENSION	18-97
OWLS-II READING COMPREHENSION	5-21
PRT COMPREHENSION	6-12
TERA 3 MEANING	3:6-8:6
TORC-4 PARAGRAPH CONSTRUCTION	7-17
TORC-4 SENTENCE COMPLETION	7-17
TORC-4 TEXT COMPREHENSION	7-17
WFAS READING COMPREHENSION (FORM A & B) GRADES K-1	6-35
WIAT-III READING COMPREHENSION	6-50
WJ III NU ACH Form C PASSAGE COMPREHENSION	2-90+
WJ III NU DRB PASSAGE COMPREHENSION	2-90+
WMLS-R: NU PASSAGE COMPREHENSION	2-90+
WRMT-3 PASSAGE COMPREHENSION	5-75+
TORC-4 Relational Vocabulary (Gf:I)	7-17

Reading Speed (RS)	
The rate at which a person can read connected discourse with full comprehension	
WJ III NU ACH READING FLUENCY	6-90+
PRT FLUENCY	6-12
TORC-4 CONTEXTUAL FLUENCY	7-17
TOSCRF ALL FORMS A-D	7-18
TOSREC TEST OF SILENT READING EFFICIENCY AND COMPREHENSION	6-18
WIAT-III ORAL READING FLUENCY	6-50
WJ III NU ACH Form C READING FLUENCY	6-90+
WJ III NU DRB READING FLUENCY	6-90+

Writing Ability (WA)	
The ability to use text to communicate ideas clearly	
WJ III NU ACH WRITING SAMPLES	5-90+
DAB-3 CONTEXTUAL LANGUAGE	7-14
DAB-3 STORY CONSTRUCTION	6-14
KBNA PICTURE DESCRIPTION: WRITTEN	20-89

OWLS-II WRITTEN EXPRESSION	5-21
TEWL3 CONTEXTUAL WRITING	5-11
TOWL-4 SENTENCE COMBINING (EU)	7-17
TOWL-4 STORY COMPOSITION	7-17
WIAT-III ESSAY COMPOSITION (EU)	8-50
WJ III NU ACH Form C WRITING SAMPLES	5-90+

Spelling Ability (SG)	
The ability to spell words	
WJ III NU ACH SPELLING	2-90+
WJ III NU ACH Spelling of Sounds (Ga:PC)	6-90+
DAB-3 SPELLING	6-14
ITPA-3 SIGHT SPELLING	6:6-12
ITPA-3 SOUND SPELLING	6:6-12
KTEA-II SPELLING	6-25
SIT SECTION C	6-17
TOC SIGHT SPELLING	6-17
TOC WORD CHOICE	6-17
TOWL-4 SPELLING	7-17
WFAS SPELLING	5-50
WIAT-III SPELLING	5-50
WIST SPELLING	7-18
WJ III NU ACH Form C SPELLING	2-90+
TOC Homophone Choice (Gc:VL,K0)	6-17
TOC Word Scramble (Gs:R9)	6-17
WJ III NU DRB Spelling of Sounds (Ga:PC)	6-90+

Writing Speed (WS)	
The ability to copy or generate text quickly	
WJ III NU ACH WRITING FLUENCY	5-90+
WIAT-III ALPHABET WRITING FLUENCY	4-9
WJ III NU ACH Form C WRITING FLUENCY	7-90+

QUANTITATIVE KNOWLEDGE (Gc)

The depth and breadth of knowledge related to mathematics

Mathematical Achievement (A3)	
Measured (tested) mathematics achievement	
WJ III NU ACH CALCULATION	5-90+
CMAT ADDITION	7-18
CMAT CHARTS, TABLES, AND GRAPHS	7-18
CMAT DIVISION	7-18
CMAT MONEY	7-18
CMAT MULTIPLICATION	7-18
CMAT RATIONAL NUMBERS	7-18
CMAT SUBTRACTION	7-18
CMAT TIME	7-18
DAB-3 MATH CALCULATION	6-14
KM3 ADDITION AND SUBTRACTION	5-21
KM3 ALGEBRA (KM)	5-21
KM3 MEASUREMENT (KM)	5-21
KM3 MENTAL COMPUTATION AND ESTIMATION	6-21
KM3 MULTIPLICATION AND DIVISION	7-21
KM3 NUMERATION	5-21
KTEA-II MATH COMPUTATION	5-25
WFAS NUMERICAL OPERATIONS	5-50
WIAT-III NUMERICAL OPERATIONS	5-50
WISC-IV/Integrated WRITTEN ARITHMETIC	6-16
WJ III NU ACH Form C CALCULATION	5-90+
CMAT Algebra (Gf:RQ)	7-18
CMAT Geometry (Gv:Vz)	10-18:11
CMAT Measurement (Gv:Vz)	7-18
CMAT Problem Solving (Gf:RQ)	7-18
DAB-3 Math Reasoning (Gf:RQ)	6-14
KBNA Sentence Reading-Arithmetic (Grw:RC)	20-89
KM3 Foundations of Problem Solving (Gf:RQ)	5-21
KTEA-II Math Concepts and Application (Gf:RQ)	4-25
WRAT-Expanded Mathematics (Gf:RQ)	5-24

Mathematical Knowledge (KM)

Range of general knowledge about mathematics, not the performance of mathematical operations or the solving of math problems

BSRA-3 NUMBERS/COUNTING (A3)	3-6
PTI-2 QUANTITATIVE CONCEPTS (A3)	3-8
KM3 Data Analysis and Probability (A3;Gf:RQ)	5-21
KM3 Geometry (A3;Gv:Vz)	5-21
TEMA-3 Test of Early Mathematics (A3;Gsm:MW)	3-8

Table B.1 CHC Broad and Narrow Ability Classifications Based on Factor Analyses and an Expert Consensus Process

Battery/Subtest	CHC Broad and Narrow Ability Classifications Based on Factor Analysis	Additional CHC Broad and Narrow Ability Classifications Based on an Expert Consensus Process
DAS-II/Rapid Naming	<i>Gl</i> :NA	<i>Gs</i> :R9
DAS-II/Verbal Similarities	<i>Gc</i> :VL	<i>Gf</i> :I
KABC-II/Conceptual Thinking	<i>Gv</i> :Vz	<i>Gf</i> :I
KABC-II/Hand Movements	<i>Gsm</i> :MS	<i>Gv</i> :MV
KABC-II/Pattern Reasoning (5-6 years)	<i>Gv</i> :Vz	<i>Gf</i> :I
KABC-II/Pattern Reasoning (7-18 years)	<i>Gf</i> :I	<i>Gv</i> :Vz
KABC-II/Riddles	<i>Gc</i> :VL	<i>Gf</i> :RG
KABC-II//Rover	<i>Gv</i> :SS	<i>Gf</i> :RG
KABC-II/Story Completion (5-6 years)	<i>Gc</i> :K0	<i>Gf</i> :RG
KABC-II/Story Completion (7-18 years)	<i>Gf</i> :RG	<i>Gc</i> :K0
RIAS/Guess What	<i>Gc</i> :K0,VL	<i>Gf</i> :I
RIAS/Verbal Reasoning	<i>Gc</i> :VL,LD	<i>Gf</i> :I
SB5/Nonverbal Fluid Reasoning	<i>Gf</i> :I	<i>Gv</i>
SB5/Nonverbal Knowledge	<i>Gc</i> :K0	<i>Gf</i> :RG
SB5/Nonverbal Quantitative Reasoning	<i>Gf</i> :RQ	<i>Gq</i> :A3
SB5/Verbal Fluid Reasoning	<i>Gf</i> :I,RG	<i>Gc</i> :CM
SB5/Verbal Quantitative Reasoning	<i>Gf</i> :RQ	<i>Gq</i> :A3
SB5/Verbal Visual-Spatial	<i>Gv</i> :Vz	<i>Gc</i> :VL,K0
WECH /Arithmetic	<i>Gsm</i> :MW	<i>Gf</i> :RQ
WECH/Similarities	<i>Gc</i> :VL	<i>Gf</i> :I

WISC-IV Word Reasoning	<i>Gc:VL</i>	<i>Gf:I</i>
WISC-IV Integrated/Similarities Multiple Choice	<i>Gc:VL</i>	<i>Gf:I</i>
WJ III NU ACH/Academic Knowledge	<i>Gc:K0</i>	<i>Gkn:K2</i>
WJ III NU COG/Planning	<i>Gv:SS</i>	<i>Gf:RG</i>
WJ III NU COG/Rapid Picture Naming	<i>Glr:NA</i>	<i>Gs:R9</i>
WJ III NU COG/Verbal Comprehension	<i>Gc:VL</i>	<i>Gf:I</i>
WJ III NU DS/Bilingual Verbal Comprehension	<i>Gc:VL</i>	<i>Gf:I</i>