

WISC-IV Integrated Interpretive Report - (United States)

EXAMINEE: Hayley Keller
AGE: 12 years 11 months
DATE OF BIRTH: 2/18/1992
EXAMINEE ID: 9494949
GENDER: Female

REPORT DATE: 2/15/2005
GRADE: 6th
ETHNICITY: White not Hispanic Origin
EXAMINER: Emily Martinez

Tests Administered: WISC-IV Core/Supplemental (6/12/2003)
WISC-IV Process Approach (6/12/2003)

Age at Testing: (11 years 3 months)
(11 years 3 months)

Is this a retest? No

SCORES SUMMARY

WISC-IV COMPOSITE	SCORE
Verbal Comprehension Index (VCI)	112
Perceptual Reasoning Index (PRI)	79
Working Memory Index (WMI)	102
Processing Speed Index (PSI)	91
Full Scale IQ (FSIQ)	96

Reason for Referral

Referral information for Hayley is unknown at this time.

Home

There is no data available regarding Hayley's parent(s), guardian(s), living arrangements, or family stressors.

Language

There is no data available regarding Hayley's language.

Development

There is no data available regarding Hayley's pregnancy, birth and developmental history.

Health

There is no information available regarding Hayley's sensory/motor status. There is no information or behavioral observations available regarding Hayley's medical, psychiatric, and neurological status. There is no data available regarding Hayley's use of medication and substances.

School

There is no information provided regarding Hayley's early educational history. Hayley's school performance with regard to her attendance, conduct, and academics are unknown at this time. Hayley's past and recent performance on standardized achievement tests is unknown at this time.

Behavior Observation

There are no additional behavioral observations regarding Hayley's appearance, affect, test-taking attitude and behavior.

WISC-IV Integrated Interpretive Report - (United States)

Interpretation of WISC-IV Results

Hayley's unique set of thinking and reasoning abilities make her overall intellectual functioning difficult to summarize by a single score on the Wechsler Intelligence Scale for Children - Fourth Edition (WISC-IV). Her verbal reasoning abilities are much better developed than her nonverbal reasoning abilities. Making sense of complex verbal information and using verbal abilities to solve novel problems are a strength for Hayley. Processing complex visual information by forming spatial images of part-whole relationships and/or by manipulating the parts to solve novel problems without using words is a weakness.

Hayley's verbal reasoning abilities as measured by the Verbal Comprehension Index are in the High Average range and above those of approximately 79% of her peers (VCI = 112; 95% confidence interval = 105-118). The Verbal Comprehension Index is designed to measure verbal reasoning and concept formation. Hayley performed comparably on the verbal subtests contributing to the VCI, suggesting that these verbal cognitive abilities are similarly developed.

In order to investigate Hayley's ability to reason with verbal information and demonstrate her store of verbal knowledge, she was administered five process-oriented verbal multiple-choice subtests. These multiple-choice subtests are designed to reduce the demand on free recall and verbal expression, while measuring the same core trait as its counterpart. Her performance on the multiple-choice version of the Similarities subtest is comparable to her peers (Similarities Multiple Choice = 13). This subtest required Hayley to choose from a list of options the one that best explains the relationship between two objects. Her performance suggests that she has likely developed an age appropriate ability for recognizing conceptual relationships between common objects, concepts, or words. Although she performed somewhat better on multiple-choice than free recall, the difference is not especially uncommon.

Her performance on the multiple-choice version of the Vocabulary subtest is comparable to her peers (Vocabulary Multiple-Choice = 13). This subtest required Hayley to choose from a list of options the one that best defines a word presented in text and read aloud. Her performance suggests that she has likely acquired an age appropriate level of general word knowledge. Presentation of items in a multiple-choice format, did not significantly improve Hayley's verbal performance.

Her performance on the pictorial or visual multiple-choice version of the Vocabulary subtest is comparable to her peers (Picture Vocabulary Multiple-Choice = 14). This subtest required her to choose from four pictures the one that best represents a given verbal concept. Her performance suggests that she has likely acquired an age appropriate level of general word knowledge and ability to relate pictorial or visual information to verbal concepts. Providing visual cues did not significantly enhance her word knowledge performance.

Her performance on the multiple-choice version of the Comprehension subtest is comparable to her peers (Comprehension Multiple-Choice = 12). This subtest required Hayley to choose from a list of options the one that best explains her understanding of a general principle or social situation. Her performance suggests that she has developed an age appropriate understanding of the principles that govern behavior in social situations or organized society. Presentation of items in a multiple-choice format, did not significantly improve Hayley's Comprehension performance.

WISC-IV Integrated Interpretive Report - (United States)

Hayley's performance on the multiple-choice version of the Information subtest is comparable to her peers (Information Multiple-Choice = 13). This subtest required Hayley to choose the best answer to questions concerning factual information from a list of options. Her performance suggests that she has likely acquired and encoded an age appropriate level of factual knowledge. Presentation of items in a multiple-choice format, did not significantly improve Hayley's Information performance.

Hayley's nonverbal reasoning abilities as measured by the Perceptual Reasoning Index are in the Borderline range and above those of only 8% of her peers (PRI = 79; 95% confidence interval = 73-88). The Perceptual Reasoning Index is designed to measure fluid reasoning in the perceptual domain with tasks that primarily assess nonverbal fluid reasoning and perceptual organization abilities. Hayley's performance on the perceptual reasoning subtests contributing to the PRI is somewhat variable, although the magnitude of this difference in performance is not unusual among children her age. Examination of Hayley's performance on individual subtests provides additional information regarding her specific nonverbal abilities. Hayley performed much better on tasks that require abstract concept formation and categorical reasoning that must be verbally expressed (Similarities = 12), than tasks requiring abstract categorical reasoning without verbal expression required (Picture Concepts = 8). Hayley's performed much better on the Block Design subtest when speed of performance is not considered (Block Design = 3; Block Design No Time Bonus = 9). This variability is unusual for children her age, and may become noticeable during tasks that require quick analysis of part-whole relationships, especially when information is presented spatially. However, Hayley performed as well or better than her peers on task requiring the rapid processing of simple information (PSI = Average range). This may indicate a specific difficulty in processing more complex information.

In order to further investigate Hayley's non-verbal reasoning ability, she was administered three process oriented perceptual reasoning subtests. Hayley's performance on the multiple-choice version of the Block Design subtest is comparable to her peers (Block Design Multiple Choice = 12). This subtest required Hayley to select from four options the one that matches the target design. Her performance on this task compared to Block Design suggest she has developed an age appropriate level of visual discrimination and attention to detail. However, she seems to have difficulty when asked to physically reconstruct a target design using its component parts (Block Design = 3). This may be due to difficulty in visually integrating and then converting visual information into fine motor movement, or that she performs better on visual tasks when allowed to choose one answer from a smaller set of possible responses. Hayley's performance on the Block Design Process Approach subtest is comparable to her peers (Block Design Process Approach = 8). This subtest required Hayley to view pictures in a Stimulus Book and use 12 red-and-white blocks to recreate the design within a specified time limit. Her performance suggests she has developed an age appropriate ability to analyze part-whole relationships, especially when information is presented spatially.

Hayley's performance on the Elithorn Mazes subtest is comparable to her peers (Elithorn Mazes = 8). This subtest required Hayley to view a series of mazes and draw a path that passes through a specified number of dots en route to the exit within a specified time limit. The designs are created to draw impulsive responders into making incorrect responses because planning skills are emphasized in this test. Her performance on this task compared to Block Design Multiple Choice suggests her visual integration and attention to detail (Block Design Multiple Choice = 12) are better developed than her ability to use this information for spatial planning or motor execution. However, her overall performance on these tasks is comparable to her peers,

WISC-IV Integrated Interpretive Report - (United States)

suggesting that Hayley has developed an age appropriate level of visual integration, attention to detail, spatial planning, and command over fine motor movement.

Hayley's ability to sustain attention, concentrate, and exert mental control is in the Average range. She performed better than approximately 55% of her age-mates in this area (Working Memory Index = 102; 95% confidence interval 94-109).

Hayley's abilities to sustain attention, concentrate, and exert mental control are better developed than her nonverbal reasoning abilities.

In order to further investigate Hayley's working memory skills, she was administered six process oriented working memory subtests. Hayley's ability to recall aurally presented digits is comparable to her peers (Digit Span Forward = 11). This score represents her ability to listen and recall increasingly long strings of numbers, and repeat them verbatim. Her performance suggests that she has developed an age appropriate capacity for aural information. Although she performed somewhat better on aurally presented digits than visual (Visual Digit Span = 10), the difference is not especially uncommon. Hayley's ability to recall digits presented visually is comparable to her peers (Visual Digit Span = 10). This score represents her ability to view and recall increasingly long strings of numbers, and repeat them verbatim. Her performance suggests that she has developed an age appropriate capacity for visual information. Although she performed somewhat better on aurally presented digits (Digit Span Forward = 11) than visually presented digits, the difference is not especially uncommon. Hayley's capacity for visual-spatial registration is comparable to her peers (Spatial Span Forward = 9). This task required Hayley to track, store, mentally rehearse, and execute a sequence of spatial locations. Her performance suggests that she has developed an age appropriate ability for registration of visual-spatial information, sequencing, attention, visual scanning, and accurate execution of motor responses. Although she performed somewhat better on aurally presented digits (Digit Span Forward = 11) than visual-spatial locations, the difference is not especially uncommon.

Hayley's performance on the Letter Span Non-Rhyming subtest is comparable to her peers (Letter Span Non-Rhyming = 13). This score represents Hayley's ability to recall a series of phonologically distinct letters presented aurally. Her performance suggests that she has developed an age appropriate capacity for phonological processing and registration of aural information. Although she performed somewhat better on aurally presented non-rhyming letters than digits (Digit Span Forward = 11), the difference is not especially uncommon. Hayley's performance on the Letter- Number Sequencing Process Approach subtest is comparable to her peers (Letter-Number Sequencing PA = 12). This score represents Hayley's ability to recall a series of letter and numbers where the letters make up an embedded word within the sequence. Her performance suggests that she has developed an age appropriate capacity for registering and manipulating two types of phonological information simultaneously. Although she performed somewhat better on recalling sequences with embedded words (Letter-Number Sequencing PA = 12), than without (Letter-Number Sequencing = 11), the difference is not especially uncommon. Hayley's capacity for visual-spatial registration with mental manipulation is comparable to her peers (Spatial Span Backward = 8). This task required Hayley to track, store, mentally rehearse, and execute in reverse order a sequence of spatial locations. His performance suggests that she has developed an age appropriate ability for registration with mental manipulation of visual-spatial information, sequencing, attention, visual scanning, and accurate

WISC-IV Integrated Interpretive Report - (United States)

execution of motor responses. Although she performed somewhat better on reversing aurally presented digits (Digit Span Backward = 10) than visual-spatial locations, the difference is not especially uncommon.

Hayley's Arithmetic Process Approach Part-A performance is comparable to her peers (Arithmetic PA-A = 11). This subtest is a variation of the Arithmetic subtest and is designed to reduce the working memory load by presenting failed Arithmetic items both aurally and in written form. Her performance suggests that she has developed age appropriate math skills, working memory capacity, and rate of cognitive processing. Although her Arithmetic Process Approach Part-A performance, is somewhat better than her Arithmetic performance (Arithmetic = 10), the difference is not especially uncommon. Hayley's Arithmetic Process Approach Part-B performance, where she was allowed the use of pencil and paper to solve missed items, is comparable to her peers, and did not significantly improve Hayley's Arithmetic performance. (Arithmetic = 10; Arithmetic PA-B = 12). Hayley's performance on the Written Arithmetic subtest, designed to assess knowledge of numbers, mathematical symbols, and the proper sequence of performing mathematical operations, is comparable to her peers (Written Arithmetic = 13). When compared to Arithmetic (Arithmetic = 10), Hayley performed much better on Written Arithmetic, suggesting that her math skills are better developed than her working memory, yet her overall performance on these two tasks is comparable to her peers. Hayley's Arithmetic Process Approach Part A performance was much better when speed of performance is considered (Arithmetic PA-A = 11; Arithmetic PA-AT = 13). This pattern of scores suggests that her ability to perform mental operations quickly is better developed than her math skills, or the ability to perform these tasks consistently. However, her overall performance on this task is comparable to her peers.

Hayley's ability in processing simple or routine visual material without making errors is in the Average range when compared to her peers. She performed better than approximately 27% of her peers on the processing speed tasks (Processing Speed Index = 91; 95% confidence interval 83-101). Processing visual material quickly is an ability that Hayley performs less well than her verbal reasoning ability. Processing speed is an indication of the rapidity with which Hayley can mentally process simple or routine information without making errors. Because learning often involves a combination of routine information processing (such as reading) and complex information processing (such as reasoning), a relative weakness in the speed of processing routine information may make the task of comprehending novel information more time-consuming and difficult for Hayley. Thus, this relative weakness in simple visual scanning and tracking may leave her less time and mental energy for the complex task of understanding new material. Although much less developed than her verbal reasoning abilities Hayley's speed of information processing abilities are still within the Average range and better than those of approximately 27% of her age-mates (Processing Speed Index = 91; 95% confidence interval 73-88).

Hayley's performance on the Coding Copy subtest is comparable to her peers (Coding Copy = 10). This subtest required Hayley to copy symbols from the nine number/symbol pairs in the Coding subtest within a specified time limit. This task requires visual-motor integration and graphomotor speed without the additional demand to associate the nine number/symbol pairs as in the Coding subtest. Her performance suggests age-appropriate development of visual-motor integration and rapid graphomotor speed. Although she performed somewhat better on Coding Copy than Coding, the difference is not especially uncommon.

Personal Strengths and Weakness

Hayley achieved her best performance among the verbal reasoning tasks on the Vocabulary subtest. Her strong performance on the Vocabulary subtest was better than that of most students her age. The

WISC-IV Integrated Interpretive Report - (United States)

Vocabulary subtest required Hayley to explain the meaning of words presented in isolation. As a direct assessment of word knowledge, the subtest is one indication of her overall verbal comprehension. Performance on this subtest also requires abilities to verbalize meaningful concepts as well as to retrieve information from long-term memory; (Vocabulary scaled score = 13).

Hayley's performance was significantly weaker on the Block Design subtest than her own mean score. Her weak performance on the Block Design subtest was far below that of most children her age. The Block Design subtest required Hayley to use two-color cubes to construct replicas of two-dimensional, geometric patterns. This subtest assesses nonverbal fluid reasoning and the ability to mentally organize visual information. More specifically, this subtest assesses her ability to analyze part-whole relationships when information is presented spatially. Performance on this task also may be influenced by visual-spatial perception and visual perception-fine motor coordination, as well as planning ability; (Block Design scaled score = 3).

Summary

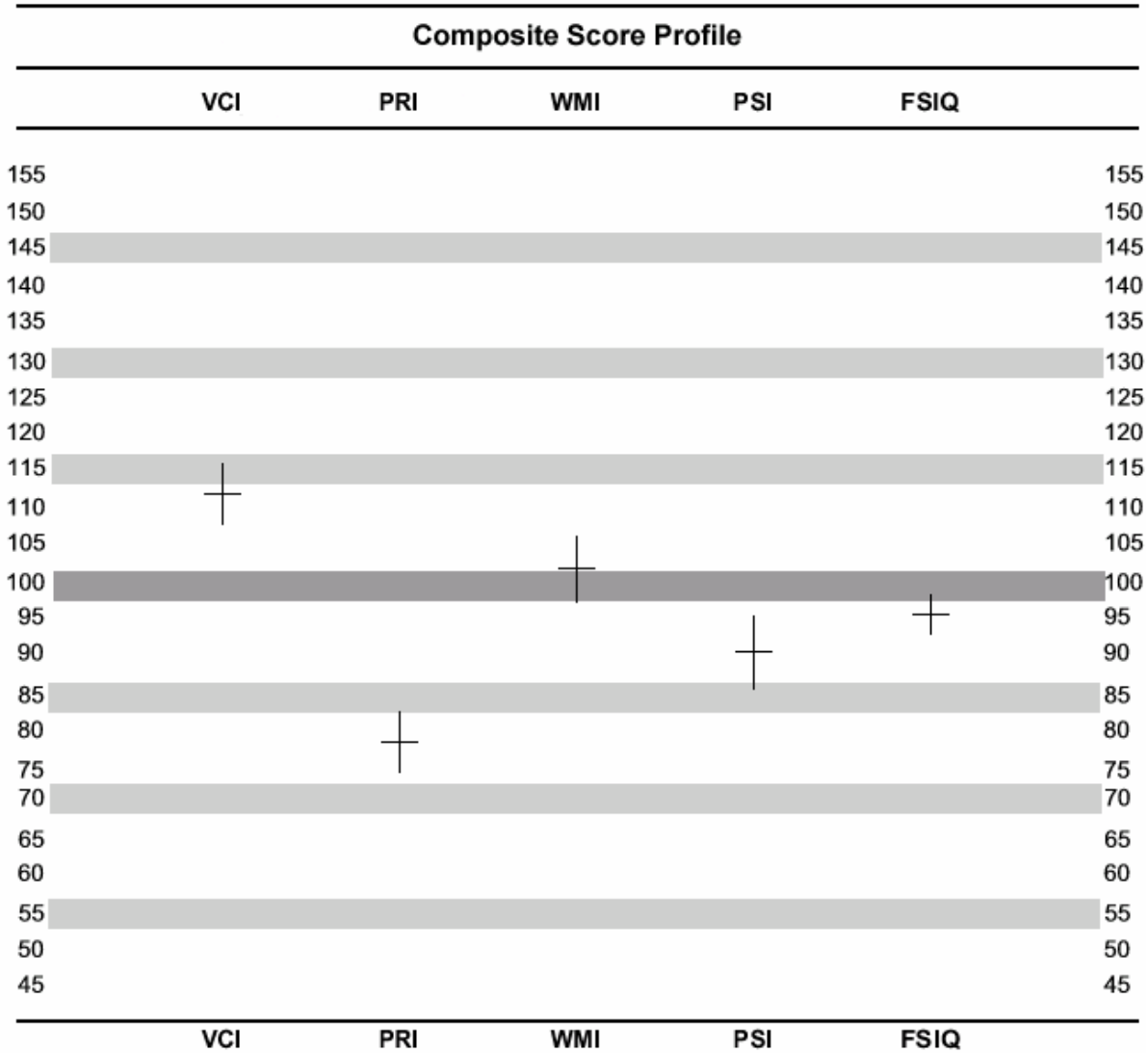
Hayley is an 11-year-old child who completed the WISC-IV. Her overall cognitive ability, as evaluated by the WISC-IV, cannot easily be summarized because her verbal reasoning abilities are much better developed than her nonverbal reasoning abilities. Hayley's reasoning abilities on verbal tasks are generally in the High Average range (VCI = 112), while her nonverbal reasoning abilities are significantly lower and in the Borderline range (PRI = 79). Hayley's general working memory abilities are in the Average range (WMI = 102), and general processing speed abilities in the Average range (PSI = 91). Hayley's ability to process visual material quickly is also a weakness relative to her reasoning ability.

Composite Scores Summary

Scale	Sum of Scaled Scores	Composite Score	Percentile Rank	Confidence Interval	Qualitative Description
Verbal Comprehension (VCI)	37	112	79	105-118	High Average
Perceptual Reasoning (PRI)	20	79	8	73-88	Borderline
Working Memory (WMI)	21	102	55	94-109	Average
Processing Speed (PSI)	17	91	27	83-101	Average
Full Scale (FSIQ)	95	96	39	91-101	Average

WISC-IV Integrated Interpretive Report - (United States)

WISC-IV Integrated Composite Score Profile



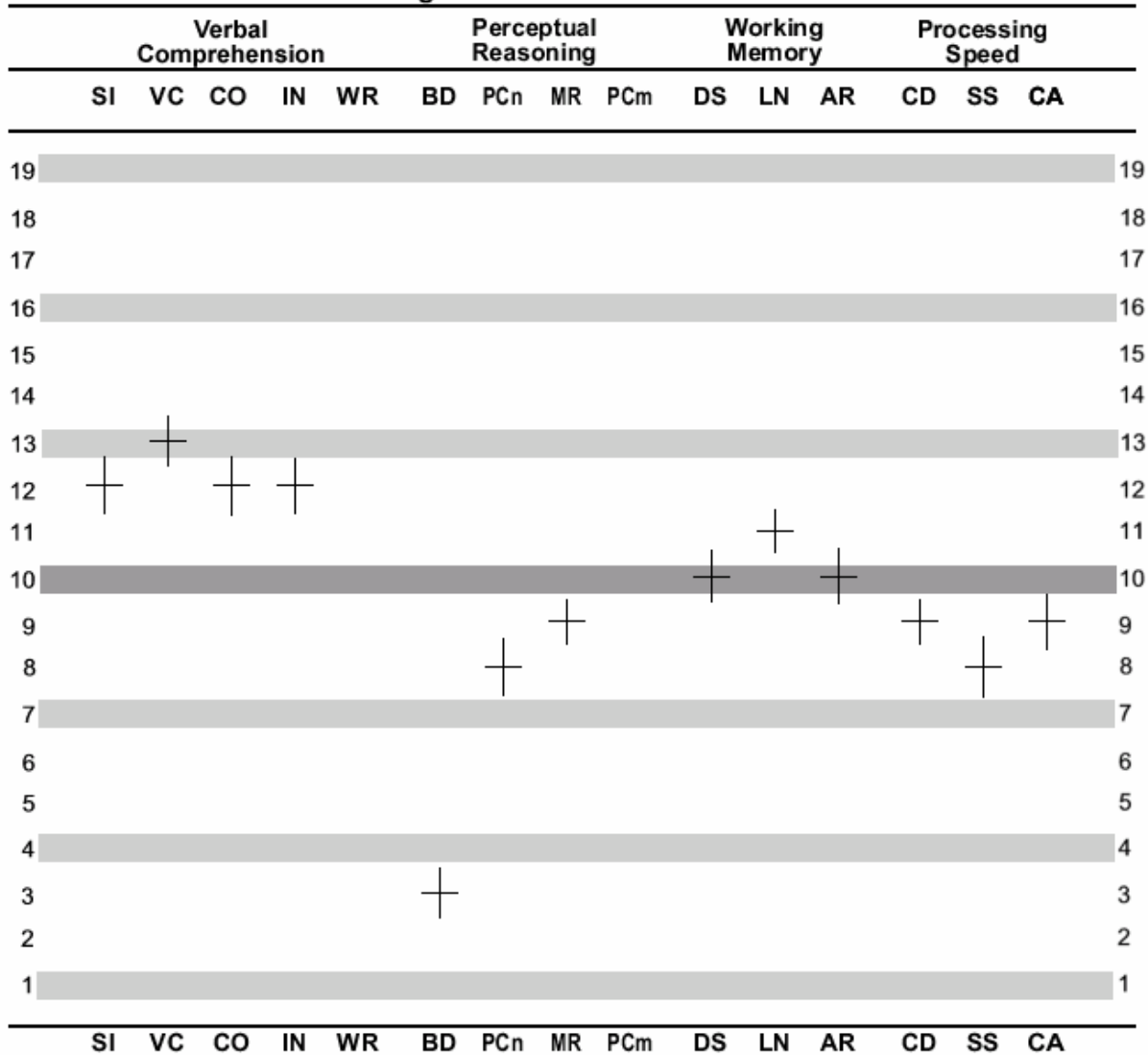
Vertical bar represents the Standard Error of Measurement.

WISC-IV Integrated Composite Scores and Standard Error of Measurement

Composite	Score	SEM	Composite	Score	SEM
VCI	112	3.97	PSI	91	4.74
PRI	79	3.97	FSIQ	96	2.6
WMI	102	4.24			

WISC-IV Integrated Interpretive Report - (United States)

WISC-IV Integrated Subtest Scaled Score Profile



Vertical bar represents the Standard Error of Measurement.

WISC-IV Integrated Subtest Scaled Scores and Standard Error of Measurement

Subtest	Score	SEM	Subtest	Score	SEM
Similarities (SI)	12	1.24	Picture Completion (PCm)		
Vocabulary (VC)	13	1.08	Digit Span (DS)	10	1.12
Comprehension (CO)	12	1.31	Letter-Number Sequencing (LN)	11	0.9
Information (IN)	12	1.2	Arithmetic (AR)	10	1.2
Word Reasoning (WR)			Coding (CD)	9	0.99
Block Design (BD)	3	1.08	Symbol Search (SS)	8	1.34
Picture Concepts (PCn)	8	1.24	Cancellation (CA)	9	1.2
Matrix Reasoning (MR)	9	0.99			

WISC-IV Integrated Interpretive Report - (United States)

Index Level Discrepancy Comparisons

Index Comparisons	Scaled Score 1	Scaled Score 2	Diff.	Critical Value	Sig. Diff. Y/N	Base Rate
VCI - PRI	112	79	33	11	Y	0.6%
VCI - WMI	112	102	10	11.38	N	22.9%
VCI - PSI	112	91	21	12.12	Y	9.7%
PRI - WMI	79	102	-23	11.38	Y	5.6%
PRI - PSI	79	91	-12	12.12	N	21.8%
WMI - PSI	102	91	11	12.46	N	24.1%

Base Rate by Overall Sample

Statistical Significance (Critical Values) at the .05 level

Differences between Subtest and Mean of Subtest Scores

Subtest	Subtest Scaled Score	Mean Scaled Score	Diff.	Critical Value	S/W	Base Rate
Block Design	3	9.5	-6.50	3.01	W	<1%
Similarities	12	9.5	2.50	3.01		10-25%
Digit Span	10	9.5	0.50	2.87		>25%
Picture Concepts	8	9.5	-1.50	3.39		>25%
Coding	9	9.5	-0.50	3.17		>25%
Vocabulary	13	9.5	3.50	2.70	S	5-10%
Letter-Number Sequencing	11	9.5	1.50	2.63		>25%
Matrix Reasoning	9	9.5	-0.50	2.68		>25%
Comprehension	12	9.5	2.50	3.44		10-25%
Symbol Search	8	9.5	-1.50	3.56		>25%

Overall: Mean = 9.5, Scatter = 10, Base Rate = 12.6%

Statistical Significance (Critical Values) at the .05 level

WISC-IV Integrated Interpretive Report - (United States)

Subtest Level Discrepancy Comparison

Discrepancy Comparisons	Scaled Score 1	Scaled Score 2	Diff.	Critical Value	Sig. Diff. Y/N	Base Rate
Vocabulary - Comprehension	13	12	1	3.23	N	39.7%
Digit Span - Letter-Number Sequencing	10	11	-1	2.83	N	47.1%
Coding - Symbol Search	9	8	1	3.55	N	40.2%
Similarities - Picture Concepts	12	8	4	3.36	Y	13.0%
Digit Span - Arithmetic	10	10	0	2.94	N	
Letter-Number Sequencing - Arithmetic	11	10	1	2.80	N	44.4%
Coding - Cancellation	9	9	0	3.58	N	
Symbol Search - Cancellation	8	9	-1	3.80	N	43.0%
Vocabulary - Matrix Reasoning	13	9	4	2.76	Y	11.9%

Statistical Significance (Critical Values) at the .05 level

Verbal Comprehension Subtest Score Summary (Total Raw Score to Scaled Score Conversions)

Subtest	Raw Score	Scaled Score	Percentile Rank
Similarities	26	12	75
Vocabulary	44	13	84
Comprehension	28	12	75
(Information)	20	12	75

Verbal Domain Process Score Summary (Total Raw Score to Scaled Score Conversions)

Process Score	Raw Score	Scaled Score	Percentile Rank
Similarities Multiple Choice (SIMC)	36	13	84
Vocabulary Multiple Choice (VCMC)	53	13	84
Picture Vocabulary Multiple Choice (PVMC)	30	14	91
Comprehension Multiple Choice (COMC)	33	12	75
Information Multiple Choice (INMC)	25	13	84

WISC-IV Integrated Interpretive Report - (United States)

Verbal Domain Discrepancy Comparisons

Subtest/Process Score	Scaled Score 1	Scaled Score 2	Diff.	Critical Value	Sig. Diff. Y/N	Base Rate
SI - SIMC	12	13	-1	3.62	N	42.6%
VC - VCMC	13	13	0	3.05	N	
VC - PVMC	13	14	-1	3.09	N	41.1%
VCMC - PVMC	13	14	-1	3.34	N	44.2%
CO - COMC	12	12	0	3.93	N	
IN - INMC	12	13	-1	3.26	N	37.7%

Statistical Significance (Critical Values) at the .05 level

Perceptual Reasoning Subtest Score Summary (Total Raw Score to Scaled Score Conversions)

Subtests	Raw Score	Scaled Score	Percentile Rank
Block Design	9	3	1
Picture Concepts	16	8	25
Matrix Reasoning	20	9	37

Perceptual Domain Process Score Summary (Total Raw Score to Scaled Score Conversions)

Process Score	Raw Score	Scaled Score	Percentile Rank
Block Design No Time Bonus (BDN)	30	9	37
Block Design Multiple Choice (BDMC)	39	12	75
Block Design Multiple Choice No Time Bonus (BDMCN)	23	13	84
Block Design PA (BDPA)	15	8	25
Elithorn Mazes (EM)	20	8	25
Elithorn Mazes No Time Bonus(EMN)	18	9	37

Norms for Block Design PA are taken from the WISC-III PI.

WISC-IV Integrated Interpretive Report - (United States)

Perceptual Domain Discrepancy Comparisons

Subtest/Process Score	Scaled Score 1	Scaled Score 2	Diff.	Critical Value	Sig. Diff. Y/N	Base Rate
BD - BDN	3	9	-6	3.26	Y	0%
BD - BDMC	3	12	-9	2.87	Y	0%
BDMC - EM	12	8	4	5.74	N	14.7%
BDMC - BDMCN	12	13	-1	2.61	N	33.5%
MR - EM	9	8	1	4.5	N	40.8%
CAS - EM	10	8	2	5.02	N	35.2%
EM - EMN	8	9	-1	5.78	N	29.3%

Statistical Significance (Critical Values) at the .05 level

Working Memory Subtest Score Summary (Total Raw Score to Scaled Score Conversions)

Subtests	Raw Score	Scaled Score	Percentile Rank
Digit Span	16	10	50
Letter-Number Sequencing	18	11	63
(Arithmetic)	23	10	50

Working Memory Domain Process Score Summary: Registration (Total Raw Score to Scaled Score Conversions)

Process Score	Raw Score	Scaled Score	Percentile Rank
Digit Span Forward (DSF)	9	11	63
Visual Digit Span (VDS)	9	10	50
Spatial Span Forward (SSpF)	7	9	37
Letter Span Nonrhyming (LSN)	9	13	84
Letter Span Rhyming (LSR)	6	11	63

Working Memory Domain Discrepancy Comparisons: Registration

Subtest/Process Score	Scaled Score 1	Scaled Score 2	Diff.	Critical Value	Sig. Diff. Y/N	Base Rate
DSF - VDS	11	10	1	3.44	N	44.1%
DSF - SSpF	11	9	2	3.64	N	35.2%
DSF - LSN	11	13	-2	3.83	N	29.3%
VDS - SSpF	10	9	1	3.64	N	47.9%
LSN - LSR	13	11	2	4.5	N	27.9%

Additional Discrepancy Comparisons for Research Use

DSF - LSR	11	11	0	4.17	N	
VDS - LSN	10	13	-3	3.83	N	22.7%
VDS - LSR	10	11	-1	4.17	N	41.6%
SSpF - LSN	9	13	-4	4.01	N	15.8%
SSpF - LSR	9	11	-2	4.34	N	34.9%

Statistical Significance (Critical Values) at the .05 level

Working Memory Domain Process Score Summary: Mental Manipulation (Total Raw Score to Scaled Score Conversions)

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WISC-IV Integrated Interpretive Report - (United States)

Process Score	Raw Score	Scaled Score	Percentile Rank
Digit Span Backward (DSB)	7	10	50
Spatial Span Backward (SSpB)	5	8	25
Letter-Number Sequencing PA (LNPA)	6	12	75
Arithmetic PA Part A (ARPA-A)	20	11	63
Arithmetic PA Part B (ARPA-B)	23	12	75
Written Arithmetic(WA)	24	13	84

Additional Process Scores for Research Use

Arithmetic PA Part A with Time Bonus(ARPA-AT)	49	13	84
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Working Memory Domain Discrepancy Comparisons: Mental Manipulation

Subtest/Process Score	Scaled Score 1	Scaled Score 2	Diff.	Critical Value	Sig. Diff. Y/N	Base Rate
LN - DSB	11	10	1	3.29	N	44%
LN - LNPA	11	12	-1	3.02	N	41.8%
DSB - SSpB	10	8	2	3.74	N	33.6%
AR - ARPA-A	10	11	-1	2.84	N	36.4%
AR - ARPA-B	10	12	-2	2.79	N	22.3%
AR - WA	10	13	-3	2.88	Y	12.4%

Additional Discrepancy Comparisons for Research Use

LN - SSpB	11	8	3	3.23	N	21.7%
DSB - LNPA	10	12	-2	3.57	N	31%
SSpB - LNPA	8	12	-4	3.51	Y	15.7%
ARPA-A - ARPA-B	11	12	-1	2.72	N	28.8%
ARPA-A - WA	11	13	-2	2.81	N	25%
ARPA-B - WA	12	13	-1	2.76	N	42.9%
ARPA-A - ARPA-AT	11	13	-2	2.72	N	8%

Statistical Significance (Critical Values) at the .05 level

Working Memory Domain Discrepancy Comparisons: Registration vs Mental Manipulation

Process Score	Scaled Score 1	Scaled Score 2	Diff.	Critical Value	Sig. Diff. Y/N	Base Rate
DSF - DSB	11	10	1	3.62	N	44.2%
SSpF - SSpB	9	8	1	3.76	N	43.3%

Additional Discrepancy Comparison for Research Use

DSF - AR	11	10	1	3.18	N	44.8%
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Statistical Significance (Critical Values) at the .05 level

WISC-IV Integrated Interpretive Report - (United States)

Working Memory Domain Process Score Summary: Longest Span (Raw Score to Base Rate Conversions)

Process Score	Raw Score	Base Rate
Longest Digit Span Forward (LDSF)	7	27.5%
Longest Digit Span Backward (LDSB)	4	72%
Longest Visual Digit Span (LVDS)	6	80%
Longest Spatial Span Forward (LSSpF)	5	77.1%
Longest Spatial Span Backward (LSSpB)	5	44.3%
Longest Letter Span Non-Rhyming (LLSN)	6	31.4%
Longest Letter Span Rhyming (LLSR)	4	87.1%
Longest Letter-Number Sequence PA (LLNPA)	5	55.7%

Working Memory Domain Discrepancy Comparisons: Longest Spans

Process Score	Raw Score 1	Raw Score 2	Diff.	Base Rate
LDSF - LDSB	7	4	3	27%
LSSpF - LSSpB	5	5	0	
LLSN - LLSR	6	4	2	21.4%

Statistical Significance (Critical Values) at the .05 level

Processing Speed Subtest Scores Summary (Total Raw Score to Scaled Score Conversions)

Subtests	Raw Score	Scaled Score	Percentile Rank
Coding (CD)	45	9	37
Symbol Search (SS)	21	8	25
(Cancellation) (CA)	73	9	37

Processing Speed Domain Process Score Summary (Total Raw Score to Scaled Score Conversions)

Process Score	Raw Score	Scaled Score	Percentile Rank
Cancellation Random (CAR)	32	8	25
Cancellation Structured (CAS)	41	10	50
Coding Copy (CDC)	107	10	50

WISC-IV Integrated Interpretive Report - (United States)

Processing Speed Domain Search Strategy Summary (Total Raw Score to Scaled Score Conversions)

Process Score	Search Pattern (A-B-C-D)	Base Rate
Cancellation Random Strategy	B	28.2%
Cancellation Structured Strategy	A	53.8%

Processing Speed Domain Discrepancy Comparisons

Subtest/Process Score	Scaled Score 1	Scaled Score 2	Diff.	Critical Value	Sig. Diff. Y/N	Base Rate
CD - CDC	9	10	-1	3.35	N	42.2%
CAR - CAS	8	10	-2	4.4	N	24.6%

Additional Discrepancy Comparison for Research Use

CA - CDC	9	10	-1	3.61	N	43.9%
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Statistical Significance (Critical Values) at the .05 level

Processing Speed Domain Process Score Summary: Coding Recall (Total Raw Score to Base Rate Conversions)

Process Score	Raw Score	Base Rate
CDR Cued Symbol Recall	7	>25%
CDR Free Symbol Recall	6	16-25%
CDR Cued Digit Recall	6	16-25%

Processing Speed Time Interval Performance

Subtest/Process Score	30" Interval	Raw Score	Mean	Standard Deviation	Base Rate
	1"-30"	20	29.7	6.8	10.5%
Coding Copy	31"-60"	14	27.7	7.3	2.6%
	61"-90"	9	29.3	7	0%

WISC-IV Integrated Interpretive Report - (United States)

WISC-IV Integrated Total Raw Scores

Supplemental Scores may be identified by the (...)’s

Subtest/Process Scores	Score Range	Raw Score
Block Design	0 to 68	9
Block Design No Time Bonus	0 to 50	30
Similarities	0 to 44	26
Digit Span	0 to 32	16
Digit Span Forward	0 to 16	9
Digit Span Backward	0 to 16	7
Longest Span Forward	0, 2 to 9	7
Longest Span Backward	0, 2 to 8	4
Picture Concepts	0 to 28	16
Coding	0 to 119	45
Cued Symbol Recall	0 to 18	7
Free Symbol Recall	0 to 9	6
Cued Digit Recall	0 to 18	6
Vocabulary	0 to 68	44
Letter-Number Sequencing	0 to 30	18
Matrix Reasoning	0 to 35	20
Comprehension	0 to 42	28
Symbol Search	0 to 60	21
(Cancellation)	0 to 136	73
Random	0 to 68	32
Structured	0 to 68	41
Random Strategy	A-D	2
Structured Strategy	A-D	1
(Information)	0 to 33	20
(Arithmetic)	0 to 34	23
Similarities Multiple Choice	0 to 44	36
Vocabulary Multiple Choice	0 to 68	53
Picture Vocabulary Multiple Choice	0 to 36	30
Comprehension Multiple Choice	0 to 42	33
Information Multiple Choice	0 to 32	25
Block Design Multiple Choice	0 to 50	39
(No Time Bonus)	0 to 25	23
Block Design PA	0 to 36	15
Elithorn Mazes	0 to 56	20
Partial Score Part A	0 to 39	20
(No Time Bonus)	0 to 28	18
Partial Score Part B	0 to 39	18
Visual Digit Span	0 to 16	9
En Route Break in Configuration Part A	0 to 19	9
(Longest Visual Span)	0 to 9	6
En Route Break in Configuration Part B	0 to 19	6
Spatial Span Forward	0 to 14	7
Break in Final Configuration Part A	0 to 19	7
Spatial Span Backward	0 to 14	5
Break in Final Configuration Part B	0 to 19	5
(Longest Span Forward)	0 to 8	5
Extra Blocks Construction Part A	0 to 19	5

WISC-IV Integrated Interpretive Report - (United States)

(Longest Span Backward)	0 to 8	5
Extra Blocks Construction Part B	0 to 19	5
Non-Rhyming	0 to 16	9
Rhyming	0 to 16	6
(Longest Rhyming)	0 to 9	4
(Longest Non-Rhyming)	0 to 9	6
Letter-Number Sequencing PA	0 to 12	6
(Longest Sequencing PA)	0 to 8	5
Arithmetic PA Part A	0 to 29	20
(Part A Time Bonus)	0 to 87	49
Arithmetic PA Part B	0 to 29	23
Written Arithmetic	0 to 29	24
Coding Copy	0 to 200	107
(1" - 30")	0 to 200	20
(31" - 60")	0 to 200	14
(61" - 90")	0 to 200	9

WISC-IV Test Scores Report to Parents/Guardians

EXAMINEE:	Hayley Keller	REPORT DATE:	2/15/2005
AGE:	12 years 11 months	GRADE:	6th
DATE OF BIRTH:	2/18/1992	ETHNICITY:	White not Hispanic Origin
EXAMINEE ID:	9494949	EXAMINER:	Emily Martinez
GENDER:	Female		

Tests Administered:	WISC-IV Core/Supplemental (6/12/2003) WISC-IV Process Approach (6/12/2003)	Age at Testing:	(11 years 3 months) (11 years 3 months)
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Is this a retest? No

Reason for Testing

Hayley was referred for testing.

About the WISC-IV

Hayley was administered the Wechsler Intelligence Scale for Children– Fourth Edition (WISC–IV) on 6/12/2003. The WISC–IV is used to assess the general thinking and reasoning skills of children aged 6 years to 16 years. This test has five main scores: Verbal Comprehension score, Perceptual Reasoning score, Working Memory score, Processing Speed score, and Full Scale score.

The Verbal Comprehension score indicates how well Hayley did on tasks that required her to listen to questions and give spoken answers to them. These tasks evaluate her skills in understanding verbal information, thinking and reasoning with words, and expressing thoughts as words.

The Perceptual Reasoning score indicates how well Hayley did on tasks that required her to examine and think about things such as designs and pictures, and to solve problems without using words. These tasks evaluate her skills in solving nonverbal problems, sometimes using eye-hand coordination, and working quickly and efficiently with visual information.

The Working Memory score indicates how well Hayley did on tasks requiring her to learn and retain information in memory while utilizing the learned information to complete a task. These tasks measure her skills in attention, concentration, and mental reasoning. This skill is closely related to learning and achievement.

The Processing Speed score indicates how well Hayley did on tasks requiring her to quickly scan symbols and make judgments about them. These tasks measure her skills in speed of mental problem-solving, attention, and eye-hand coordination. This skill may be important to her development in reading, and ability to think quickly in general.

WISC-IV Test Scores Report to Parents/Guardians

The Full Scale score is derived from the combination of the Verbal Comprehension, Perceptual Reasoning, Working Memory, and Processing Speed scores. The WISC-IV Full Scale score is one way to view Hayley's overall thinking and reasoning skills.

How WISC-IV Scores are Reported

The scores show how well Hayley performed compared to a group of children the same age from across the United States. The highest possible score is 160 and the lowest possible score is 40. Half of all children will score less than 100, and half of all children will score more than 100. Scores from 90 to 109 are average.

A percentile rank is also given. This shows your child's rank in the national comparison group. If the percentile rank were 45, for example, it would mean that she scored higher than approximately 45 out of 100 children her age.

When reviewing Hayley's scores, remember that no test is perfectly accurate. Any child might score slightly higher or lower if tested again on a different day.

WISC-IV Test Scores

Scale	Score	Percentile Rank	Qualitative Range
Verbal Comprehension (VCI)	112	79	High Average
Perceptual Reasoning (PRI)	79	8	Borderline
Working Memory (WMI)	102	55	Average
Processing Speed (PSI)	91	27	Average

Hayley's Verbal Comprehension score is 112. She scored higher than approximately 79 out of 100 children her age on tasks that require listening to questions and giving verbal responses. Generally speaking, Hayley's skills in understanding verbal information, thinking with words, and expressing thoughts in words are in the High Average range. Her skills in solving verbal problems are much better developed than her skills in solving nonverbal problems.

Her Perceptual Reasoning score is 79. Hayley scored higher than approximately 8 out of 100 children her age on tasks that require her to examine and think about designs and pictures, and solve problems without using words. In general, her skills in solving nonverbal problems quickly and efficiently with visual information are in the Borderline range.

Hayley's Working Memory score is 102. She scored higher than approximately 55 out of 100 children her age on tasks that require learning and retaining information in memory while utilizing the learned information to complete a task. In general, her skills in attention, concentration, and mental reasoning are in the Average range.

WISC-IV Test Scores Report to Parents/Guardians

Hayley's Processing Speed score is 91. She scored higher than approximately 27 out of 100 children her age on tasks requiring her to quickly scan symbols and make judgments about them. In general, her skills in speed of mental problem-solving, attention, and eye-hand coordination are in the Average range.

Hayley's Full Scale score is 96. She scored higher than approximately 39 out of 100 children her age. Her general thinking and reasoning skills, as assessed by the WISC-IV, are in the Average range.

Although the WISC-IV is a test of thinking and reasoning abilities, a child's scores on this test can also be influenced by motivation, attention, interests, and opportunities for learning. Please keep in mind that a few test scores cannot assess all of the skills that your child might be capable of using to assist her in achieving success.

Emily Martinez

Resultados de la prueba WISC-IV Reporte para los Padres/Guardianes

ESTUDIANTE:	Hayley Keller	FECHA DEL REPORTE:	2/15/2005
EDAD:	12 años	GRADO ESCOLAR:	6º
FECHA DE NACIMIENTO:	2/18/1992	GRUPO ÉTNICO:	White not Hispanic Origin
ID DEL ESTUDIANTE:	9494949	EXAMINADOR:	Emily Martinez
SEXO:	Femenino		
Pruebas Administradas:	WISC-IV Core/Supplemental (6/12/2003) WISC-IV Process Approach (6/12/2003)	Edad al momento de tomar la Prueba:	(11 years 3 months) (11 years 3 months)

¿Es ésta la segunda vez que se le administra esta prueba? No

Razón para la Evaluación

Hayley fue referida para esta evaluación.

Acerca del WISC-IV

A Hayley se le administró el Wechsler Intelligence Scale for Children–Fourth Edition (WISC–IV) el 12 de junio, 2003. El WISC–IV se usa para medir las habilidades generales de pensamiento y razonamiento de niños y niñas entre 6 y 16 años de edad. Esta prueba tiene cinco puntuaciones principales: puntuación de Comprensión Verbal, puntuación de Razonamiento Perceptual, puntuación de Memoria de Trabajo, puntuación de Velocidad de Procesamiento y puntuación de la Escala Total.

La puntuación de Comprensión Verbal indica qué tan bien se desempeñó Hayley en actividades que requerían que ella escuchara preguntas y las respondiera verbalmente. Estas actividades evalúan su habilidad para entender información verbal, pensar y razonar con palabras y expresar pensamientos en palabras.

La puntuación de Razonamiento Perceptual indica qué tan bien se desempeñó Hayley en actividades que requerían que ella examinara y pensara acerca de cosas tales como diseños y dibujos y resolviera problemas sin usar palabras. Estas actividades evalúan su habilidad para resolver problemas no verbales usando en ocasiones su coordinación ojo-mano y su habilidad para trabajar de manera rápida y eficiente con información visual.

La puntuación de Memoria de Trabajo indica qué tan bien se desempeñó Hayley en actividades que requerían que ella aprendiera y retuviera información en su memoria mientras que utilizaba la información aprendida para completar una actividad. Estas actividades evalúan su atención, concentración y razonamiento mental. Estas habilidades se relacionan directamente con aprendizaje y logro.

La puntuación de Velocidad de Procesamiento indica qué tan bien se desempeñó Hayley en actividades que requerían que ella examinara símbolos rápidamente y tomara decisiones respecto a ellos. Estas actividades evalúan su rapidez para solucionar problemas mentales, atención y coordinación ojo-mano. Estas habilidades pueden ser importantes para su desarrollo de lectura y su habilidad para pensar rápido en general.

Resultados de la prueba WISC-IV Reporte para los Padres/Guardianes

La puntuación de la Escala Total se deriva de la combinación de las puntuaciones de Comprensión Verbal, Razonamiento Perceptual, Memoria de Trabajo y Velocidad de Procesamiento. La Escala Total del WISC-IV es una de las maneras de referirse a las habilidades generales de pensamiento y razonamiento de Hayley.

Cómo se reportan las puntuaciones del WISC-IV

Las puntuaciones demuestran qué tan bien se desempeñó Hayley en comparación a un grupo de niños(as) de su misma edad en los Estados Unidos. La puntuación más alta posible es 160 y la más baja es 40. La mitad de los niños(as) obtendrá una puntuación menor de 100 y la otra mitad obtendrá una puntuación mayor de 100. Puntuaciones entre 90 y 109 son puntuaciones promedio.

El rango percentil también se ha incluido. El rango percentil se refiere al rango que ocupa su niña de acuerdo al grupo nacional con el que se hizo la comparación. Si el rango percentil fuera 45, por ejemplo, indicaría que Hayley obtuvo una puntuación mayor que el 45 por ciento de niños(as) de su edad.

Cuando revise las puntuaciones de Hayley, recuerde que ninguna prueba es perfecta. Cualquier niño o niña pudiera obtener una puntuación ligeramente más alta o baja si se le volviera a aplicar la prueba en un día diferente.

Puntuaciones obtenidas en el WISC-IV

Escala	Puntuación	Rango Percentil	Rango Cualitativo
Comprensión Verbal (VCI)	112	79	Promedio Alto
Razonamiento Perceptual (PRI)	79	8	Limítrofe
Memoria de Trabajo (WMI)	102	55	Promedio
Velocidad de Procesamiento (PSI)	91	27	Promedio

Hayley obtuvo una puntuación de 112 en Comprensión Verbal. Su puntuación fue más alta que la de aproximadamente el 79 por ciento de niños(as) de su edad en actividades que requieren escuchar preguntas y proporcionar respuestas verbales. En general, las habilidades de Hayley para entender información verbal, pensar con palabras y expresar pensamientos en palabras están en el rango Promedio Alto. Las habilidades de Hayley para resolver problemas verbales están mucho más desarrolladas que sus habilidades para resolver problemas no verbales.

Hayley obtuvo una puntuación de 79 en Razonamiento Perceptual. Su puntuación fue más alta que la de aproximadamente el 8 por ciento de niños(as) de su edad en actividades que requieren que ella examine y piense acerca de diseños y dibujos y resuelva problemas sin usar palabras. En general, las habilidades de Hayley para resolver problemas no verbales de manera rápida y eficiente con información visual están en el rango Limítrofe.

Resultados de la prueba WISC-IV Reporte para los Padres/Guardianes

Hayley obtuvo una puntuación de 102 en Memoria de Trabajo. Su puntuación fue más alta que la de aproximadamente el 55 por ciento de niños(as) de su edad en actividades que requieren de aprendizaje y retención de información en la memoria mientras se utiliza la información aprendida para completar una actividad. En general, las habilidades de atención, concentración y razonamiento mental de Hayley están en el rango Promedio.

Hayley obtuvo una puntuación de 91 en Velocidad de Procesamiento. Su puntuación fue más alta que la de aproximadamente el 27 por ciento de niños(as) de su edad en actividades que requieren que ella examine símbolos rápidamente y tome decisiones respecto a ellos. En general, las habilidades de Hayley en cuanto a su velocidad para resolver problemas mentalmente, su atención y coordinación ojo-mano están en el rango Promedio.

Hayley obtuvo una puntuación de 96 en la Escala Total. Su puntuación fue más alta que la de aproximadamente el 39 por ciento de niños(as) de su edad. Sus habilidades generales de pensamiento y razonamiento, de acuerdo a la manera en que el WISC-IV las mide, están en el rango Promedio.

A pesar de que el WISC-IV es una prueba de habilidades de pensamiento y razonamiento, las puntuaciones de un niño(a) en esta prueba también pueden ser influidas por motivación, atención, intereses y oportunidades de aprendizaje. Por favor tenga en mente que unas cuantas puntuaciones en una prueba no pueden medir todas las habilidades que su niña puede ser capaz de usar como apoyo para lograr el éxito.

Emily Martinez