## Scoring Notebook for the

## CIFASD Neurobehavioral Test Battery

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* The listed page numbers are for the items on this Table of Contents only. It is suggested that you use these pages along with photocopies of the pages listed in the text from the actual manuals (i.e. norm charts and tables) to gain the most benefit from this scoring notebook. The photocopied pages should follow the pages above (see ScoringNotebookWithNorms.PDF on the website) and be placed in a three-ring binder with tab dividers separating out each test.


## CIFASD Test Packet Cover Sheet Instructions

Child's Name: Enter the child's first name and last name initial(s). Ex. Jill V.V.
ID\#: Enter your site code and the subject number. Ex. SMS2
(San Diego's site code and a 2 for the second child being tested at this site.)
Please contact Sarah Mattson if you do not know your site's code.
Sex: Circle the appropriate sex of the child.
Ex. MALE FEMALE
Handedness: Circle the appropriate handedness of the child for writing skills primarily. Ask the child their handedness and observe which hand they hold a pencil with. For mixed handedness you will have to observe the child throughout the session and evaluate after looking at all of the subtests. This should also become clear after completing the Edinburgh Handedness scale. Use this handedness as the dominant hand for skills like the Grooved Pegboard. Note which hand the child uses on each test.
RIGHT LEFT MIXED
Grade: Enter the grade that the child is currently enrolled in or the grade they have just completed if the child is being tested during a time when school is out of session.
Ex. $4^{\text {th }}$ Currently Attending Just Completed
Calculating the child's age at time of testing: This is to be completed per session if needed. Enter in the date of testing and the child's date of birth in the order labeled (Year then Month then Day). Subtract the date of birth from the date of testing. Ex. All months are assumed to have 30 days for the purpose of this calculation.
Session 1: Year /Month/ Day
$03 \quad 1022 \quad 37$
Date of Testing: $\quad 04$ / 14 / 07 (Date of testing = November 7, 2004)
Date of Birth: $\quad 94 / 12$ / 22 (Child's date of birth = December 22, 1994)
Age at Testing: $\quad 09 / 10$ / 15 (Child's age $=9$ yrs., 10 mos. and 15 days)
Age Calculation Explanation: Since you cannot subtract 22 from 7 you need to borrow a months worth of days ( 30 days) from the month column so that you now subtract 22 from $37(7+30)$ to equal 15 days. Likewise, you will need to borrow a year's worth of months (12) to add to the month column so that you can subtract 12 from $22(10+12)$ to equal 10 months. Lastly, you will subtract 1994 from 2003 to establish that the child is 9 years, 10 months and 15 days old.
Medications \& Dosage: It is preferred for CIFASD testing that the child is not taking any stimulant medications on the day of testing; however, this is not an exclusionary criterion for participation. Ask the child and then verify with a parent/caretaker the medications and dosages that the child is currently taking and be sure to indicate which the child has taken that day prior to your testing session. Circle whether or not the medications were already taken today. If not all listed were taken yet, circle those that were taken.
Start Time, End Time \& Total Time: Write in the time that you start the session and the time that you end the session. Then calculate the total time in both hours and minutes and minutes only. Ex. Total Time $=5$ hours 33 minutes $=333$ minutes
Session 2: If for some reason all tests could not be completed in one session, please provide the information requested for the second session and be sure to recalculate the child's age for the new date of testing.

## Monthly Conversion Chart:

Below is a chart that illustrates the decimal equivalents for the number of months. Each decimal is based on the simple equation of $X$ (where $X=$ the number of months) divided by 12 (the number of months in a year). For example, if the child's age is 9 years, 10 months and 15 days, the child is 9.833 . You will need to verify the child's age in the decimal format on the CIFASD Access databases.

```
MONTH CONVERSION CHART
    # of Months = Decimal
        1=0.083
        2 = 0.167
        3=0.250
        4=0.333
        5=0.417
        6=0.500
        7 = 0.583
        8=0.667
        9 = 0.750
        10=0.833
        11=0.917
```


## Leiter-R Brief IQ

It should be noted that each response (card) is scored, not just the complete sequence. In other words, partial completion of a sequence is credited for most subtests.

Subtest Raw Scores: Count up the correct score responses (the number of circled card letters) on the response form and list the total on the response blank for that item. Note: For Figure Ground (FG), each card has it's own 1 or 0 score blank as do portions of some of the other subtests. Award full credit for all non-administered items prior to the starting point for this child if the training item/start item receives full credit. Be mindful of the discontinue (stop rule) and remember that for the Leiter-R, it is the number of cumulative responses failed NOT consecutive. Check to be sure the correct starting point, reversal (if needed) and discontinue were followed by the examiner.

Leiter-R Brief IQ: Transfer the raw score totals for each subtest and use the Leiter-R Brief IQ calculation area on the bottom of the Leiter-R RP test packet page (see example below) to calculate the child's Leiter-R Brief IQ. Locate the correct table by finding the child's age and convert the raw score totals for each of the four subtests (FG, FC, SO and RP) to scaled scores by using the tables on pages A-13 to A-27 of the Leiter-R Examiner's Manual. Take the total of the scaled scores for these four subtests and use the table on page D-2 to convert this scaled score total to the appropriate IQ equivalent. Use pages $\mathrm{K}-1 \& \mathrm{~K}-2$ to determine the appropriate percentile rank for the standard score (which is the IQ). Use page E-15 to calculate the confidence interval. (Confidence interval example: If a child is 9 years old and has a Leiter-R Brief IQ score of 88 , the confidence interval is 78 to 98 .)

Leiter-R Brief IQ: Raw SS
Figure Ground:
Form Completion:


Sequential Order:


Repeated Patterns: $\square$ *Brief IQ: SS Total __ IQ __ \% C.I.@95\%__

The following pages from the Leiter-R manual should be photocopied and placed in the order below following this cover page as they provide the normative data: A-13 to A-27, D-2, K-1 to K-2, E-15 and page 104.

## Grooved Pegboard Test

Raw Score: Time in seconds to complete the first 2 rows (for children $\leq 8$ ) or all 5 rows (for children $\geq 9$ ). Time for each hand is recorded and scored separately. All children regardless of age are administered all rows. If the time discontinue was met (300 seconds or 5 minutes) use 300 as the child's raw score.

Note: If the time is written in minutes and seconds be sure to transfer it into seconds only. For example, if the total time is written as $1: 17$, this would convert to 77 seconds. 1 minute = 60 seconds.

Calculating the Z-Score: Use the age and sex appropriate means and standard deviations on the table provided on the next page to calculate the $z$-score for each hand separately. Use the raw score (see definition above) as the total time for each hand.

Z-Score = Total Time minus the Age Mean divided by the Standard Deviation.
Note: Do NOT modify this equation. Negative Z-scores on this task (the child performing in less time than the age mean) demonstrate performance in the Average to Superior range whereas positive $z$-scores on this task (the child performing in more time than the age mean) demonstrate performance in the Average to Well Below Average range. For example, if a 9 year-old boy has a raw score of 65 seconds on his DH, his Zscore would be -0.974 . Even though his score is negative, he is still performing in the High Average range.

Again, it is essential that all sites follow the equation below so that we may combine our data for analysis:
Z-Score = Total Time minus the Age Mean divided by the Standard Deviation.
Example: 10 year-old male

| D.H. | 77 | Non-DH: | 96 |
| :--- | :--- | :--- | :--- |
| Age Mean: | 83.00 |  | 90.00 |
| Age S.D.: | 36.50 |  | 28.90 |
| Z-Score: | -0.164 |  | 0.208 |

Note: Dominant on the norms table does not mean a default of right hand. Use the Dominant Hand norms for the dominant hand for both right and left-handed children.

Time/Row: Calculate the time per row by subtracting the previous row total time from the current row. For example, if the total time for Row 3 is 34 and the total time for row 2 is 23 , then the time per row for row 3 equals 34 minus 23 which is 11 . The time per row for row 1 will always be the total time for row 1 .

## D-KEFS Verbal Fluency

Use the CIFASD test packet form, the D-KEFS Record Form and the D-KEFS Examiner's Manual pages 58-73 and 242-255 to score this test.

Circle all words that are errors regardless of type.
Do not include those words that the child says, but then later self corrects. Cross them out with a line on the test packet form.

## Raw Scores:

For each letter/category, add up the total number of correct words (total number and for each 15 " interval), total number of repetitions and set loss words, and the total number of words (correct and incorrect) the child gave.

For switching, add up the number of correct switches to obtain Total Switching Accuracy. It is helpful to draw a dash (similar to a minus sign) with pencil on the test packet form to indicate correct switches. For example, apple - table.

See the D-KEFS Manual pages for specifics on scoring information (pages 64-71) and use the D-KEFS Verbal Fluency Record Form for scoring calculations (e.g. converting raw scores to scaled scores).

Note: There is a typo in the D-KEFS Examiner's Manual on page 63. On the last variable on this page in figure 4.4 they are demonstrating how to calculate the Percent Switching Accuracy for Category Switching. The Total Responses Condition 3 Only should be 14 not 15 and therefore, the resulting Percent Raw Score is 71.4 and Scaled Score is 8 .

## Scoring Tips:

Furniture: Cabinet (China, File or just Cabinet), Mattress, and Trunk are all scored as correct.

Boys' Names: If it is unclear as to whether or not the name a child listed is a first or last name, give them the benefit of the doubt unless there is a string of last names.
Ex. If the child says "Keith, Edwards, John", give them the benefit of the doubt that they meant Edward.

## D-KEFS Trail Making

Use the CIFASD test packet form, D-KEFS Record Form, child's Response Booklets and the D-KEFS Examiner's Manual pages 46-49 and 221-240 to score this test.

Discontinue Times: For Visual Scanning, Number Sequencing, Letter Sequencing, and Motor Speed, the discontinue time is 150 seconds ( 2 and a $1 / 2$ minutes). For NumberLetter Switching the discontinue time is 240 seconds ( 4 minutes).

Completion Times Scoring: The primary scoring measure for each of the five conditions is the number of seconds that the examinee takes to complete each condition. If the examinee does not complete a particular condition at the end of the time limit, then the time limit is used as the completion time. The raw score (in seconds) for each of Conditons $1-5$ is converted to a scaled score. Additional Completion Time Measures are explained on the D-KEFS record form and in the D-KEFS manual (pages 46-47).

Error Analysis Scoring: Count up the total number of omissions and commissions for Condition 1 and the number of set loss, sequencing, and time discontinue errors for Conditions 2 through 5 and record in the appropriate blanks. Convert to cumulative percentile ranks and standards scores as available (D-KEFS manual pgs.221-240).

Condition 1: There are 12 threes on each page of this response booklet.
Omission Error: Whenever an examinee fails to mark a target 3, either after the examinee states that he or she has completed the task or the time limit has elapsed.
CIFASD Note: If there is a mark in the margin/open space but near a 3 and it is obvious the child meant to mark that 3 , do not count this as an omission.
Commission Error: Whenever an examinee marks a letter or a number that is not a 3 . If an examinee makes a commission error and then self-corrects it (e.g. by scribbling over it), that response is not scored as an error.

Conditions 2-5: Check to make sure the child completed the proper connections and that the tester pointed out mistakes as needed. Once an incorrect connection has been made, it is counted as an error even if the examinee catches the error after it's made.

Sequencing Error: When an examinee makes a connection within the correct set of symbols for the condition being administered (numbers or letters) but connects the wrong item within that set (e.g. 8 to 10 or F to H ). On Condition 4, a sequencing error is when an examinee correctly switches from one set of symbols to the other but connects an item that is out of sequence within the correct set (e.g. 3 to E instead of 3 to D ).

Set-Loss Error: When an examinee draws a line connecting an item that belongs to the wrong set of symbols (numbers or letters) for the condition being administered (e.g. 4 to D instead of 4 to 5 or $C$ to 5 instead of $C$ to D ). On Condition 4, a set-loss error occurs when the examinee fails to switch from one set of symbols to the other (e.g. 4 to 5 instead of 4 to D ).

Time-Discontinue Errors: When an examinee failed to connect one or more items because the time limit for that condition had elapsed. All connections that should have been made but were not because of the expired time limit are counted as timediscontinue errors. Note exception (D-KEFS manual page 48).

## Developmental Test of Visual-Motor Integration (VMI)

Child's age: If the child is X -years, Y -months and 15 days old, their age remains at X years and Y months. If however, the child is X -years, Y -months and 16 or more days old, their age goes up to X -years and $\mathrm{Y}+1$-months. Note: For the CIFASD test battery, the only test in which you will round up the month is the VMI.

Raw Score: Use a ruler and a protractor to score each item according to the criteria listed on pages 28-75. Experienced scorers will find the Summary Scoring Information on pages 76-77 useful as a reminder of the basic scoring criteria. An item is scored a failure/no score (zero) if it fails even one of the criteria listed. Indicate which criterion results in a no score for that item by writing the criteria number next to the zero score for that item on the scoring sheet. For example, writing 0 \#2 would indicate that the child received a no score for this item because they did not meet criterion \#2 for that item. The total raw score is the total number of forms correctly copied. Give credit to all previous items, even if not administered. Discontinue scoring after three consecutive failures (scoring only).

Important Scoring Considerations:

- A major rule to remember when scoring a form is if in doubt, score it as meeting a criteria. Some scorers tend to be too strict. In general, it is better to gain a good developmental sense or gestalt for each form. For example, it is common to encounter an older child who somewhat hastily copies the easier forms, not bothering to dot the i's and cross the t's, because the forms are well within the child's command. An experienced examiner/scorer takes such behavior into account in scoring.
- Do not become obsessed with details. Look at each production as a whole in the context of the scoring criteria and examples. If it still seems too close to call, give it a passing score of one.
- Occasionally, a child makes a second attempt at a form. Always score the first attempt of children below age nine. If you did not actually see which one was first, it can often be identified by comparing the sizes of dual attempts relative to the sizes of the child's single attempts on other forms.
- Accept productions of children over age nine who first sketch with light lines and then complete a form with darker lines.

CIFASD Note about extra lines: The question has come up about what to do with extra lines. As long as it isn't a second attempt at a line (which isn't permitted) or a sign of directional confusion (i.e. Form 25), it is best to ignore extra lines.

To convert the Raw score to the Standard Score: Use the even numbered pages in the Manual pages 166-194 making sure that you are using the page with the proper age for the child you are testing.

To find the appropriate Percentile for the Standard Score: Use the 1st and last columns on page 198.

To find the Age Equivalents: Use page 160 of the Manual.

## Re-Checking System

Each file is to be scored by the examiner/tester and one other person (the re-checker). The tester is to score the file within 3 days of the testing session. The re-checker will score the file independently of the tester within 5 days of the tester's scoring.

The purpose of the re-checker is to carefully score the file as if they were the tester by using the re-checker form to calculate the child's scores on their own. While the rechecker will rely on information collected by the tester in the test packet, it is essential that they score the file ignoring the calculations and scoring judgments made by the tester. For example, the re-checker will need to rely on the words listed by the tester that the child responded with on D-KEFS Verbal Fluency, but the re-checker should decide on their own whether or not each word meets the scoring criteria and if not, which type of error it falls into. Other examples of things that the re-checker should score independently: the child's age (using the date of testing and date of birth provided by the tester), the Leiter-R FG raw score (by adding up the number of correct responses and coming up with the raw score NOT just simply transferring the raw score the tester calculated and looking up the scaled score), or verifying that the time listed for Grooved Pegs was converted properly into seconds. Reminder: These were just a few examples to demonstrate that anything the re-checker can score, they should do so independently (including raw scores).

The tester will complete the re-checker form (located on the following pages) test by test and score the entire file. Once they are finished, they will compare their scores to that of the tester and highlight any and all differences. They should also leave comments to the tester as needed to help explain the difference to the tester if the difference isn't obvious.

Within 4 days of the re-checkers scoring, the tester will look at the re-checker sheet highlights and comments and finalize the file by correcting any obvious mistakes and making judgments on those items with differences. It is essential that the tester communicate with the re-checker regarding any differences that are unclear on the rechecker form.

There are certain tests that require a lot of the examiner and it is strongly suggested that you videotape each child's testing session so that you can review the tapes later if necessary. The tester may also request that the re-checker review a portion of the tape if the child has done something unique that that tester feels the re-checker should view as well. There are blanks on the re-checker form for the tester to request the re-checker to review the videotape for the following tests: PPT, FL and D-KEFS VF. The tester should note which portion of the test they are requesting the re-checker to review in that area of the re-checker form. Tape review request for other tests may be made by the tester as well in the margin near that test.

