



Frontotemporal Lobar Degeneration (FTLD) Neuropsychological Test Module

SEQUENCE OF ADMINISTRATION

Benson Complex Figure Copy Test (BCFT)
Verbal Fluency
Single Word Reading (regular, irregular)
BCFT Delayed Recall
Semantic Word-Picture Matching
Semantic Associates
Northwestern Anagram Test (10-item)
Sentence Repetition
Noun and Verb Naming



Frontotemporal Lobar Degeneration (FTLD)

Neuropsychological Test Module

1. Language Tests

Word Fluency (Phonemic)

Word Reading (Regular, Irregular)

Semantic Word-Picture Matching

Semantic Associates**

Northwestern Anagram Test (NAT-10)*

Sentence Repetition

Noun and Verb Naming**

Sentence Reading

2. Visuospatial Tests

Benson Complex Figure Copy Test (BCFT)

BCFT Delayed Recall

- Northwestern Anagram Test (NAT), Thompson, Mesulam, Weintraub
- Northwestern Naming Battery (NNB), Thompson and Weintraub

NACC Uniform Data Set (UDS) — FTLD Module

Worksheets

**FOR TESTS REPORTED ON FORM C1F:
NEUROPSYCHOLOGICAL BATTERY SUMMARY SCORES**

Version 2.0, January 2012

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This publication was funded by the National Institutes of Health through the National Institute on Aging (Cooperative Agreement U01 AG016976).

Subject ID _____ Date ____ / ____ / ____

Examiner's initials ____



Worksheet for Benson Figure Copy

[Examiner]: Please copy this design as best you can.

Hand patient a pen and present patient with page that has the modified figure at the top. Have patient make his/her copy in the lower half of the page below the figure. Make note of the order in which patient completes figure details. When design is completed, leave the figure in front of the patient for 5 seconds and say:

[Examiner]: Be sure to remember this design, because I'll ask you to draw it again later.

Allow approximately 10 – 15 minutes before administering the delayed recall portion of the test.

- | | | | | |
|--|---|----------------------------|----------------------------|----------------------------|
| | 1. Four-sided, 90° angles, width > height, any gaps or overlaps < 8mm | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| | 2. Reasonably straight lines; any gaps or overlaps < 8mm | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| | 3. Connects at middle third, no overlap with diagonals | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| | 4. Reasonably round, doesn't touch sides | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| | 5. Vertical lines > 1/2 distance to diagonals, width > height, 90° angles | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| | 6. Connects below #3, top of square above bottom | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| | 7. Vertex corresponds to middle third; any gaps or overlaps < 8mm | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| | 8. Gap b/w #7 < 5mm, angle at end of stem = 90° | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| | BONUS | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | |

Time of day design completed: ____ : ____ ☐ AM ☐ PM

Total score (circle one): 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

When test is completed, please transfer this score to section 1 of Form C1F: FTLD Neuropsychological Battery Summary Scores.

SCORING: Please see manual for scoring guidelines. Each figural element is scored as 2 points if the element is drawn accurately and placed correctly in the figure (1 point for accuracy, 1 point for placement). Score 1 point if the element is poorly drawn but placed correctly or is correctly drawn but misplaced, and 0 points if the element is neither accurately drawn nor correctly placed.

Worksheet for Verbal Fluency: Phonemic Test

Materials

Timer.

[Examiner]: I'm going to say a letter of the alphabet. When I ask you to start, tell me as many words as you can that begin with that letter. You will have one minute before I tell you to stop. None of the words can be numbers, or names of people, or places.

For example, if I gave you the letter *B*, you could say *brown*, *bottle*, or *bake*, but you couldn't say *Barbara*, *Boston*, or *billion*. Also, please try not to give me the same word with different endings. So if you said *bake*, you wouldn't also say *baked* or *bakes*. And if you said *big*, you wouldn't also say *bigger* and *biggest*.

Let's begin. Tell me all the words you can, as quickly as you can, that begin with the letter *F*. Ready? Begin.

Administration

Start timer after completing instructions. Write actual responses as legibly as possible. Stop the procedure at 60 seconds, then administer the second letter for 60 seconds in the same manner.

Prompts

1. If the participant pauses for 15 seconds:
 - **Keep going.**
 - **What other words beginning with F can you think of?**
2. If the participant gives three consecutive words that do not start with the designated letter (provide this prompt only once during this condition):
 - **We are now using the letter F.**



ADDITIONAL INSTRUCTIONS

PROMPTS:

1. If the participant pauses for 15 seconds:

Keep going.

What other words beginning with 'F' can you think of?

2. If participant gives 3 consecutive words that do not start with the designated letter (provide this prompt only once during this condition):

We are now using the letter 'F'.



SCORING CRITERIA FOR PHONEMIC FLUENCY

Record all responses, including repeated words and rule violations. When a rule violation (e.g., proper nouns, words beginning with the wrong letter) occurs on three consecutive responses, examiners should remind the participant of the correct rule. Each rule can be repeated only once per trial.

CORRECT RESPONSES

REPETITIONS

RULE VIOLATIONS

Words beginning with letters other than the designated letter. This includes words that have the same initial sound but begin with a different letter (e.g., “phone” for f-words).

- Non-words
- Proper nouns that are names of people or places
- Numbers
- Grammatical variants of a previous response

Record **F** responses:

1.	11.	21.	31.
2.	12.	22.	32.
3.	13.	23.	33.
4.	14.	24.	34.
5.	15.	25.	35.
6.	16.	26.	36.
7.	17.	27.	37.
8.	18.	28.	38.
9.	19.	29.	39.
10.	20.	30.	40.

SCORING Number of correct **F-words** generated in 1 minute (0–40) ———

 Number of **F-words** repeated in 1 minute (0–15) ———

 Number of **non-F-words** and rule violation errors in 1 minute (0–15) ———

[Examiner]: Let's try another one. This time, tell me all the words you can, as quickly as you can, that begin with the letter **L**. Ready? Begin.

Record **L** responses:

1.	11.	21.	31.
2.	12.	22.	32.
3.	13.	23.	33.
4.	14.	24.	34.
5.	15.	25.	35.
6.	16.	26.	36.
7.	17.	27.	37.
8.	18.	28.	38.
9.	19.	29.	39.
10.	20.	30.	40.

SCORING Number of correct **L-words** generated in 1 minute (0–40) ———

 Number of **L-words** repeated in 1 minute (0–15) ———

 Number of **non-L words** and rule violation errors in 1 minute (0–15) ———

 TOTAL number of correct **F-words and L-words** (0–80) ———

 TOTAL number of **F-word and L-word** repetition errors (0–30) ———

 TOTAL number of **non-F/L words** and rule violation errors (0–30) ———

When test is complete, please transfer all scores to section 2 of Form C1F: FTLD Neuropsychological Battery Summary Scores.



SINGLE WORD READING TEST

ball book road door leaf

cane deer rope speak cut

kick shave pray hang shoot

earth ghost sword tongue heir

limb aisle choir laugh sigh

gauge seize sieve knock sew

Subject ID _____ Date ____ / ____ / ____

Examiner's initials ____



Worksheet for Word Reading Test

Instructions

Give the stimulus sheet to the patient. Say, **"Please read these words out loud."**

If the patient reads the word perfectly, place a checkmark in the "correct" box. If the patient does NOT read the word perfectly, transcribe his/her response verbatim in the space below, and check the box that describes the kind of error the patient made.

Sum the columns to derive a total score for the correct responses and for each category of error.

REGULAR WORDS			INCORRECT	
Words	Participant response	CORR.	Sem. errors	Other errors
BALL				
BOOK				
ROAD				
DOOR				
LEAF				
CANE				
DEER				
ROPE				
SPEAK				
CUT				
KICK				
SHAVE				
PRAY				
HANG				
SHOOT				
Total completely accurate words (0-15)				
Total semantically related inaccurate words (0-15)				
EXAMPLES:				
• super-ordinate errors ("animal" for deer)				
• subordinate errors ("Bambi" for deer)				
• within-category errors ("goat" for deer)				
• thematically related words ("hunt" for deer)				
Total other phonologically related words or non-word errors (0-15)				



If the patient reads the word perfectly, place a checkmark in the “correct” box. If the patient does NOT read the word perfectly, transcribe his/her response verbatim in the space below, and check the box that describes the kind of error the patient made.

Scoring

Sum the columns to derive a total score for the correct responses and for each category of error.

Do not count distorted phonemes (speech sounds) as errors if a word is understood as the correct word with all of the correct phonemes in the correct order. For example, if the patient is dysarthric, the dysarthric errors are not considered errors; score them as correct.

Words with omitted, inserted, or transposed phonemes are counted as phonological related errors (whether they are words or nonwords; examples include the word bear read as “dare” or [blart]). An example of a semantically related word would be bear read as “tiger.”

IRREGULAR WORDS

			INCORRECT		
Words	Participant response	CORR.	Sem. errors	Reg. errors	Other errors
EARTH					
GHOST					
SWORD					
TONGUE					
HEIR					
LIMB					
AISLE					
CHOIR					
LAUGH					
SIGH					
GAUGE					
SEIZE					
SIEVE					
KNOCK					
SEW					
Total completely accurate words (0–15)					
Total semantically related inaccurate words (0–15)					
EXAMPLES:					
• super-ordinate errors ("animal" for deer)					
• subordinate errors ("Bambi" for deer)					
• within-category errors ("goat" for deer)					
• thematically-related words ("hunt" for deer)					
Total words that are "regularized" (0–15)					
(read using "phonics," e.g., sew read as <i>sue</i>)					
Total other phonologically related words or non-word errors (0–15)					

When test is complete, please transfer all scores to section 3 of Form C1F: FTLD Neuropsychological Battery Summary Scores.

Subject ID _____ Date ____ / ____ / ____

Examiner's initials ____



Worksheet for Benson Complex Figure Delay

The interval between copy and recall of the Benson figure should be approximately 10 – 15 minutes.

[Examiner]: Please draw for me again that figure I had you copy before.

Note order of completion.

- | | | | | |
|--|---|----------------------------|----------------------------|----------------------------|
| | 1. Four-sided, 90° angles, width > height, any gaps or overlaps < 8mm | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| | 2. Reasonably straight lines; any gaps or overlaps < 8mm | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| | 3. Connects at middle third, no overlap with diagonals | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| | 4. Reasonably round, doesn't touch sides | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| | 5. Vertical lines > 1/2 distance to diagonals, width > height, 90° angles | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| | 6. Connects below #3, top of square above bottom | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| | 7. Vertex corresponds to middle third; any gaps or overlaps < 8mm | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| | 8. Gap b/w #7 < 5mm, angle at end of stem = 90° | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| | BONUS | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | |

Time of day design completed: ____ : ____ ☐ AM ☐ PM

Total score (circle one): 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

Did subject recognize original stimulus from among four options? ☐ Yes ☐ No

When test is completed, please transfer this score to section 4 of Form C1F: FTLD Neuropsychological Battery Summary Scores.

SCORING: Please see manual for scoring guidelines. Each figural element is scored as 2 points if the element is drawn accurately and placed correctly in the figure (1 point for accuracy, 1 point for placement). Score 1 point if the element is poorly drawn but placed correctly or is correctly drawn but misplaced, and 0 points if the element is neither accurately drawn nor correctly placed.

Worksheet for Semantic Word-picture Matching Test

Description

This test evaluates spoken word recognition and assesses the frequency of semantic errors in word comprehension. The stimuli consist of five four-picture displays, each of which includes pictures of four objects that are semantically related. These five displays are each presented four times (once for each picture as the target), for a total of 20 trials. The location of the target picture is counterbalanced across all of the trials. The order of presentation of the displays is pseudo-randomized, so that no four-picture display appears in sequential trials.

Instructions for the patient:

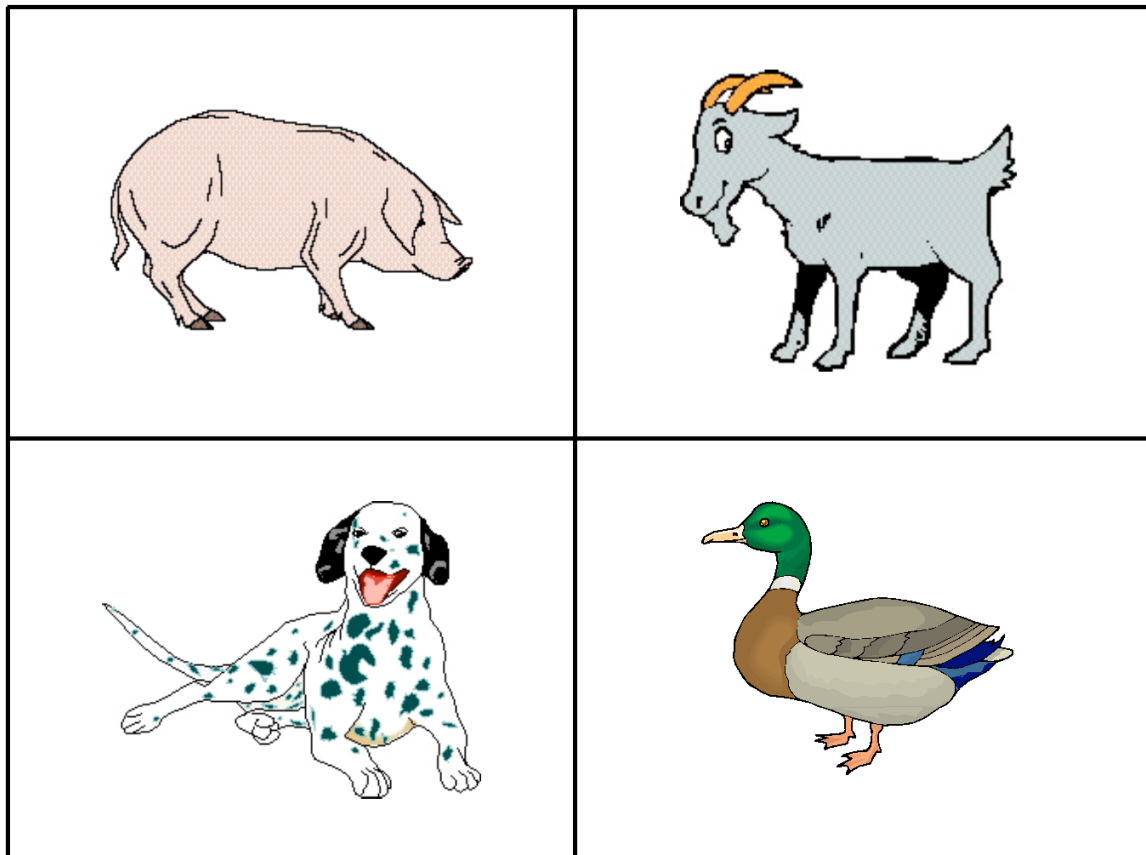
You are going to see four pictures, while you hear a word. With your finger, please point to the picture that matches the word. If you need to hear the word again, I will repeat it for you.

Administration

Use the score sheet on the next page to record which picture the subject points to throughout the experiment. Circle the number that corresponds to the location to which the patient pointed. The location of the correct answer (the matching picture) is indicated by the number that is in **bold**. If the patient would like to hear the auditory stimulus again, first ask them to answer, and record this initial response. Then, repeat the word, and make a note of their second response, if different from the initial response.

Scoring

One point is given for each correct response given on the first attempt. An "I don't know" response is considered incorrect. However, if the subject was distracted or unable to hear the first stimulus presentation (e.g., the subject was coughing, experienced a hearing-aid malfunction, etc.), then one point should be given if the correct response is made after the second presentation of the word.



[Examiner] “You are going to see four pictures, while¹ you hear a word. With your finger, please point to the picture that matches the word. If you need to hear the word again, I will repeat it for you.”



One point is given for each correct response given on the first attempt. An “I don’t know” response is considered incorrect. However, if the subject was distracted or unable to hear the first stimulus presentation (e.g., the subject was coughing, experienced a hearing-aid malfunction, etc.), then 1 point should be given if the correct response is made after the second presentation of the word.

PRACTICE

	Auditory stimulus	Subject's response	
1	Ghost	1	2
		3	4
2	Grapes	1	2
		3	4
3	Vase	1	2
		3	4

	Auditory stimulus	Subject's response			Auditory stimulus	Subject's response		
1	Dog	1	2		11	Boat	1	2
		3	4				3	4
2	Web	1	2		12	Hand	1	2
		3	4				3	4
3	Tie	1	2		13	Bug	1	2
		3	4				3	4
4	Plane	1	2		14	Hat	1	2
		3	4				3	4
5	Goat	1	2		15	Van	1	2
		3	4				3	4
6	Coat	1	2		16	Arm	1	2
		3	4				3	4
7	Worm	1	2		17	Rat	1	2
		3	4				3	4
8	Ear	1	2		18	Duck	1	2
		3	4				3	4
9	Shoe	1	2		19	Car	1	2
		3	4				3	4
10	Pig	1	2		20	Toe	1	2
		3	4				3	4

When test is completed, please transfer this score to section 5 of Form C1F: FTLD Neuropsychological Battery Summary Scores.

Total correct (0 – 20):

— —

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Worksheet for Semantic Associates Test

Northwestern Naming Battery 2010 — Semantic Associates Subtest

Cynthia Thompson, PhD and Sandra Weintraub, PhD

Experimental version. Not for copying or distribution without permission

Instructions: There are three practice items. The examiner says: "You will see two pairs of pictures. The objects in one pair have a relationship to each other — that is, they go together. The objects in the other pair do not go together. Pick the pair that goes together. You don't have to say your choice or why you have picked it. You just need to point to your choice. Let's start with these practice trials."

Present the first practice item, which demonstrates a functional relationship. Point to the left picture pair and say: "This pair shows a sweater and a blanket." Then point to the other picture pair and say: "This pair shows a sweater and a pillow. Which pair goes together?"

- If the patient points to the correct answer (sweater/blanket), say: "Yes, the sweater and blanket go together because both are used to keep us warm."
- If the patient picks the wrong pair, say: "A sweater and pillow don't go together because they are not used for the same purpose." Point to the correct pair and say: "The sweater and blanket go together because they can both be used to keep you warm."

Turn to the next practice item, which demonstrates an association that is contextual, and say: "Let's look at another example." Point to the picture pair on the left and say: "This pair shows a sweater and a chest." Point to the picture pair on the right and say: "This pair shows a sweater and a work bench. Which pair goes together?"

- If the patient points to the correct answer (sweater/chest), say: "Yes, the sweater and chest go together because a sweater is usually kept in a chest of drawers but not on a work bench."
- If the patient points to the incorrect pair, say: "No, a sweater and work bench do not go together." Point to the correct pair and say: "The sweater and the chest go together because a sweater is usually kept in a chest of drawers and not on a work bench."

Turn to the third practice example. Point to the picture pair on the left and say: "This pair shows a sweater and a magnet." Then point to the picture pair on the right and say: "This pair shows a sweater and a dress. Which pair goes together?"

- If the patient points to the correct answer, say: "Yes, a sweater and a dress go together because they are both articles of clothing, things you wear."
- If the patient points to the incorrect pair, say: "No, the sweater and magnet do not go together." Point to the correct pair and say: "The sweater and the dress go together because they are both articles of clothing, things you wear." Standard American English dialect is used, with accommodations for the patient's regional variations.

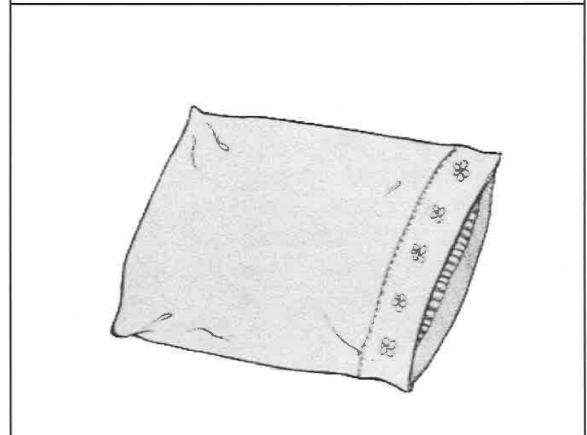
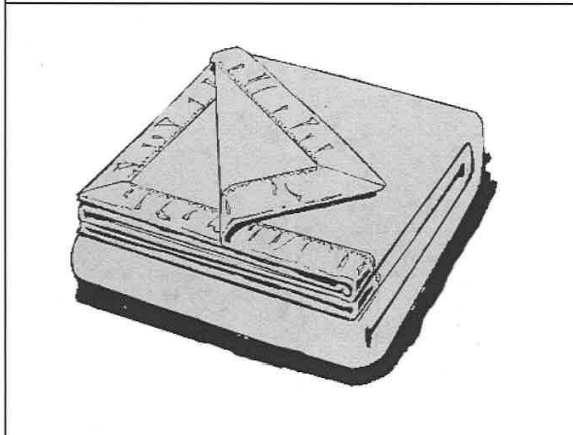
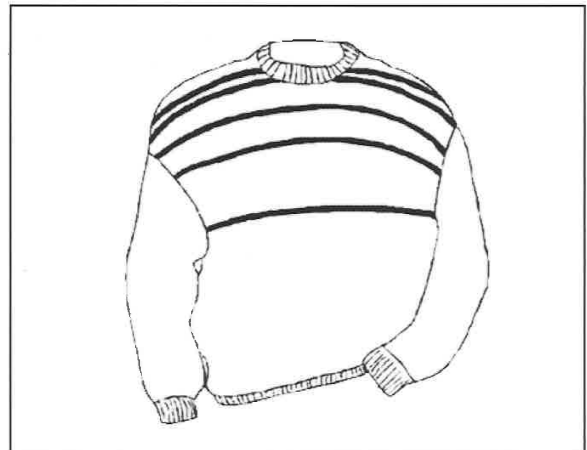
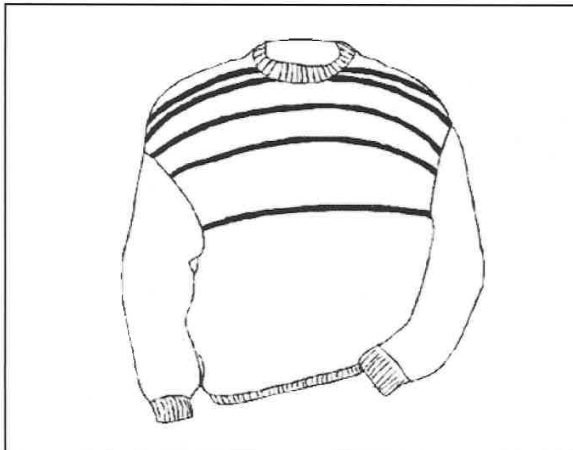
Scoring: There is a single score sheet for this subtest (see next page). One point is given for each correct item. Tally the number correct for each category (Animals and Tools), and calculate the total correct. Transfer scores to Form C1F, FTLD Neuropsychological Battery Summary Scores. Total possible points for this subtest = 16.

			CATEGORY	
	Target	Distracter	Animals	Tools
Example 1	sweater • blanket	sweater • pillow		
Example 2	sweater • chest	sweater • workbench		
Example 3	sweater • dress	sweater • magnet		
1	camel • saddlebag	camel • garbage can		
2	lion • meat	lion • corn		
3	mouse • cheese	mouse • drumstick		
4	hammer • mallet	hammer • ladle		
5	squirrel • nuts	squirrel • eggs		
6	camel • pyramid	camel • Eiffel Tower		
7	scissors • paper	scissors • log		
8	lion • circus tent	lion • dog house		
9	paintbrush • paint can	paintbrush • pitcher		
10	mouse • garbage can	mouse • igloo		
11	saw • log	saw • bread		
12	squirrel • tree	squirrel • balloon		
13	scissors • desk	scissors • safe		
14	paintbrush • house	paintbrush • car		
15	saw • workbench	saw • desk		
16	hammer • ladder	hammer • pillow		
			Total correct animal associations (0-8):	Total correct tool associations (0-8):
			Sum of all correct associations (0-16):	

When test is complete, please transfer these scores to section 6 of Form C1F: FTLD Neuropsychological Battery Summary Scores.

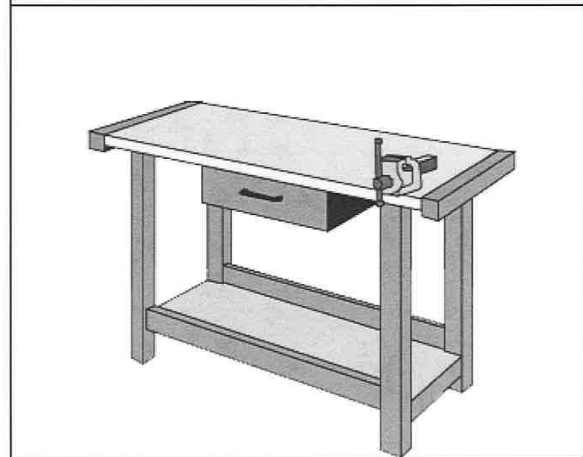
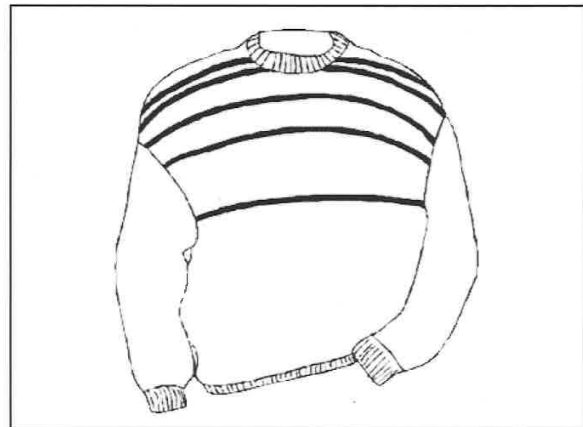
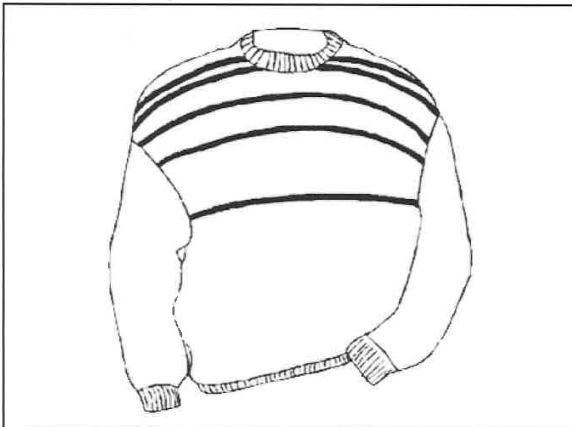


SEMANTIC ASSOCIATES TEST FUNCTIONAL RELATIONSHIP



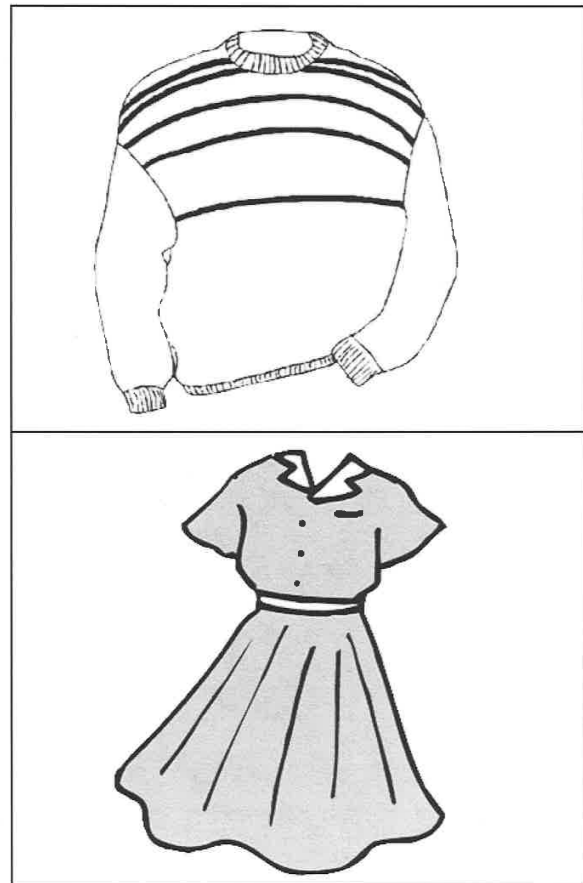
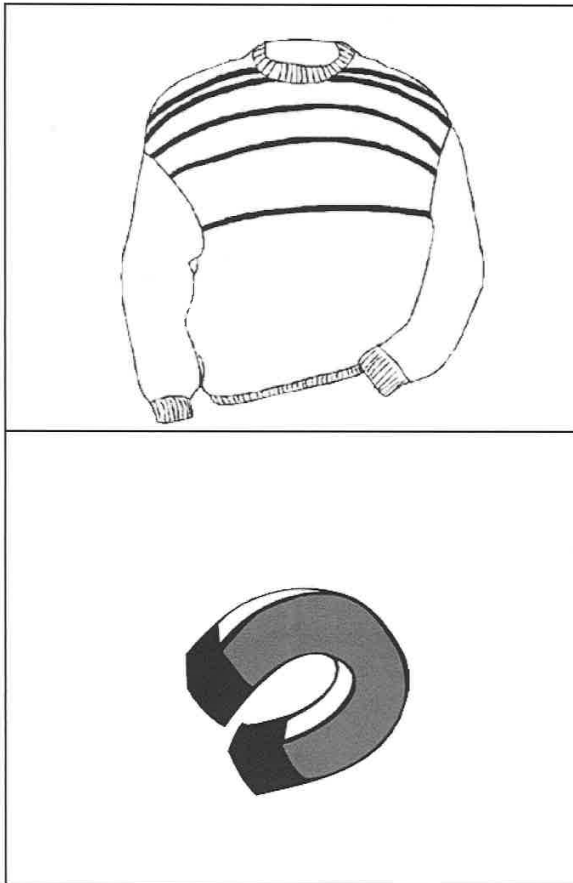


SEMANTIC ASSOCIATES TEST CONTEXTUAL RELATIONSHIP






SEMANTIC ASSOCIATES TEST SAME CATEGORY RELATIONSHIP






NORTHWESTERN ANAGRAM TEST WORD CARDS



P1	who	is	carrying	the	bride
1	who	is	chasing	the	cat
2	who	is	the	dog	watching
3	who	is	saving	the	woman
4	who	is	the	boy	pulling
5	who	is	pulling	the	girl
6	who	is	the	man	saving
7	who	is	the	dog	chasing
8	who	is	watching	the	cat
9	who	is	the	woman	kissing
10	who	is	kissing	the	man





NORTHWESTERN ANAGRAM TEST SCORE FORM

SWh = subject who-question OWh = object who-question

	Target sentence	Transcribe word string order (errors only)	S Wh	O Wh
P 1	Who is carrying the bride?			
1	Who is chasing the cat?			
2	Who is the dog watching?			
3	Who is saving the woman?			
4	Who is the boy pulling?			
5	Who is pulling the girl?			
6	Who is the man saving?			
7	Who is the dog chasing?			
8	Who is watching the cat?			
9	Who is the woman kissing?			
10	Who is kissing the man?			
SUMMARY ALL QUESTIONS:			/5	/5

SUMMARY SCORES

Sentence type	Total # correct	Total % correct
Subject Wh-Questions	/5	%
Object Wh-Questions	/5	%
Total correct	/10	%

When test is complete, please transfer these scores to section 7 of Form C1F: FTLN Neuropsychological Battery Summary Scores



NORTHWESTERN ANAGRAM TEST

Give one point for each correct item. The only acceptable answers are indicated on the response form, and there is only one point per item. Partial credit is not given for any pairs of words in the correct sequence. Total the number of correct responses to WH-Object and WH-SUBJ questions and then add those two numbers for the total NAT score.

Worksheet for Sentence Repetition Test

Instructions

This test should always be given BEFORE the Sentence Reading Task, and the two tasks ideally should be separated by other tests in the battery, not given in direct succession.

Say, "I'm going to read some sentences to you. Please repeat this back to me, exactly the way I say it."

Read each sentence out loud to the patient. One repetition of the sentence is allowed in cases where the patient did not hear the sentence, but only if the patient explicitly requests it.

If the patient does not repeat the sentence perfectly, transcribe his/her response verbatim in the space below. Score each response to the right.

	Correct	# omitted words	# semantic errors	# phonol/ other errors
1. The cat ate the caterpillar.				
2. Justin is taller than Henry.				
3. A teacher bought three pairs of gloves.				
4. We walked to the lake and then to the store.				
5. The rabbit was given to the child by a fireman.				
Total number of completely accurate sentences (0–5)				
Total number of words omitted from sentence (0–37)				
Total number of semantically related or unrelated incorrect real words (0–20)				
Total number of phonologically related words or nonword errors (0–20)				

When test is complete, please transfer these scores to section 8 of Form C1F: FTLD Neuropsychological Battery Summary Scores.



[Examiner} “I’m going to read some sentences to you. Please repeat this back to me, exactly the way I say it.”

The cat ate the caterpillar.

Justin is taller than Henry.

A teacher bought three pairs of gloves.

We walked to the lake and then to the store.

The rabbit was given to the child by a fireman.

Give 1 point for each sentence read completely correctly. Do not count distorted phonemes (speech sounds) as errors if a word is understood as the correct word with all of the correct phonemes in the correct order. Sentences that contain one or more words with omitted, inserted, or transposed phonemes are errors. Do not count distorted phonemes (speech sounds) as errors if a word is understood as the correct word with all of the correct phonemes in the correct order. Count the number of omitted words, semantically related words, and phonologically related words. Words with omitted, inserted, or transposed phonemes are counted as phonological related errors (whether they are words or nonwords; examples include the word bear repeated as “dare” or [blart]). An example of a semantically related word would be bear repeated as “tiger.”

Subject ID _____ Date ____ / ____ / ____

Examiner's initials ____



Instructions for noun and verb naming subtests

From the Northwestern Naming Battery (Cynthia K. Thompson, PhD and Sandra Weintraub, PhD, experimental edition — 2011); do not copy or distribute without authors' permission. Form created for the NACC FTLD module to the UDS.

Items are presented one at a time for the patient to name. Allow 10 seconds for each item to be named. Before beginning this subtest, say, **"I am going to show you some pictures. Some of them will be objects or things, and others will show people doing various actions. I want you to name each picture as quickly and accurately as you can."**

Show practice example (p1, shoe), followed by action example (p2, laugh [CK1]). **"For example, this picture shows a shoe, so you would say 'shoe'. This picture shows a man laughing. So you would say 'laugh' or 'laughing'."** Any verb form (morphological inflection) is accepted as correct (e.g., for *laugh*, correct responses are *laughs*, *laughed*, and *laughing*). If the patient tends to confuse objects and actions (e.g., *spoon* for *stirring*), provide a reminder to name the action and not the object (e.g., say **"Yes, but tell me what is happening."**). If the patient again names the object, it is counted as an error.

Errors can be categorized, but for purposes of the FTLD module, only accuracy will be noted. Failures are not prompted by either semantic or phonemic cues.



Subject ID _____ Date ____ / ____ / ____

Examiner's Initials _____



Worksheet for Noun and Verb Naming Subtests

Nouns for confrontation naming				
	Frequency per million	Category	Response	Correct/Incorrect
CAT	1.8	Animal		
SUIT	1.7	Clothing		
TIE	1.5	Clothing		
APPLE	1.5	Fruit / vegetable		
BELT	1.4	Clothing		
ELEPHANT	1.4	Animal		
CORN	1.4	Fruit / vegetable		
SNAKE	1.4	Animal		
GLOVE	1.3	Clothing		
MOUSE / RAT	1.3	Animal		
SOCK	1.3	Clothing		
ONION	1.2	Fruit / vegetable		
HAMMER	1.0	Tool		
PEPPER	1.0	Fruit / vegetable		
BROOM	0.8	Tool		
SCISSORS	0.6	Tool		
MEAN	1.3			

TOTAL

Verbs for confrontation naming			
	Frequency per million	Response	Correct/Incorrect
WRITE***	2.7		
READ***	2.6		
PULL**	2.3		
THROW***	2.2		
CRY*	2.1		
CLIMB**	2.0		
POUR***	1.9		
JUMP*	1.8		
SWEEP***	1.7		
SWIM*	1.7		
STIR / MIX**	1.6		
CRAWL*	1.4		
SPILL**	1.3		
BARK*	1.0		
PRAY*	0.3		
ZIP**	0.3		
MEAN	1.7		

TOTAL

Note: *=1-argument verb, **=2-argument verb, ***=3-argument verb

SCORING

Total nouns correct = _____ /16

Total verbs correct = _____ /16

Noun-to-verb ratio:

total nouns correct / total verbs correct = _____ If either the noun or verb score is zero, the noun-to-verb ratio cannot be calculated. In this case, please enter 88.88.

When test is complete, please transfer these scores to section 9 of
Form C1F: FTLN Neuropsychological Battery Summary Scores.

One point is given for each item named exactly, within 10 seconds. Any other response is an error. Errors can consist of phonemic paraphasias, semantic paraphasias, circumlocution, neologism. Minor phonemic distortions due to dysarthria are not considered errors, e.g., “zhou” for “shoe”.

Calculate the total number of nouns and verbs correctly named and add these numbers together for the total naming score. A ratio of noun-to-verb naming can also be calculated if desired by dividing correct nouns by correct verbs. Scores less than 1 indicate less nouns than verbs while scores greater than 1 indicate more nouns than verbs. If either the noun or verb score is 0, a ratio cannot be calculated.



[Examiner] “I am going to show you some pictures. Some of them will be objects or things, and others will show people doing various actions. I want you to name each picture as quickly and accurately as you can.”

“For example, this picture shows a shoe, so you would say ‘shoe’.”

1d



This picture shows a man laughing. So you would say 'laugh' or 'laughing'."



Worksheet for Sentence Reading Test

Instructions

This test should always be given AFTER the Sentence Repetition Task, and the two tasks ideally should be separated by other tests in the battery, not given in direct succession.

Give the stimulus sheet to the patient. Say, **"Please read these sentences out loud."**

If the patient does not read the sentence perfectly, transcribe his/her response verbatim in the space below. Score the response to the right.

	Correct	# omitted words	# semantic errors	# phonol/ other errors
1. The cat ate the caterpillar.				
2. Justin is taller than Henry.				
3. A teacher bought three pairs of gloves.				
4. We walked to the lake and then to the store.				
5. The rabbit was given to the child by a fireman.				
Total number of completely accurate sentences (0–5)				
Total number of words omitted from sentence (0–37)				
Total number of semantically related or unrelated incorrect real words (0–20)				
Total number of phonologically related words or nonword errors (0–20)				

When test is complete, please transfer these scores to section 10 of Form C1F: FTLN Neuropsychological Battery Summary Scores.

The cat ate the caterpillar.

Justin is taller than Henry.

A teacher bought three pairs of gloves.

We walked to the lake and then to the store.

The rabbit was given to the child by a fireman.

FOLLOW-UP VISIT PACKET NACC UNIFORM DATA SET (UDS) — FTL D MODULE

Form C1F: Neuropsychological Battery Summary Scores

Center: _____ Subject ID: _____ Form Date: ____/____/____

NOTE: This form is to be completed by ADC or clinic staff. For test administration and scoring, see FTL D Module Coding Guidebook for Initial Visit Packet, Form C1F. Time to completion of C1F and C2F tests should be reported at the end of form C3F.

Visit #: _____

Examiner's initials: _____

KEY: If the subject cannot complete any of the following exams, please give the reason by entering one of the following codes in the first data element and skip the rest of the data elements for that test:

95 = Physical problem 96 = Cognitive/behavior problem 97 = Other problem 98 = Verbal refusal

1. Benson Complex Figure Copy

1a. Total score for copy of Benson figure (0–17) _____

2. Verbal Fluency: Phonemic Test

2a. Number of correct **F-words** generated in 1 minute (0–40) _____

2b. Number of **F-words** repeated in 1 minute (0–15) _____

2c. Number of **non-F-words** and rule violation errors in 1 minute (0–15) _____

2d. Number of correct **L-words** generated in 1 minute (0–40) _____

2e. Number of **L-words** repeated in one minute (0–15) _____

2f. Number of **non-L-words** and rule violation errors in 1 minute (0–15) _____

2g. TOTAL number of correct **F-words and L-words** (0–80) _____

2h. TOTAL number of **F-word and L-word** repetition errors (0–30) _____

2i. TOTAL number of **non-F/L words** and rule violation errors (0–30) _____

Visit #: _____

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Center: _____ Subject ID: _____ Form Date: ____/____/____

Visit #: _____

KEY: 95 = Physical problem 96 = Cognitive/behavior problem 97 = Other problem 98 = Verbal refusal

8. Sentence Repetition Test

- 8a. Number of completely accurate sentences (0–5) _____
- 8b. Total number of words omitted from sentences (0–37) _____
- 8c. Total number of semantically related or unrelated incorrect real words (0–20) _____
- 8d. Total number of phonologically related words or nonword errors (0–20) _____

9. Noun and Verb Naming Subtests

- 9a. Total nouns correct (0–16) _____
- 9b. Total verbs correct (0–16) _____
- 9c. Noun-to-verb ratio (total nouns correct / total verbs correct) _____

10. Sentence Reading Test

- 10a. Number of completely accurate sentences (0–5) _____
- 10b. Total number of words omitted from sentence (0–37) _____
- 10c. Total number of semantically related or unrelated incorrect real words (0–20) _____
- 10d. Total number of phonologically related words or nonword errors (0–20) _____



Frontotemporal Lobar Degeneration (FTLD) Neuropsychological Test Module

PLEASE MAKE NOTES AS YOU ARE TESTING
AND LET US KNOW IF YOU RUN ACROSS
ANY PROBLEMS WITH INSTRUCTIONS OR
SCORING.

FOR ALL LANGUAGE TESTS YOU CAN CONTACT
SANDY WEINTRAUB

FOR BCFT CONTACT JOEL KRAMER

FOR ALL BEHAVIORAL QUESTIONNAIRES
CONTACT KATE RANKIN