

Woodcock-Johnson® IV

Tests of Achievement

Examiner Training Workbook

Barbara J. Wendling

Contents

Overview
Basal and Ceiling Rules
Computing the Raw Score
Obtaining Estimated Age- and Grade-Equivalent Scores
Using the Woodcock-Johnson Online Scoring and Reporting Program 10
Building Examiner Competency
Practice Exercises
Answer Key to Practice Exercises
WJ IV General Test Observations Checklist
WJ IV Tests of Achievement Examiner Training Checklist
Deferences





Copyright © 2014 by Riverside Assessments, LLC. All rights reserved.

Woodcock-Johnson, the Woodcock-Johnson IV logo, and WJ IV are registered trademarks of Houghton Mifflin Harcourt.

The WJ IV tests are not to be used in any program operating under statutes or regulations that require disclosure of specific item content and/or correct responses to the public, including subjects or their parents. Any unauthorized distribution of the specific item content and/or correct responses is prohibited by copyright law.

For technical information, please visit www.riversideinsights.com or call Riverside Insights Customer Service at 800.323.9540.

Published in Itasca, Illinois

Manufactured in the United States



Overview

The Woodcock-Johnson® IV (WJ IV®) (Schrank, McGrew, & Mather, 2014a) consists of three assessment instruments: the Woodcock-Johnson IV Tests of Cognitive Abilities (WJ IV COG) (Schrank, McGrew, & Mather, 2014b); the Woodcock-Johnson IV Tests of Oral Language (WJ IV OL) (Schrank, Mather, & McGrew, 2014b); and the Woodcock-Johnson IV Tests of Achievement (WJ IV ACH) (Schrank, Mather, & McGrew, 2014a). Consult the appropriate Examiner's Manual or the Woodcock-Johnson IV Technical Manual (McGrew, LaForte, & Schrank, 2014) for comprehensive information about these three assessment instruments.

The WJ IV Tests of Achievement consists of 20 tests organized into a standard and an extended battery. There are three forms of the Standard Battery (Forms A, B, and C) and one form of the Extended Battery. The Extended Battery can be used with all three forms of the Standard Battery. Tests 1 through 6 serve as a core set of tests. Table 1 provides an overview of the organization of the WJ IV ACH.

Table 1.Organization of the WJ IV ACH Tests

	WJ IV TESTS OF ACHIEVEME	ENT		
Standard Battery Curricular Area Form A or B or C Extended Battery				
Reading (<i>Grw</i>)				
Reading	Test 1: Letter-Word Identification	Test 12: Reading Recall		
Broad Reading	Test 4: Passage Comprehension	Test 15: Word Reading Fluency		
Basic Reading Skills	Test 7: Word Attack			
Reading Comprehension	Test 8: Oral Reading	Test 17: Reading Vocabulary		
Reading Fluency	Test 9: Sentence Reading Fluency			
Reading Rate				
Mathematics (Gq)				
Mathematics	Test 2: Applied Problems	Test 13: Number Matrices		
Broad Mathematics	Test 5: Calculation			
Basic Math Skills	Test 10: Math Facts Fluency			
Math Problem Solving				
Written Language (<i>Grw</i>)				
Written Language	Test 3: Spelling	Test 14: Editing		
Broad Written Language	Test 6: Writing Samples	Test 16: Spelling of Sounds		
Basic Writing Skills	Test 11: Sentence Writing Fluency			
Written Expression				
Knowledge (<i>Gc</i>)				
Academic Knowledge		Test 18: Science		
		Test 19: Social Studies		
		Test 20: Humanities		

The Examiner Training Workbook provides a reference to facilitate administration and scoring of the WJ IV. This workbook is to be used in conjunction with the *Woodcock-Johnson IV Tests of Achievement Examiner's Manual* (Mather & Wendling, 2014a), not in place of the manual. The content focuses on manual scoring options including (a) item-level scoring, (b) raw score calculation, and (c) obtaining estimated age and grade equivalents. An illustration of the uniqueness of the scores available in the WJ IV is presented. Important administration points required for correct raw score calculation are covered. This includes basal and ceiling rules and directions for scoring tests with sets or blocks of items or multiple parts.

To aid examiners in building competency with the test, Practice Exercises are included to reinforce mastery of basal and ceiling rules, raw score calculation, and determination of estimated age and grade equivalents. In addition, two reproducible checklists are included. The first, the *WJ IV Tests of Achievement* Examiner Training Checklist, is a test-by-test form

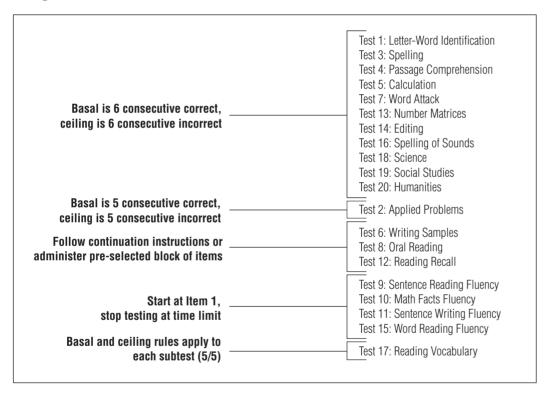
that may be used as an observation or self-study tool. The second is the WJ IV General Test Observations Checklist that may be used by an experienced examiner when observing a new examiner. These checklists are also available in Appendices C and D of the WJ IV ACH Examiner's Manual

Basal and Ceiling Rules

The purpose of basal and ceiling requirements is to limit the number of items administered but still be able to estimate, with high probability, the score that would have been obtained if all items were administered. By not administering items that are extremely easy or difficult, the number of administered items is minimized and the examinee's tolerance for the testing situation is maximized.

Many of the WJ IV ACH tests require the examiner to establish a basal and a ceiling. Exceptions are timed tests, such as Test 9: Sentence Reading Fluency, or tests that require the administration of a pre-selected block of items, such as Test 6: Writing Samples, or tests that use continuation instructions, such as Test 8: Oral Reading. Figure 1 illustrates the basal and ceiling rules for each test in the WJ IV ACH tests.

Figure 1.
Basal and ceiling rules for the WJ IV ACH tests.



Meeting Basal and Ceiling Criteria

When required, the basal and ceiling criteria are included in each test in the Test Book and are stated briefly at the top of each test in the Test Record. Because the basal and ceiling criteria are not the same for each test and subtest, review the criteria before testing.

It is important to note that in cases where the basal criterion is not met on the first items administered, the examiner needs to test backward until either the basal is established or Item 1 is administered. If the specified number of correct responses is not obtained, Item 1 serves as the basal. In addition, if a ceiling criterion is not met, the examiner needs to continue testing until the last item is administered. The last item serves as the ceiling.

The best practice is to test by complete pages when stimulus material appears on the

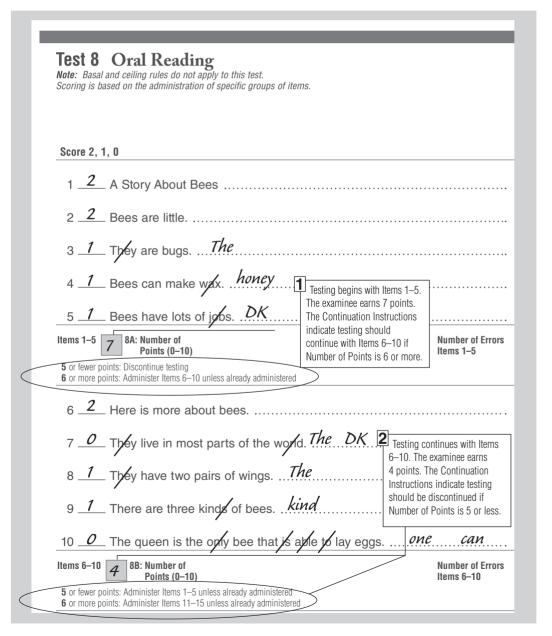
examinee's side of the Test Book. If an examinee reaches a ceiling in the middle of a test page and there is no stimulus material on the examinee's side, the examiner may discontinue testing. Because examinees do not see any of the pages that fall below the basal level or above the ceiling level, they are essentially unaware that there are other items in the test.

Following Continuation Instructions or Administering Pre-Selected Blocks of Items

As noted in Figure 1, Test 6: Writing Samples, Test 8: Oral Reading, and Test 12: Reading Recall do not have basal and ceiling rules, but rather require the administration of specified blocks of items or use of the Continuation Instructions.

Figure 2 illustrates the application of the Continuation Instructions in determining the appropriate items to administer on Test 8: Oral Reading. Testing began with Item 1. The examinee earned 7 points on Items 1 through 5. Following the Continuation Instructions, testing continued. The examinee earned 4 points on Items 6 through 10. The Continuation Instructions state that testing may be discontinued if the examinee scores 5 or fewer points on Items 6 through 10. Therefore, testing was discontinued.

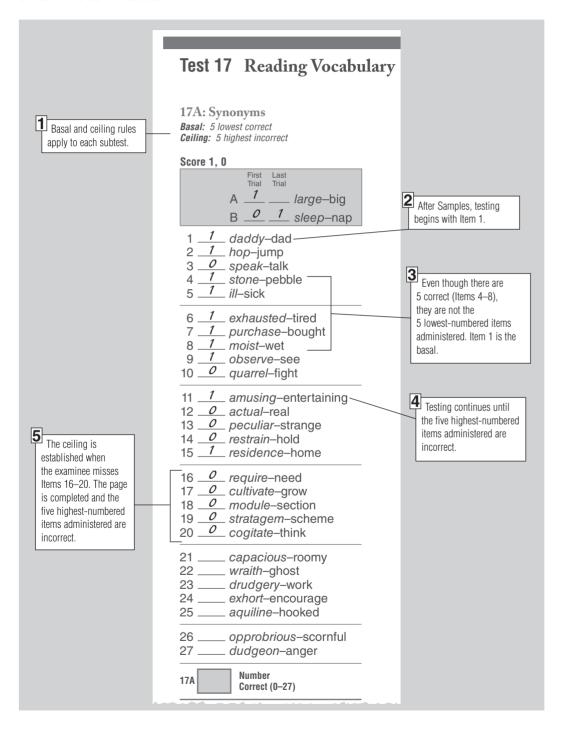
Figure 2.
Following Continuation
Instructions.



Applying Basal and Ceiling Rules to Subtests

Test 17: Reading Vocabulary consists of two subtests. The basal and ceiling rules apply to each of the subtests, and both subtests must be administered to obtain a score for Reading Vocabulary. Figure 3 illustrates the application of basal and ceiling rules for Test 17A: Reading Vocabulary–Synonyms. Note that in cases where the basal criterion is not met on the first items administered, the examiner needs to test backward until either the basal is established or Item 1 is administered.

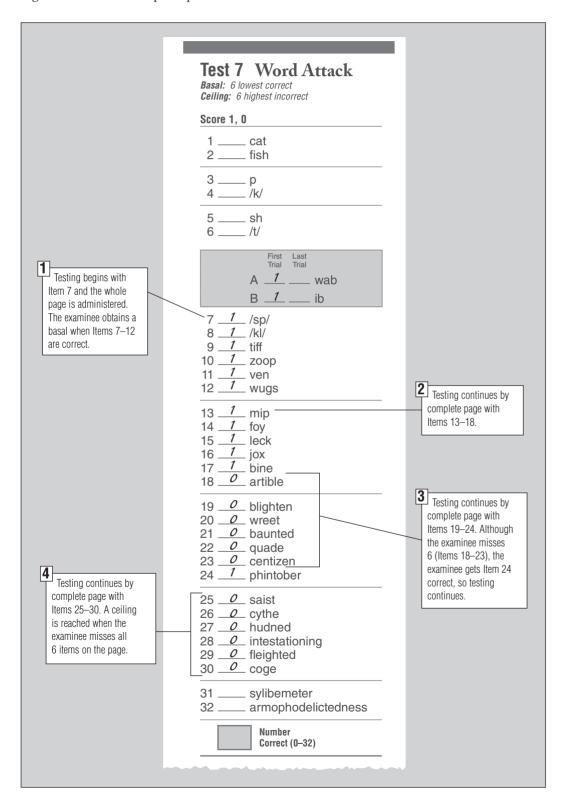
Figure 3.
Establishing a basal and ceiling for Test 17A: Reading Vocabulary—Synonyms.



Testing by Complete Pages Impacts Basal and Ceiling Rules

When stimulus material is visible on the examinee's page, the best practice is to test by complete pages. If a ceiling is reached in the middle of a page, testing should continue to complete that page. If the examinee answers any item correctly in the process of completing the page, testing should continue until a new ceiling is reached and the page is completed. Figure 4 illustrates this principle on Test 7: Word Attack.

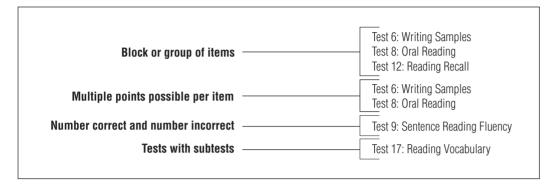
Figure 4.Testing by complete pages impacts basal and ceiling rules.



Computing the Raw Score

For most tests, the raw score is the number of correct responses, with each correct item receiving 1 point. There are several exceptions in the WJ IV ACH as noted in Figure 5. Correct calculation of the raw score is essential to obtain accurate results. Figures 6, 7, and 8 illustrate each of the exceptions in calculating raw scores.

Figure 5.Tests with special procedures for computing the raw score.



Calculating the Raw Score for Tests With Multiple Points Possible per Item

On multiple-point tests (Test 6 and Test 8), give points as directed in the Test Book or the scoring guides in the Examiner's Manual. Otherwise, the raw score will be an underestimate of the examinee's performance. Figure 6 illustrates how the raw score is calculated for Test 6: Writing Samples. Items 1 through 6 can be scored as 1 or 0. All remaining items (7–28) can be scored as 2, 1, or 0. It is also possible to score these items as 1.5 or 0.5.

Administering a Block of Items

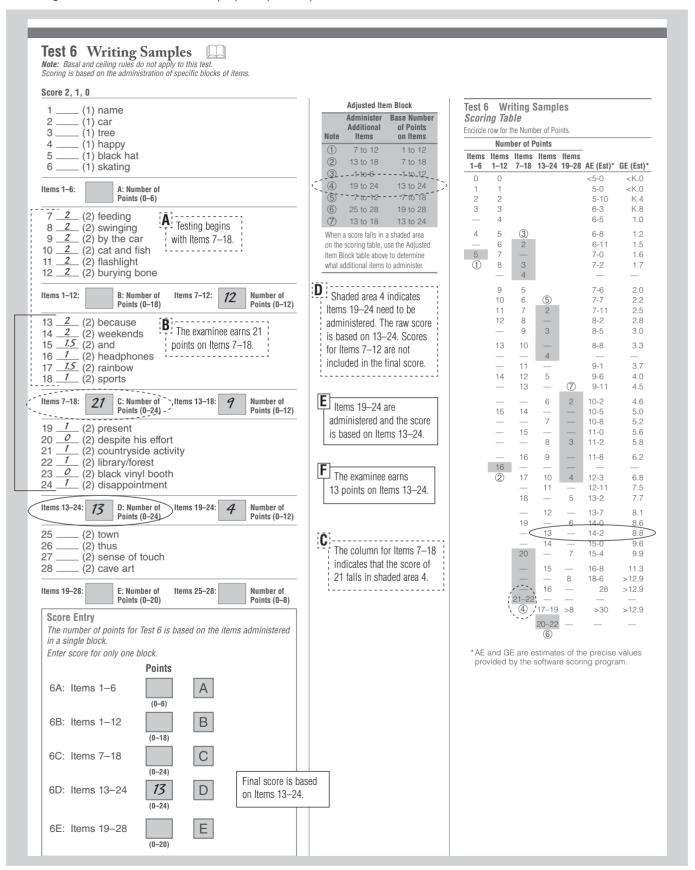
The raw score for Writing Samples is based on one of five blocks of items, even if more items are administered. Examiners must ensure that the block of items used for obtaining the raw score is the best estimate of the individual's writing skill. Sometimes, the first block administered is too easy or too difficult for the examinee. This can be determined by using the "Scoring Table" in the Test Record. Locate the raw score in the column matching the block of items administered. If the examinee's score falls in a shaded area, additional items need to be administered. Figure 6 also illustrates the procedure for determining whether additional items need to be administered.

Administer Additional Items

Initially, Items 7 through 18 were administered and the examinee received a score of 21 (see Figure 6). On the "Scoring Table," in the column for Items 7 through 18, locate the raw score of 21. The examinee's score falls in a shaded area. There is a number encircled above or below each shaded area in the "Scoring Table." When an individual's raw score falls in a shaded area, locate the corresponding encircled number in the "Adjusted Item Block" chart. This chart indicates the additional items to administer to obtain a better estimate of the examinee's writing ability as well as which block of items to use for calculating the raw score.

In this example, the examinee's raw score falls in the shaded area marked with the number 4. This means that the first block administered (Items 7 through 18) was too easy for this individual. On the "Adjusted Item Block" chart, the number 4 entry indicates that additional items (19 through 24) need to be administered. In addition, the chart shows the adjusted block of items to use when calculating the examinee's score. In this case, the score will be based on Items 13 through 24. After Items 19 through 24 are administered, the examinee earned 4 additional points. Adding the scores for Items 13 through 18 (9) and Items 19 through 24 (4) yields a total score of 13. Locating the score of 13 in the column for Items 13 through 24 falls in an unshaded area. This provides a better estimate of the examinee's writing ability. Note that even though Items 7 through 12 were administered, they are not included when calculating the final score.

Figure 6.Calculating the raw score for a test with multiple points possible per item.

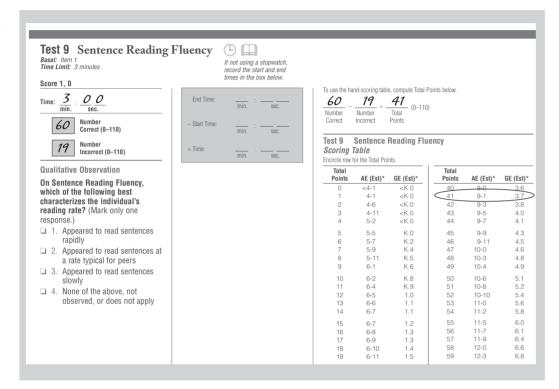


Calculating the Raw Score for the Test That Counts Number Correct and Number Incorrect

One test in the WJ IV ACH, Test 9: Sentence Reading Fluency, requires that the total number of items answered correctly and the total number of items answered incorrectly be recorded to obtain the raw score. When obtaining the estimated age and grade equivalents, the number incorrect is subtracted from the number correct. Figure 7 illustrates this procedure. If the number incorrect is larger than the number correct, use zero as the raw score to obtain the estimated AE and GE. When using the scoring program, enter both the number correct and the number incorrect.

Figure 7.

Calculating the raw score for Test 9: Sentence Reading Fluency.



Calculating the Raw Score for Tests With Subtests

For tests with subtests, all subtests must be administered to obtain a score. In the WJ IV ACH, Test 17: Reading Vocabulary is the only test with subtests. Both subtests must be administered to obtain an accurate raw score. Figure 8 illustrates how to calculate the raw score for Test 17: Reading Vocabulary, which consists of 17A: Synonyms and 17B: Antonyms. Because suggested starting points are available, not all examinees begin with Item 1. In these cases, it is important to give credit for any unadministered items below the basal. In this example, testing for subtest 17A: Synonyms begins with Item 6. Items 6 through 10 are correct, so a basal is established (five lowest-numbered items administered correct). Testing continues until a ceiling is reached when Items 16 through 20 are answered incorrectly (five highest-numbered items administered incorrect). When calculating the raw score, count the number of correct responses and add 1 point for each item below the basal (Items 1 through 5). The Number Correct for 17A: Synonyms is 15. For subtest 17B: Antonyms, the Number Correct is 18. When using the online scoring program, enter the separate scores for each subtest. When obtaining the estimated age and grade equivalents from the "Scoring Table" in the Test Record, sum the two scores. In this example, the total is 33 points. (See Obtaining Estimated Ageand Grade-Equivalent Scores.)

Test 17 Reading Vocabulary

17A: Synonyms Basal: 5 lowest correct Ceiling: 5 highest incorrect

	3
Score 1	I , O
	First Last Trial Trial A large—big B sleep—nap
2 3 4	daddy-dad hop-jump speak-talk stone-pebble ill-sick
7 <u>1</u> 8 <u>1</u> 9 <u>1</u>	exhausted_tired purchase_bought moist_wet observe_see quarrel_fight
12 <u>'</u> 13 <u>'</u> 14 <u>'</u>	amusing-entertaining actual-real peculiar-strange restrain-hold residence-home
17 <u>4</u> 18 <u>4</u> 19 <u>4</u>	2require_need 2cultivate_grow 2module_section 2stratagem_scheme 2cogitate_think
22 23 24	capacious-roomy wraith-ghost drudgery-work exhort-encourage aquiline-hooked
	opprobrious-scornful dudgeon-anger

Number

Correct (0-27)

15

17B: Antonyms Basal: 5 lowest correct Ceiling: 5 highest incorrect

Score 1, 0

	First Last Trial Trial A
2 3 4 5	on-off he-she easy-hard king-queen empty-filled above-below
8 <u>7</u> 9 <u>1</u> 10 <u>1</u> 11 <u>1</u>	ugly-pretty remember-forget find-lost something-nothing receive-send careless-careful
14 <u>1</u> 15 <u>1</u> 16 <u>1</u> 17 <u>0</u>	success-failure cellar-attic follow-avoid flawed-flawless dissuade-persuade invent-destroy
23 <u>0</u>	transitory-stable fortuitous-unlucky contentious-easygoing adroit-clumsy elucidate-confuse laconic-talkative
	enervate-energize propitious-unfortunate
17B 18	Number Correct (0–26)

To use the hand-scoring table, compute Total Number Correct below.

$$\frac{15}{17A} + \frac{18}{17B} = \frac{33}{Total} (0-53)$$

Test 17 Reading Vocabulary Scoring Table
Encircle row for the Total Number Correct.

Encircle row for the Total Number Correct.			
Total Number Correct	AE (Est)*	GE (Est)*	
0	<4-9	<k.0< td=""></k.0<>	
1	4-9	<k.0< td=""></k.0<>	
2	5-5	K.0	
3	5-10	K.4	
4	6-1	K.7	
5	6-4	K.9	
6	6-6	1.1	
7	6-8	1.3	
8	6-10	1.4	
9	7-0	1.6	
10	7-2	1.8	
11	7-5	2.0	
12	7-7	2.2	
13	7-10	2.4	
14	8-1	2.6	
15	8-3	2.9	
16	8-7	3.1	
17	8-10	3.4	
18	9-2	3.7	
19	9-6	4.1	
20	9-10	4.4	
21	10-3	4.8	
22	10-8	5.3	
23	11-3	5.8	
24	11-9	6.4	
25	12-5	7.0	
26	13-2	7.7	
27	14-0	8.6	
28	15-0	9.5	
29	16-3	10.8	
30	18-3	12.8	
31	21	>12.9	
32	30	>12.9	
>32	>30	>12.9	

^{*} AE and GE are estimates of the precise values provided by the scoring program.

Important Reminders

- 1. Do not include sample items or practice exercises in the raw score.
- 2. Include 1 point for each unadministered item below the basal for Tests 1, 2, 3, 4, 5, 7, 13, 14, 16, 17, 18, 19, and 20.
- 3. Give points as directed (multiple points per item) on Test 6 (Items 7 through 28) and Test 8.
- 4. Administer both subtests for Test 17 to obtain accurate raw scores.
- 5. Adhere to time limits on Tests 9, 10, 11, and 15.
- 6. Apply basal and ceiling rules correctly.
- 7. Follow continuation instructions carefully on Tests 8 and 12.
- 8. Base score on only one block of items for Test 6.
- 9. Test by complete pages when stimulus material is visible on the examinee's page.
- 10. Enter the raw score (Number Correct or Number of Points) in the tinted box at the end of each test or subtest in the Test Record.

Obtaining Estimated Age- and Grade-Equivalent Scores

After the raw score is calculated, estimated age- and grade-equivalent scores are obtained by using the "Scoring Tables" in the Test Record. For each test, locate the examinee's raw score and encircle the entire row for that raw score. The last two columns indicate the estimated age equivalent (AE) and grade equivalent (GE). Estimated scores are available for most tests.

The only scores available manually are the estimated age- and grade-equivalent scores and raw scores for the individual tests. The purpose of these estimated scores is to give examiners immediate feedback regarding the examinee's level of performance. These results may suggest the need to adjust starting points or the need for further testing. The report generated by the scoring program provides precise age- and grade-equivalent scores for all tests and clusters.

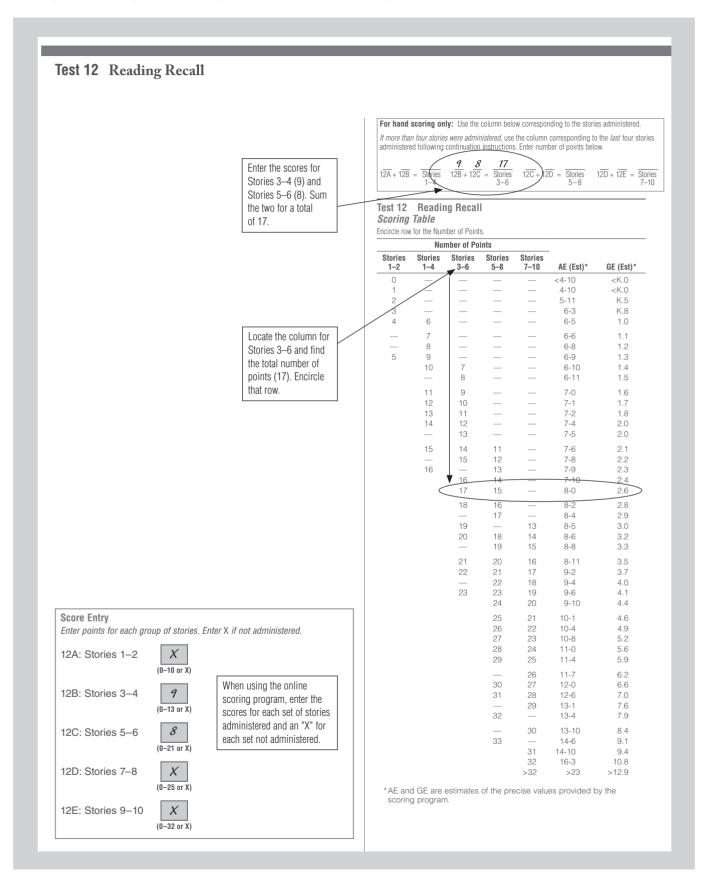
To find estimated age- and grade-equivalent scores on Test 17: Reading Vocabulary, add together the Number Correct for each of the subtests (see Figure 8). The score for 17A: Synonyms is 15 and the score for 17B: Antonyms is 18 for a total of 33. Locate 33 in the first column (Total Number Correct) of the "Scoring Table." Encircle that entire row, which includes the estimated age- and grade-equivalent scores. The estimated age equivalent is >30 and the estimated grade equivalent is >12.9. When using the online scoring program, the Number Correct for each subtest is entered individually rather than summing the subtest scores.

Figure 9 illustrates how to obtain the estimated age- and grade-equivalent scores when there are different columns to consult for the raw score. This occurs when there are blocks of items or sets of stories or sentences that must be administered, as in Tests 6, 8, and 12. In this example, Test 12: Reading Recall was administered. Testing began with Stories 3 and 4. Because the examinee received 9 points, the Continuation Instructions indicate that testing continues with Stories 5 and 6. On Stories 5 and 6, the examinee received a score of 8. The Continuation Instructions indicate that testing is discontinued. The examinee's total number of points is 17 (9 + 8). On the "Scoring Table," locate the column for Stories 3–6. Then find the Number of Points (17) in that column and encircle the row. In this case, the estimated age equivalent is 8-0 and the estimated grade equivalent is 2.6.

Using the Woodcock-Johnson Online Scoring and Reporting Program

The Woodcock-Johnson online scoring and reporting program (Schrank & Dailey, 2014) calculates all derived scores, variations, and comparisons and reports them in a table of scores. Examiners enter identifying information, raw scores, and "Test Session Observations Checklist" information directly from the Test Record. The examinee's chronological age and grade

Figure 9.Obtaining the estimated age equivalent and grade equivalent for Test 12: Reading Recall.



placement are automatically calculated. Examinee data can be saved. Consult the Woodcock-Johnson Scoring and Reporting Guide for detailed information about the online scoring program.

Uniqueness of Scores

It is important that examiners understand the various scores available. There are four different levels of information in the WJ IV (consult the Examiner's Manual). Scores from each level provide different information and are not interchangeable. Table 2 illustrates this point. The same relative standing reflected in the standard score and percentile rank can be associated with quite different levels of proficiency in the areas measured. In the example in Table 2, the individual is 9 years 1 month of age and obtained a standard score of 93 and a percentile rank of 32 on both Letter-Word Identification and Reading Recall. These scores indicate she has average standing compared with her age mates (9-1). However, the Relative Proficiency Indexes (RPIs) of 69/90 and 81/90, respectively, indicate she is less proficient on these tasks than the average standard scores seem to indicate. Her performance is less proficient on Letter-Word Identification (RPI = 69/90) than on Reading Recall (RPI = 81/90), although both fall in the limited to average range of proficiency. Such score differences occur for three reasons: (1) different abilities develop at different rates, (2) population variance differs from ability to ability, and (3) population variance differs from age to age for the same ability.

Each score has unique characteristics and communicates different information. The standard score/percentile ranks communicate relative standing in a peer group. If the standard scores and percentile ranks are the only scores considered, valuable information will be missed. Proficiency or functionality on tasks is best described by the RPI. Developmental or instructional information is best communicated by the age or grade equivalents and corresponding instructional zones (Easy to Difficult).

Table 2. Uniqueness of Scores

Score	Letter-Word Identification	Reading Recall	
Percentile Rank/Standard Score	32/93	32/93	
Age Equivalent	8-3	8-0	
Grade Equivalent	2.8	2.5	
Relative Proficiency Index	69/90	81/90	
Skill Level	Limited to Average	Limited to Average	

For more information, see the Woodcock-Johnson IV Scoring and Reporting Guide.

Building Examiner Competency

Any person administering the WJ IV ACH needs thorough knowledge of the exact administration and scoring procedures. To become proficient, examiners need to study the test material, including the Examiner's Manual, Test Books, and the Examiner Training Workbook. Additionally, the examiner needs to conduct practice administrations until administration is fluent and error-free.

Checklists

Use the reproducible checklists provided in this workbook (also available in Appendixes *C* and D of the WJ IV ACH Examiner's Manual) to build competency in scoring and administering the WJ IV ACH. Both checklists are designed as observation or self-study tools to ensure proper administration. Permission is granted to reproduce the checklists for use in training or for self-study.

Practice Exercises

The following practice exercises may be reproduced for self-study or training purposes. The Answer Key is on page 16.

Basal and Ceiling Rules

1.	True or False	When there appears to be more than one basal, use the highest-numbered one.
2.	True or False	When a ceiling is reached in the middle of a page, continue testing to complete the page if there are
		items visible on the examinee's page.
3.	True or False	Basal and ceiling rules are guidelines to reduce testing time.
4.	True or False	If no basal is established after testing backward to Item 1, the test cannot be scored.
5.	True or False	Count all items below the basal as correct in Test 1: Letter-Word Identification.
6.	True or False	Apply the basal and ceiling rules to each subtest in Test 17: Reading Vocabulary.
7.	True or False	Count all items below the basal as correct on Test 6: Writing Samples.
8.	True or False	On timed tests, the ceiling is the time limit.

Raw Score Calculation

- 1. Calculate the Number Correct for Test 17A: Reading Vocabulary–Synonyms shown in Figure 3.
- 2. Calculate the Number Correct for Test 7: Word Attack shown in Figure 4.

Obtaining Estimated Age and Grade Equivalents

Determine the estimated age and grade equivalents for the following test scores. First calculate the raw score. Then consult a Test Record for the necessary "Scoring Tables" to obtain the estimated AE/GE scores.

1. Test 8: Oral Reading
Number of Points:
Items 1–5: 8
Items 6–10: 7
Items 11–15: 5
Estimated AE/GE:
2. Test 17: Reading Vocabulary
Number Correct:
17A: Synonyms = 10
17B: Antonyms = 16
Estimated AE/GE:
3. Test 16: Spelling of Sounds Number of Points = 14
Estimated AE/GE:

Response Booklet Scoring Exercises

- 1. Use the Scoring Guide in Appendix B of the WJ IV ACH Examiner's Manual to score the following responses from Test 6: Writing Samples–Form A.
 - 2. kr
 - 5. hat
 - 10. The kat is waching the fish so he can eat it.
 - 14. On most weekends I like to read, swim and ride my bike.
 - 17. A ranebo is a butiful ark of colurs that apeers after a rain strm.
 - 22. They both need trees.
 - 28. I hope to go to France one day to explore the ancient caves.

2.	Score the following responses from Test 11: Sentence Writing Fluency–Form A. Consult the Test Book and WJ IV ACH Examiner's Manual for scoring guidelines.
	1. The boy is hapy.
	2. The sad girl is today.
	3. My soup is hot.
	4. He can catch the ball.
	5. This is a ball.
	6. The TV is not working.
	7. The nail is vary pointy.
	8. Clocks tell time.
	9. The boy got out of bed.
	10. He eats the dog food.
3.	Score the following responses from Test 16: Spelling of Sounds–Form A. Consult the Test Book and WJ IV ACH Examiner's Manual for scoring guidelines.
	6. get

7. iffed

8. hg

9. pach

10. whib

11. masp

12. ushs

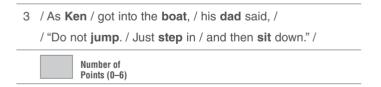
13. foi

14. jang

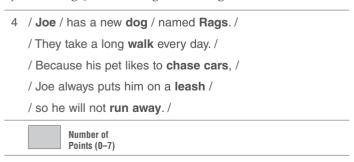
Scoring Test 12: Reading Recall

Score the following retelling for Stories 3 and 4. Place a check mark over each correctly recalled element. Then total the Number of Points earned for each story.

Story 3 retelling: Kenny's dad said don't jump in the boat.



Story 4 retelling: Joe has a dog named Rags who likes to chase cars and walk each day.



Answer Key to Practice Exercises

Basal and Ceiling Rules

- 1. False (use the lowest-numbered basal)
- 2. True (when the examinee sees items, the page should be completed even if a ceiling has been reached)
- True
- 4. False (Item 1 becomes the basal and the test can be scored)
- 5. True
- 6. True
- 7. False (the score is based on a specific block of items)
- 8. True

Raw Score Calculation

- 1. Test 17A: Reading Vocabulary–Synonyms = 10
- 2. Test 7: Word Attack = 18

Obtaining Estimated Age and Grade Equivalents

- 1. Oral Reading: Total Number Correct is 20 (8 + 7 + 5), AE is 7-0, GE is 1.6
- 2. Reading Vocabulary: Total Number Correct is 26 (10 + 16), AE is 13-2, GE is 7.7
- 3. Spelling of Sounds: Number Correct is 14, AE is 8-3, GE is 2.9

Response Booklet Scoring Exercises

- 1. Test 6: Writing Samples–Form A
 - 2.1 point
 - 5.0 points
 - 10.1 point
 - 14.2 points
 - 17. 2 points (meets criteria, no penalty for spelling)
 - 22.0 points (limited content)
 - 28.0 points (not a concluding sentence)
- 2. Test 11: Sentence Writing Fluency-Form A
 - 1.1 point (okay to miscopy a stimulus word as long as it doesn't change the tense, part of speech, or number)
 - 2.0 points (not a reasonable sentence)
 - 3.1 point
 - 4.1 point
 - 5.1 point
 - 6.1 point
 - 7.1 point (okay to miscopy stimulus word as long as it doesn't change the tense, part of speech, or number)
 - 8.0 points (changed 2 stimulus words)
 - 9.1 point
 - 10.1 point

- 3. Test 16: Spelling of Sounds-Form A
 - 6.0 points
 - 7.1 point
 - 8.0 points
 - 9.0 points
 - 10.1 point
 - 11.1 point
 - 12.0 points
 - 13.0 points
 - 14.1 point

Scoring Test 12: Reading Recall

- 1. Story 3 retelling earns 4 points. There should be a check mark above Ken, boat, dad, and jump. Kenny's is acceptable for Ken and elements can be recalled in any order.
- Story 4 retelling earns 5 points. There should be a check mark above Joe, dog, Rags, walk, and chase cars. Elements can be recalled in any order. Scoring is based on the bold word in each element.

WJ IV General Test Observations Checklist

Nan	ne of Exa	aminer:	Date:
Name of Examinee:			
Y =	= Yes	N = No	N/O = Not Observed
_	inning cle one)	the Test So	ession
Y	N	N/O	1. Records examinee's identifying information correctly, including age and grade level.
Y	N	N/O	2. Develops seating arrangement in which examiner can see both sides of Test Book but examinee can see only examinee pages.
Adr	ninistra	ıtion	
Y	N	N/O	3. Keeps Test Record behind Test Book and out of examinee's view.
Y	N	N/O	4. Begins each test by turning to tabbed page.
Y	N	N/O	5. Points with left hand while recording responses with right hand (reversed for left-handed examiner).
Y	N	N/O	6. Watches where and how he or she points on examinee's page.
Y	N	N/O	7. Uses exact wording for examiner page instructions.
Y	N	N/O	8. Knows correct pronunciation of all words in test.
Y	N	N/O	9. Communicates to examinee that test session is enjoyable.
Y	N	N/O	10. Moves smoothly from one test to another.
Y	N	N/O	11. Administers test fluidly.
Y	N	N/O	12. Moves to next item after allowing examinee appropriate, but not excessive, amount of time to respond.
Y	N	N/O	13. Is familiar with contents of all examiner page boxes containing supplementary instructions.
Y	N	N/O	14. Follows all basal and ceiling rules.
Y	N	N/O	15. When testing backward to obtain basal, starts with first item on preceding page and presents all items on page if stimuli are visible to examinee.
Y	N	N/O	16. Administers all items on page when stimuli are visible to examinee rather than stopping in middle of page when ceiling is reached.
Y	N	N/O	17. Smoothly locates correct starting track on CD for audio tests.
Y	N	N/O	18. Looks away from examinee when audio test item is presented and then looks back at examinee when prompt is heard.
Y	N	N/O	19. Presses pause button on audio equipment if examinee needs additional time.
Y	N	N/O	20. Encourages effort and praises examinee for putting forth his or her best effort.
Y	N	N/O	21. Queries whenever needed and allowed to clarify examinee's response.
Y	N	N/O	22. Uses stopwatch for all timed tests.
Y	N	N/O	23. Presents Response Booklet as directed in Test Book.

Scor	ing		
Y	N	N/O	24. Does not penalize examinee for mispronunciations resulting from articulation, speech, or dialectical differences.
Y	N	N/O	25. Uses item-scoring procedures specified in manual (e.g., 1 = correct response, 0 = incorrect response, and blanks for items not administered).
Y	N	N/O	26. Scores last response examinee gives.
Y	N	N/O	27. Calculates raw scores correctly.
Y	N	N/O	28. Completes "Test Session Observations Checklist."
Y	N	N/O	29. Uses optional "Qualitative Observation" checklists for Tests 1-11, as appropriate.
Y	N	N/O	30. Enters all identifying information and scores correctly into scoring program.

Comments:

Suggestions for improvement and further study:

WJ IV Tests of Achievement Examiner Training Checklist

Name of Examiner: _____ Date: ____ Name of Examinee: ____ Name of Observer: Y = YesN = No N/O = Not ObservedTest 1: Letter-Word Identification (circle one) Y N/O 1. Knows exact pronunciation of each item. Ν Y Ν N/O 2. Uses suggested starting points. Y N/O 3. Asks examinee to reread all items on page if response is unclear and then scores only item Ν in question. Y Ν N/O 4. Does not tell examinee any letters or words during test. Y 5. Gives reminder to pronounce words smoothly only once during test. Ν N/O Y N/O 6. Tests by complete pages. Ν Y N/O 7. Encourages examinee to try next word after 5 seconds unless examinee is still actively Ν engaged in trying to pronounce word. Y Ν N/O 8. Counts all items below basal as correct. **Test 2: Applied Problems** Y N/O 1. Uses worksheet in Response Booklet. Ν Y Ν N/O 2. Uses suggested starting points. Y N/O 3. Reads all items to examinee. Ν Y N/O 4. Provides Response Booklet and pencil at any time if examinee requests it or appears to need Ν it (e.g., uses finger to write on table or in air). Y 5. Gives examinee pencil and Response Booklet at Item 25. Ν N/O Y N/O 6. Repeats any questions if requested by examinee. Ν 7. Does not require examinee responses to contain unit labels unless specified in Test Book Y Ν N/O correct keys. N/O 8. Scores item incorrect if numeric response is wrong or if examinee provides incorrect label Y Ν (required or not). Y Ν N/O 9. Tests by complete pages. Y N/O 10. Counts all items below basal as correct. Ν Test 3: Spelling Y Ν 1. Uses Response Booklet and pencil. N/O Y Ν N/O 2. Uses suggested starting points.

Y	N	N/O	3. Knows correct pronunciation of all items.
Y	N	N/O	4. Does not penalize for poor handwriting or reversed letters as long as letter does not form different letter (e.g., reversed <i>b</i> becomes <i>d</i> and would be an error).
Y	N	N/O	5. Requests printed (manuscript) responses but accepts cursive responses.
Y	N	N/O	6. Accepts upper- or lowercase responses unless case is specified.
Y	N	N/O	7. Counts all items below basal as correct.
Test 4	Passag	e Compi	rehension
Y	N N	N/O	Begins with Introduction for examinees at preschool or kindergarten level.
Y	N	N/O	2. Begins with Item 5 for examinees at Grade 1 level.
Y	N	N/O	3. Begins with Sample Item B for all other examinees and then selects appropriate starting point.
Y	N	N/O	4. Does not insist on silent reading if examinee persists in reading aloud.
Y	N	N/O	5. Does <i>not</i> tell examinee <i>any</i> words.
Y	N	N/O	6. Accepts only one-word responses as correct unless indicated otherwise by scoring key.
Y	N	N/O	7. Asks examinee to provide one word that goes in blank when he or she reads item aloud and provides answer in context.
Y	N	N/O	8. Scores responses correct if they differ in verb tense or number, unless otherwise indicated.
Y	N	N/O	9. Scores responses incorrect if examinee substitutes different part of speech, unless otherwise indicated.
Y	N	N/O	10. Tests by complete pages.
Y	N	N/O	11. Counts all items below basal as correct.
Test 5	Calcul	ation	
Y	N	N/O	1. Uses Response Booklet and pencil.
Y	N	N/O	2. Uses suggested starting points.
Y	N	N/O	3. Discontinues testing and records score of 0 if examinee responds incorrectly to both sample items.
Y	N	N/O	4. Accepts poorly formed or reversed numbers.
Y	N	N/O	5. Scores transposed numbers (e.g., "14" for 41) as incorrect.
Y	N	N/O	6. Scores items skipped by examinee as incorrect.
Y	N	N/O	7. Completes any applicable queries as listed in Test Book.
Y	N	N/O	8. Does not point out mathematical signs or operands to examinee.
Y	N	N/O	9. Counts all items below basal as correct.
Test 6	Writin	g Sample	25
Y	N	g Sampi N/O	1. Uses Response Booklet and pencil.
1	1.4	11/0	1. Oses response dooriet and penen.

2. Uses suggested starting points.

Y

Ν

N/O

Y	N	N/O	3. Administers prescribed block of items.			
Y	N	N/O	4. Reads any word to examinee upon request.			
Y	N	N/O	5. Uses "Writing Samples Scoring Guide" in Appendix B of Examiner's Manual to score items after testing.			
Y	N	N/O	6. Does not penalize for spelling, punctuation, capitalization, or usage errors unless otherwise indicated in "Writing Samples Scoring Guide."			
Y	N	N/O	7. Asks examinee to write as neatly as possible if responses are illegible or difficult to read.			
Y	N	N/O	8. Consults Writing Samples "Scoring Table" on Test Record to determine when additional items need to be administered (score falls in shaded area).			
Y	N	N/O	9. Scores Items 1-6 as 1 or 0 points as indicated in "Writing Samples Scoring Guide."			
Y	N	N/O	10. Scores Items 7–28 as 2, 1, or 0 points as indicated in "Writing Samples Scoring Guide."			
Y	N	N/O	11. Knows that .5 and 1.5 can be used to score responses that fall between 0-, 1-, and 2-point examples.			
Y	N	N/O	12. Does not penalize for spelling or handwriting errors unless words are illegible.			
Y	N	N/O	13. Scores sentences that are illegible as 0.			
Y	N	N/O	14. Does not ask examinee to read his or her response to score item.			
Y	N	N/O	15. Alternates between assigning higher and lower scores when unsure of how to score certain items.			
Y	N	N/O	16. Scores items based on examinee's interpretation of picture.			
Y	N	N/O	17. If examinee writes more than one sentence for item, selects and scores one sentence that best satisfies task demands.			
Y	N	N/O	18. Reduces score by 1 point for severe grammatical or usage errors or if a significant word is illegible.			
Y	N	N/O	19. Does not penalize minor grammatical or usage errors.			
Y	N	N/O	20. Rounds scores ending in .5 to nearest even number.			
Y	N	N/O	21. Enters score for only one block of items (even if more than one block was administered) into scoring program.			
Test	7: Word	Attack				
Y	N	N/O	1. Uses suggested starting points.			
Y	N	N/O	2. Knows correct pronunciation of each item.			
Y	N	N/O	3. Says most common sound (phoneme) for letters printed within slashes (e.g., /p/), not letter name.			
Y	N	N/O	4. Reminds examinee to say words smoothly only once during test if examinee pronounces nonword phoneme by phoneme or syllable by syllable.			
Y	N	N/O	5. Asks examinee to reread all items on page if response is unclear and then scores only item in question.			
Y	N	N/O	6. Does <i>not</i> tell examinee <i>any</i> letters or words during test.			
3.7		1110				

7. Tests by complete pages.

Y

Ν

N/O

Y	N	N/O	8. Counts all items below basal as correct.
Y	N	N/O	9. Records errors for further analysis.
Test 8:	Oral Re	eading	
Y	N	N/O	1. Uses suggested starting points.
Y	N	N/O	2. Follows Continuation Instructions to determine what to administer or when to discontinue testing.
Y	N	N/O	3. Has examinee read sentences aloud.
Y	N	N/O	4. Knows correct pronunciation of each item.
Y	N	N/O	5. Scores as incorrect mispronunciations, omissions, insertions, substitutions, hesitations of 3 seconds, repetitions, transpositions, and ignoring punctuation.
Y	N	N/O	6. Marks slash (/) at each point on Test Record where error occurs.
Y	N	N/O	7. After hesitation of 3 seconds, marks word as incorrect and tells examinee to go on to next word.
Y	N	N/O	8. Knows that self-corrections within 3 seconds are not counted as errors.
Y	N	N/O	9. Scores each sentence as 2 (no errors), 1 (one error), or 0 (two or more errors).
Y	N	N/O	10. Records Number of Points earned on items administered.
Test 9:	Senteno	ce Readi	ng Fluency
Y	N	N/O	1. Uses stopwatch.
Y	N	N/O	2. Uses Response Booklet and pencil.
Y	N	N/O	3. Begins with sample items and practice exercise for all examinees.
Y	N	N/O	4. Discontinues testing if examinee has 2 or fewer items correct on Practice Exercises C–F and records score of 0 on Test Record.
Y	N	N/O	5. Adheres to 3-minute time limit.
Y	N	N/O	6. Records exact starting and stopping times if stopwatch is unavailable.
Y	N	N/O	7. Records exact finishing time in minutes and seconds on Test Record.
Y	N	N/O	8. Reminds examinee to read each sentence if he or she appears to be answering items without reading.
Y	N	N/O	9. Does not tell examinee any letters or words.
Y	N	N/O	10. Reminds examinee to continue if he or she stops at bottom of page or column.
Y	N	N/O	11. Counts number of correct responses and number of errors.
Y	N	N/O	12. Does not count skipped items as incorrect.
Y	N	N/O	13. Enters both Number Correct and Number Incorrect into scoring program.
Y	N	N/O	14. Subtracts Number Incorrect from Number Correct when obtaining estimated AE/GE from Test Record.
Y	N	N/O	15. Uses scoring guide overlay to facilitate scoring.

Test 1	0: Math	Facts F	luency			
Y	N	N/O	1. Uses stopwatch.			
Y	N	N/O	2. Uses Response Booklet and pencil.			
Y	N	N/O	3. Begins with Item 1 for all examinees.			
Y	N	N/O	4. Discontinues testing if examinee has 3 or fewer items correct after 1 minute and records time of 1 minute and Number Correct (0 to 3) on Test Record.			
Y	N	N/O	5. Adheres to 3-minute time limit.			
Y	N	N/O	6. Records exact starting and stopping times if stopwatch is unavailable.			
Y	N	N/O	7. Records exact finishing time in minutes and seconds on Test Record.			
Y	N	N/O	8. Does not draw attention to mathematical signs or remind examinee to pay attention to signs during test.			
Y	N	N/O	9. Does not penalize for poorly formed or reversed numbers.			
Y	N	N/O	10. Reminds examinee to proceed across page from left to right, row by row, if he or she starts skipping around.			
Y	N	N/O	11. Reminds examinee to continue if he or she stops at bottom of first page.			
Y	N	N/O	12. Uses scoring guide overlay to facilitate scoring.			
Test 1	1: Sente	nce Wr	iting Fluency			
Y	N	N/O	1. Uses stopwatch.			
Y	N	N/O	2. Uses Response Booklet and pencil.			
Y	N	N/O	3. Begins with sample items for all examinees.			
Y	N	N/O	4. Discontinues testing if examinee has score of 0 on Sample Items B–D <i>after error correction</i> and records score of 0 on Test Record.			
Y	N	N/O	5. Discontinues testing if examinee has 3 or fewer correct after 2 minutes and records time of 2 minutes and Number Correct (0 to 3) on Test Record.			
Y	N	N/O	6. Adheres to 5-minute time limit.			
Y	N	N/O	7. Records exact starting and stopping times if stopwatch is unavailable.			
Y	N	N/O	8. Records exact finishing time in minutes and seconds on Test Record.			
Y	N	N/O	9. Reads stimulus word to examinee upon request.			
Y	N	N/O	10. Reminds examinee to continue if he or she stops at bottom of page.			
Y	N	N/O	11. Scores as correct all responses that are complete, reasonable sentences using all target words.			
Y	N	N/O	12. Knows target words may not be changed in any way (e.g., verb tense or nouns changed from singular to plural).			
Y	N	N/O	13. Does not penalize for spelling, punctuation, or capitalization errors.			
Y	N	N/O	14. Does not penalize for poor handwriting or spelling unless response is illegible.			
Y	N	N/O	15. Scores skipped items as incorrect.			

Y	N	N/O	16. Scores responses that omit critical words as incorrect.		
Y	N	N/O	17. Scores responses that omit less meaningful words (e.g., <i>the</i> or <i>a</i>) as correct if all other criteria are met.		
Y	N	N/O	18. Accepts abbreviations (e.g., w/ for with) or symbols (e.g., & for and) if all other criteria are met.		
Test 1	2: Read	ing Rec	all		
Y	N	N/O	1. Uses suggested starting points.		
Y	N	N/O	2. Follows Continuation Instructions to determine when to continue testing or when to stop.		
Y	N	N/O	3. Does <i>not</i> tell examinee <i>any</i> words during test.		
Y	N	N/O	4. Allows examinee to read each story silently only once.		
Y	N	N/O	5. Knows elements to be scored are listed on Test Record.		
Y	N	N/O	6. Scores element as correct if examinee uses key word (in bold) or close synonym during retelling.		
Y	N	N/O	7. Does not penalize for mispronunciations resulting from articulation errors, dialect variations, or regional speech patterns.		
Y	N	N/O	8. Scores response correct if it differs from correct response listed only in possessive case, verb tense, or number (singular/plural), unless otherwise indicated in scoring key.		
Y	N	N/O	9. Knows that any number that is a key word (in bold), must be recalled exactly.		
Y	N	N/O	10. Scores derivations of names as correct (e.g., Annie for Ann).		
Test 1	3: Num	ber Mat	trices		
Y	N	N/O	1. Gives examinee worksheet in Response Booklet and pencil when directed.		
Y	N	N/O	2. Uses suggested starting points.		
Y	N	N/O	3. Provides corrective feedback as indicated for Sample Items A and B.		
Y	N	N/O	4. Tests by complete pages.		
Y	N	N/O	5. Allows 30 seconds for Items 1–6 and 1 minute for Items 12–30 before moving to next item.		
Y	N	N/O	6. Allows more time if examinee is actively engaged in solving problem.		
Y	N	N/O	7. Counts all items below basal as correct.		
Y	N	N/O	8. Records total Number Correct.		
Test 1	4: Editi	ng			
Y	N	N/O	1. Begins with Sample Items A–D for all examinees and then uses suggested starting points.		
Y	N	N/O	2. Discontinues testing if examinee has score of 0 on Sample Items A–D or on Items 1–4 and records score of 0 on Test Record.		
			records score of o on rest record.		
Y	N	N/O	3. Requires examinee to clearly indicate both where error is and how to correct it to receive credit.		
Y Y	N N	N/O	3. Requires examinee to clearly indicate both where error is and how to correct it to receive		

Y	N	N/O	5. Asks examinee how to correct error if he or she reads item aloud and inadvertently corrects error in context.
Y	N	N/O	6. Asks examinee how to correct mistake if he or she indicates error without explaining how to correct it.
Y	N	N/O	7. Tests by complete pages.
Y	N	N/O	8. Counts all items below basal as correct.
Test	15: Wo	rd Readi	ng Fluency
Y	N	N/O	1. Uses stopwatch.
Y	N	N/O	2. Uses Response Booklet and pencil.
Y	N	N/O	3. Administers sample items and practice exercise to all examinees.
Y	N	N/O	4. Discontinues testing if examinee has 1 or 0 correct on practice exercise and records score of 0 on Test Record.
Y	N	N/O	5. Adheres to 3-minute time limit.
Y	N	N/O	6. Records exact starting and stopping times if stopwatch is unavailable.
Y	N	N/O	7. Records exact finishing time in minutes and seconds on Test Record.
Y	N	N/O	8. Does <i>not</i> tell examinee <i>any</i> words during test.
Y	N	N/O	9. Uses scoring guide overlay to facilitate scoring.
Test	16: Spe	lling of S	Sounds
Y	N	N/O	1. Follows standardized procedures for audio recorded tests.
Y	N	N/O	2. Uses Response Booklet and pencil.
Y	N	N/O	3. Uses suggested starting points.
Y	N	N/O	4. Presents Sample Items A–D and Items 1–5 orally and presents remaining items from audio recording.
Y	N	N/O	5. Says most common sound (phoneme) for letters printed within slashes (e.g., /m/), not letter name.
Y	N	N/O	6. Knows that responses listed in Test Book are only correct answers.
Y	N	N/O	7. Does not penalize for reversed letters as long as letter does not form different letter (e.g., reversed <i>b</i> becomes <i>d</i> and would be an error).
Y	N	N/O	8. Scores items 1 if they are spelled correctly or 0 if they are spelled incorrectly.
Y	N	N/O	9. Does not penalize if examinee does not repeat stimulus word or pronounces it incorrectly. Scores only written response.
Y	N	N/O	10. Pauses or stops audio recording if examinee requires additional response time.
Y	N	N/O	11. Replays items examinee requests.
Y	N	N/O	12. Presents items orally if examinee is not responsive to audio recording.
Y	N	N/O	13. Counts all items below basal as correct.

Test 1	7: Readi	ng Voca	abulary		
Y	N	N/O	1. Administers both subtests (17A: Synonyms, 17B: Antonyms).		
Y	N	N/O	2. Begins with sample items for all examinees on each subtest.		
Y	N	N/O	3. Uses suggested starting points for each subtest.		
Y	N	N/O	4. Applies basal and ceiling rules correctly to each subtest.		
Y	N	N/O	5. Knows correct pronunciation of each item.		
Y	N	N/O	6. Does not read any words or items to examinee after administering sample items.		
Y	N	N/O	7. Accepts only one-word responses as correct, unless otherwise noted.		
Y	N	N/O	8. Asks for one-word answer if examinee provides two-word or longer response.		
Y	N	N/O	9. Scores responses correct if they differ in verb tense or number, unless otherwise indicated.		
Y	N	N/O	10. Scores responses incorrect if they substitute different part of speech, unless otherwise indicated.		
Y	N	N/O	11. Does not penalize if examinee reads stimulus word incorrectly. Scores only synonym or antonym produced.		
Y	N	N/O	12. Tests by complete pages.		
Y	N	N/O	13. Counts all items below basal on each subtest as correct.		
Y	N	N/O	14. Records errors for further analysis.		
Y	N	N/O	15. Records Number Correct for each subtest.		
Y	N	N/O	16. Enters Number Correct from each subtest into scoring program.		
Y	N	N/O	17. Sums scores from two subtests when obtaining estimated AE/GE from Test Record.		
Test 1	8: Scien	ce			
Y	N	N/O	1. Uses suggested starting points.		
Y	N	N/O	2. Knows correct pronunciation of each item.		
Y	N	N/O	3. Repeats any item upon examinee's request.		
Y	N	N/O	4. Tests by complete pages.		
Y	N	N/O	5. Counts all items below basal as correct.		
Test 1	9: Socia	l Studie	es .		
Y	N	N/O	1. Uses suggested starting points.		
Y	N	N/O	2. Knows correct pronunciation of each item.		
Y	N	N/O	3. Repeats any item upon examinee's request.		
Y	N	N/O	4. Tests by complete pages.		
Y	N	N/O	5. Counts all items below basal as correct.		

Toct	20.	Ции	nanities
Test	20:	пип	iammes

Y	N	N/O	1. Uses suggested starting points.
Y	N	N/O	2. Knows correct pronunciation of each item.
Y	N	N/O	3. Repeats any item upon examinee's request.
Y	N	N/O	4. Tests by complete pages.
Y	N	N/O	5. Counts all items below basal as correct.

References

- Mather, N., & Wendling, B. J. (2014). Examiner's Manual. Woodcock-Johnson IV Tests of Achievement. Rolling Meadows, IL: Riverside.
- McGrew, K. S., LaForte, E. M., & Schrank, F. A. (2014). Technical Manual. *Woodcock-Johnson IV*. Rolling Meadows, IL: Riverside.
- Schrank, F. A., & Dailey, D. (2014). Woodcock-Johnson Online Scoring and Reporting [Online format]. Rolling Meadows, IL: Riverside.
- Schrank, F. A., Mather, N., & McGrew, K. S. (2014a). Woodcock-Johnson IV Tests of Achievement. Rolling Meadows, IL: Riverside.
- Schrank, F. A., Mather, N., & McGrew, K. S. (2014b). Woodcock-Johnson IV Tests of Oral Language. Rolling Meadows, IL: Riverside.
- Schrank, F. A., McGrew, K. S., & Mather, N. (2014a). Woodcock-Johnson IV. Rolling Meadows, IL: Riverside.
- Schrank, F. A., McGrew, K. S., & Mather, N. (2014b). Woodcock-Johnson IV Tests of Cognitive Abilities. Rolling Meadows, IL: Riverside.



800.323.9540 www.riversideinsights.com