NACC UNIFORM DATA SET **FTLD MODULE**

Worksheets

For tests reported on Form C1F

Version 3.0, March 2015

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NACC
National Alzheimer's Coordinating Center

Subject ID _____ Date __ __ / __ __ / __ __ __ __

Examiner's initials __ __ __

Worksheet for Word Reading Test — Regular and Irregular Words

Instructions

For each word, there is a time limit of 10 seconds. No cues or prompting are to be provided. If the word is not read in 10 seconds, then move on to the next item. Give the stimulus sheet to the subject.

[Examiner]: "Please read these words out loud."

If the subject reads the word perfectly, place a checkmark in the "correct" box. If the subject does NOT read the word perfectly, transcribe his or her response verbatim in the space below, and check the box that describes the kind of error the subject made. If you are unsure of the type of error, you should check the response with a member of your research team who has experience with aphasia. Examples of error types are presented in the following tables.

Sometimes the subject may generate a string of erroneous attempts. Only count the first word produced to code the error type for entry into NACC. If the subject initially says a word wrong and then immediately self-corrects, count the self-correction as correct.

If the subject does not respond, encourage them to do their best, or to take a guess. If they still don't respond, count the item as wrong.

	EXAMPLES: TYPES OF LANGUAGE ERRORS ON REGULAR WORDS			
		Semantic errors**		
	Phonemic errors*	Direct semantic errors	Related items	Dysarthric errors***
BALL	boss, bahk, bull	toy, throw		baw
BOOK	took, buht, back	paper, read	story	
ROAD	roll, rode, raid	street, drive	car	wllode
DOOR	doe, dure, dare	gate, open	lock	
LEAF	leap, keef, loaf	grass, grow	fall	wheeff
CANE	cake, tane, cone	crutch, walk		
DEER	deep, steer, theer	horse, santa	antlers	
ROPE	rote, roke, ripe	string, climb		
SPEAK	speech, speam, spike	talk, mouth		zhpeak
CUT	cup, shut, cat	slice, knife		ncut
KICK	kit, kuck, kip	boot, football		
SHAVE	shove, save, shape	scrape, razor, soap		zhave
PRAY	cray, prow	bless, church		
HANG	hat, bang	swing, clothes		
SHOOT	soup, shoe	kill, gun		zjoot

*__Phonemic errors__ are defined as errors in the sounds within a word. These sound omissions or substitutions can result in the production of another real word (e.g., "boss" for "ball") or a non-word "bauhk"

for “ball,” but in both instances the word sounds similar to the target word. Phonemic errors should be written out as they sound to the examiner.

****Semantic errors** are words that are related to the target item in meaning. Direct semantic errors are substitutions for the target (e.g., “gate” for “door,” “slice” for “cut”); other types of semantic errors are words that are related to the target but not a substitute for it (e.g., “kneel” or “church” for “pray;” “open” or “knob” for “door”).

*****Dysarthria** is a motor disorder, not a language disorder. If you have had a novocaine injection and could not normally move your tongue or mouth, you can imagine what it is like to be dysarthric: you can produce a normal word, but the sounds are distorted. You can also imagine trying to talk with your mouth full or when you have a cold and your nose is stuffed. It is difficult to provide samples of all possible types of dysarthric errors, but this column shows a few. For blank boxes, the examiner will need to transcribe the production or record it for an expert to decide.

	EXAMPLES: TYPES OF LANGUAGE ERRORS ON IRREGULAR WORDS	
	Semantic error*	**Regularizing error****
SEW	needle, thread	sue
EARTH	globe, world, global	eerth
GHOST	phantom, casper	guh-host, jost
SWORD	stab, knife	sooward, ess-word
TONGUE	mouth, swallow	ton-gew
HEIR	will	here, hire
LIMB	foot, arm	lim-buh
AISLE	walk, bride	ay-zle
CHOIR	church, hymn	ch-ore, cho-ear
LAUGH	joke, funny	log
SIGH	worry	sig
GAUGE	meter, measure	gog
SEIZE	grab, arrest	size, see-zee
SIEVE	funnel, strainer	seeve, seevie
KNOCK	door	kuh-nock

***Semantic error**: Produces a word that is a substitute for or related to the target word in meaning.

****Regularizing error**: Tries to pronounce the sounds of the word as they are written — that is, phonetically.

REGULAR WORDS

Words	Participant response	CORRECT	INCORRECT: Semantic errors	INCORRECT: 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)				

IRREGULAR WORDS

Words	Participant response	CORRECT	INCORRECT: Semantic errors	INCORRECT: Regularizing errors	INCORRECT: 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 *sue*)					
Total other phonologically related words or non-word errors (0–15)					

When test is complete, please transfer all scores to section 1 of Form C1F: FTLD Neuropsychological Battery Summary Scores.

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 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 subject:

> **[Examiner]: "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

Ensure that all pictures presented to the subject are in color. 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 subject pointed. The location of the correct answer (the matching picture) is indicated by the number that is in **bold**. If the subject 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. For each word-picture item, there is a time limit of 10 seconds. No cues or prompting are to be provided. If the answer is not given within 10 seconds, then move on to the next item.

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.

PRACTICE

	Auditory stimulus	Subject's response	
1	ghost	1	**2**
		3	4
2	grapes	**1**	2
		3	4
3	vase	**1**	2
		3	4

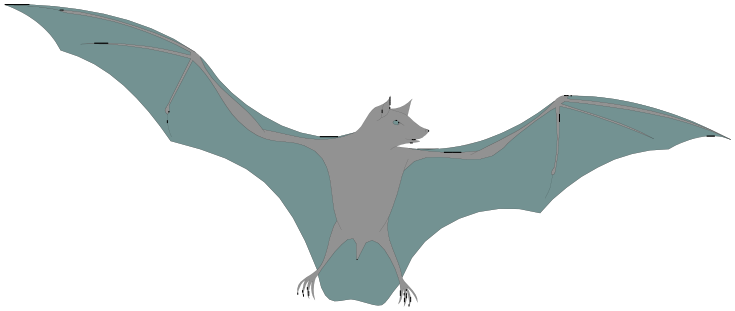
	Auditory stimulus	Subject's response	
1	dog	1	2
		3	4
2	web	1	**2**
		3	4
3	tie	1	2
		3	**4**
4	plane	**1**	2
		3	4
5	goat	**1**	2
		3	4
6	coat	1	**2**
		3	4
7	worm	1	2
		3	**4**
8	ear	1	2
		3	4
9	shoe	1	**2**
		3	4
10	pig	**1**	2
		3	4

	Auditory stimulus	Subject's response	
11	boat	1	2
		3	**4**
12	hand	1	2
		3	4
13	bug	1	2
		3	4
14	hat	1	**2**
		3	4
15	van	**1**	2
		3	4
16	arm	1	2
		3	4
17	rat	1	**2**
		3	4
18	duck	1	2
		3	**4**
19	car	1	2
		3	**4**
20	toe	**1**	2
		3	4

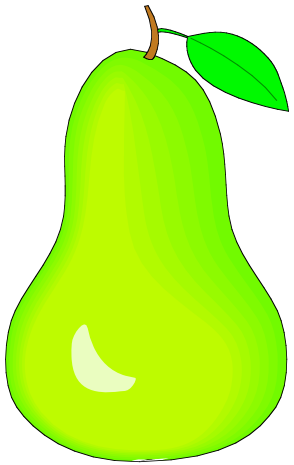
When test is completed, please transfer this score to section 2 of Form C1F: FTLD Neuropsychological Battery Summary Scores.

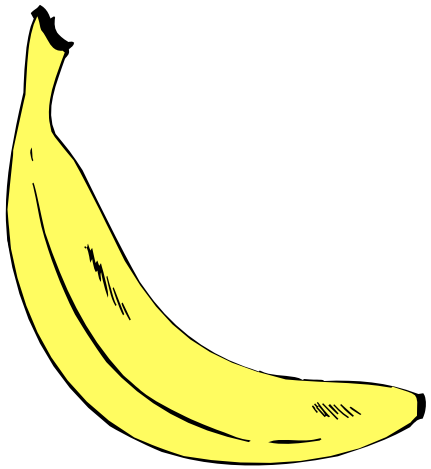
Total correct (0 – 20): ____ ____

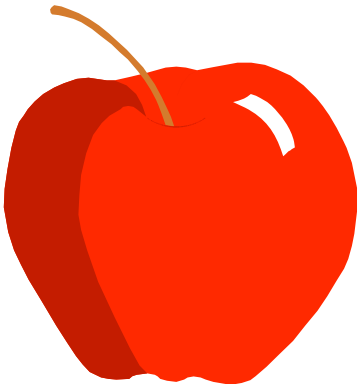
Practice



1P







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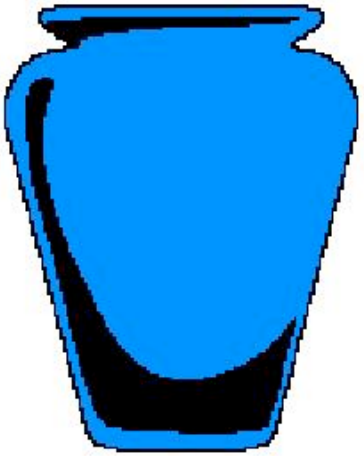
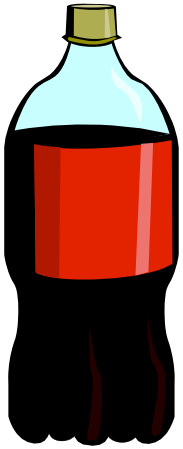
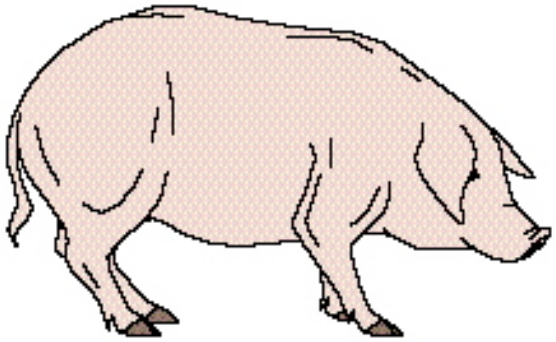
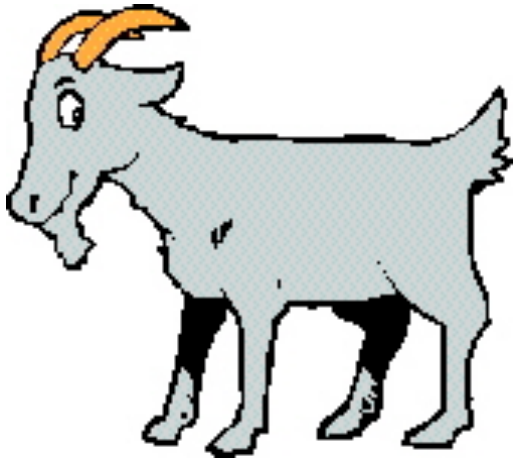
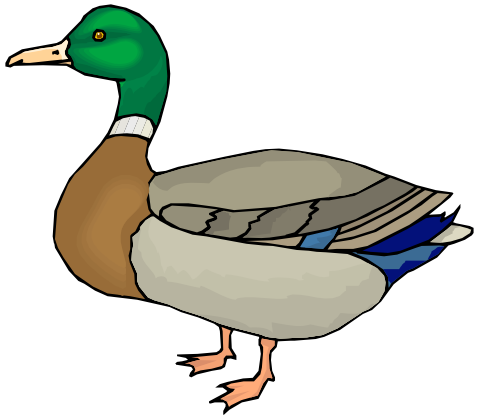


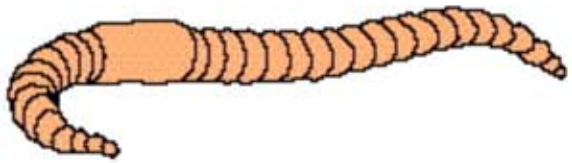


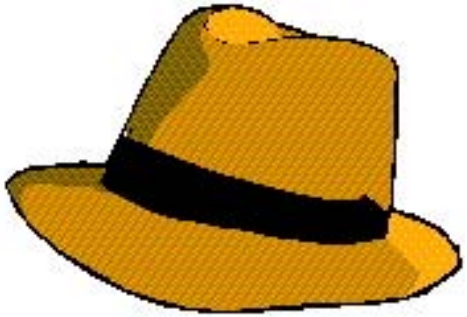
Ready?

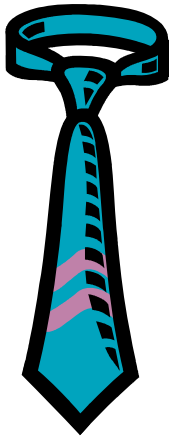


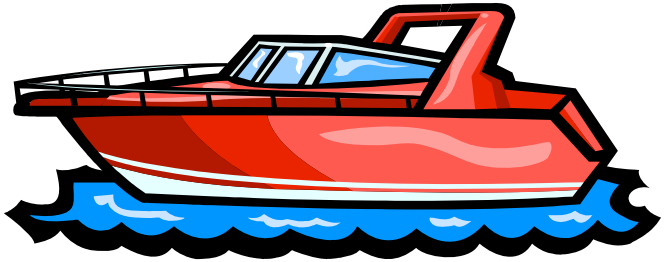


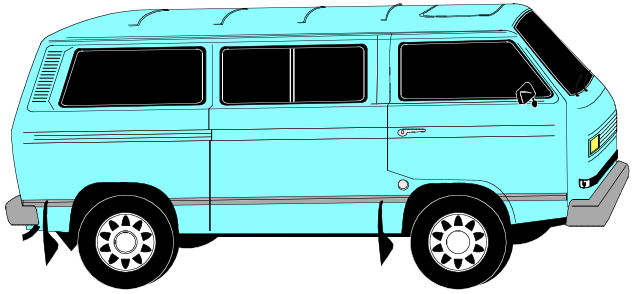


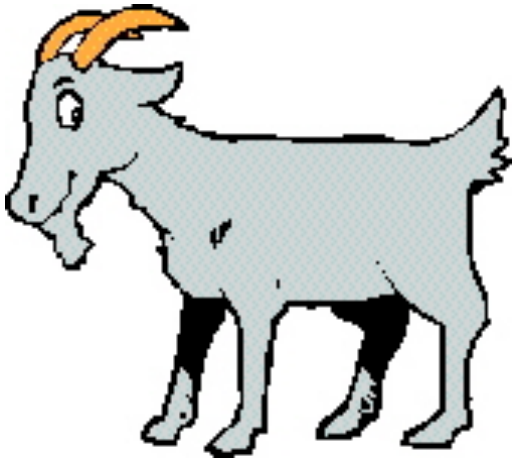


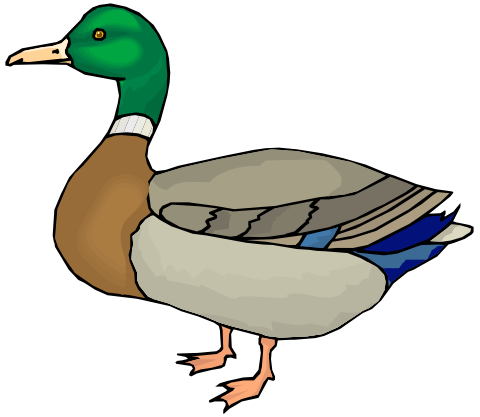


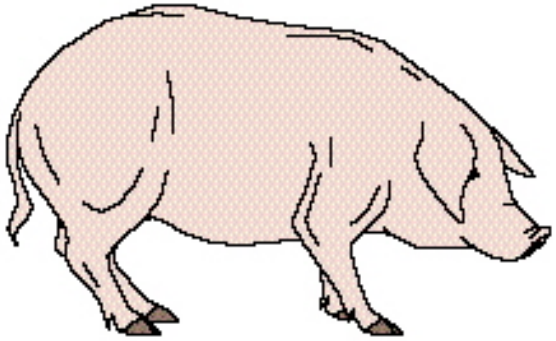


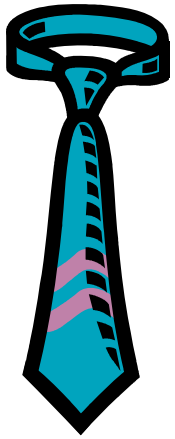


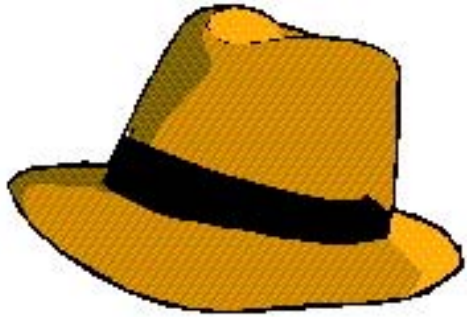


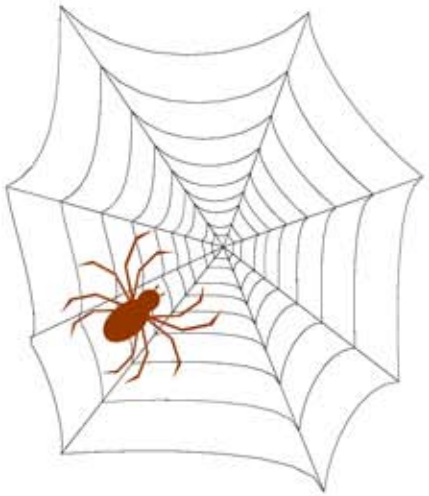


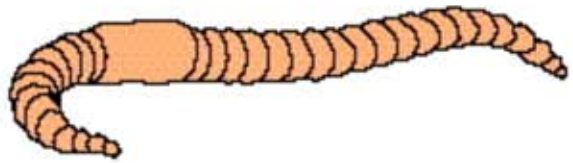


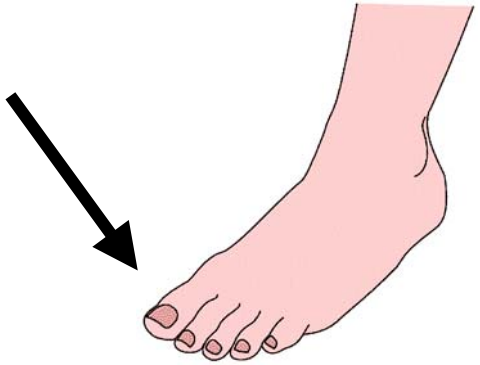


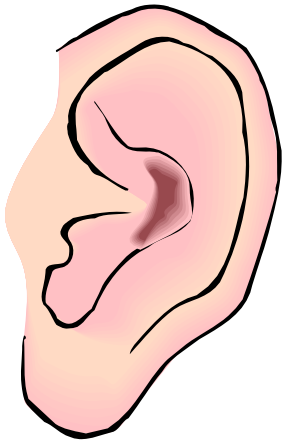


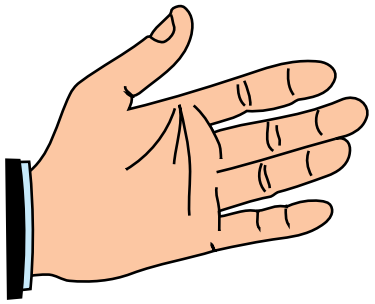


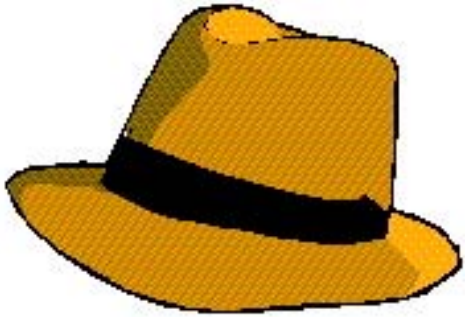


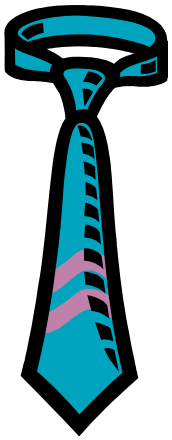


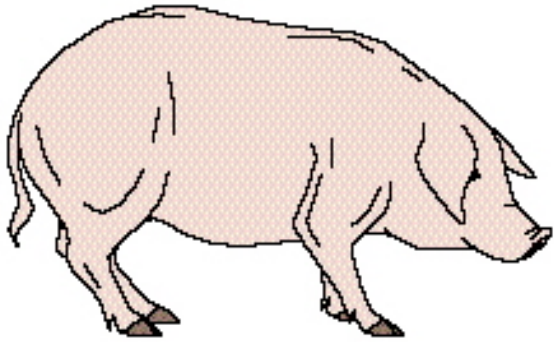


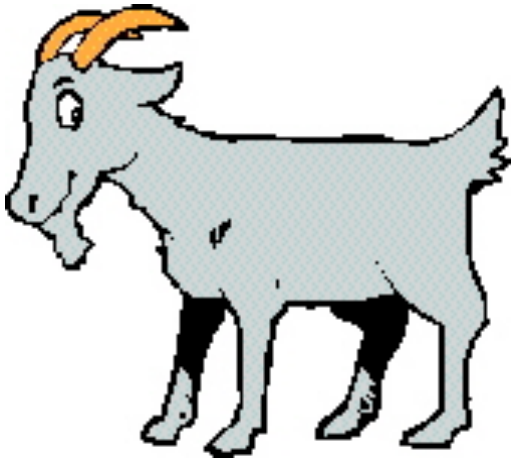


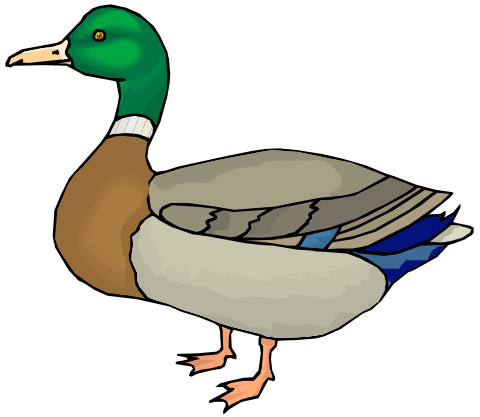


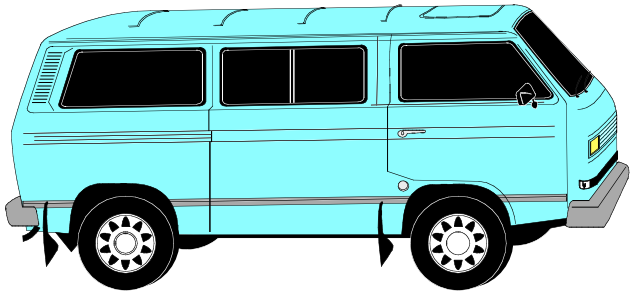


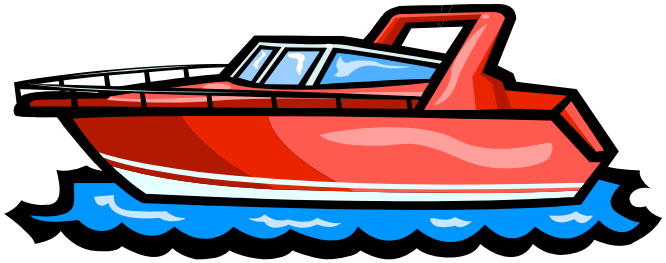


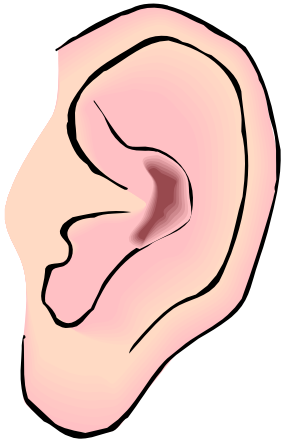


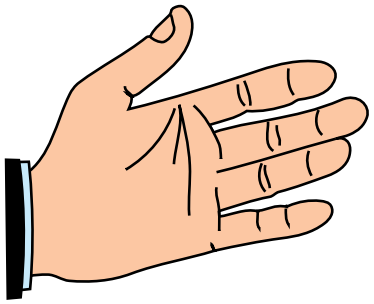


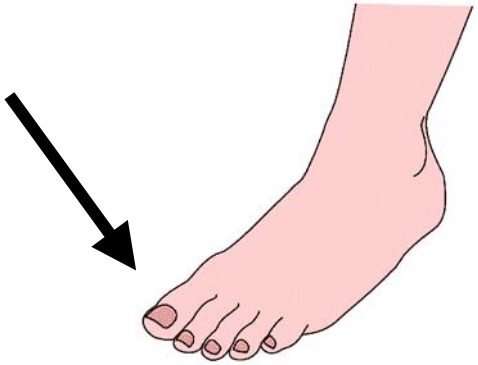


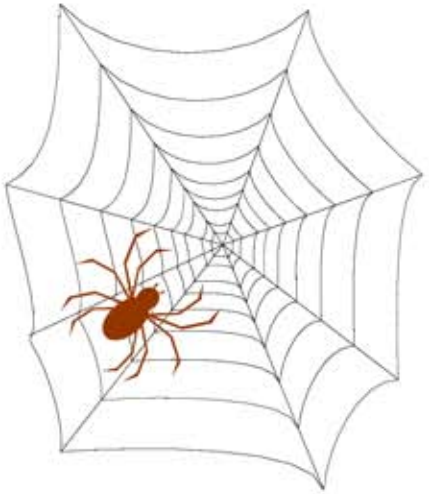


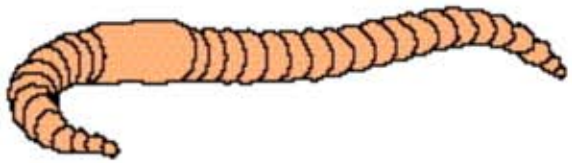


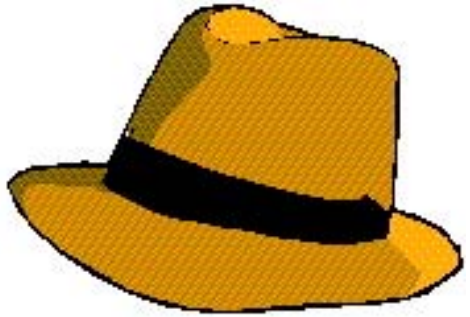


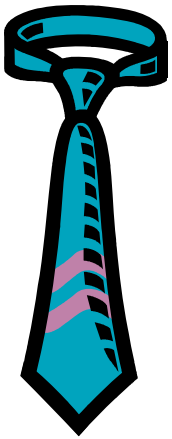


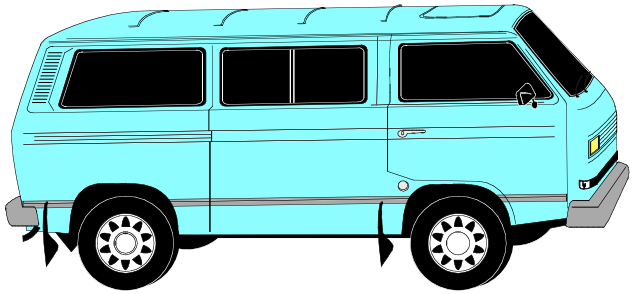


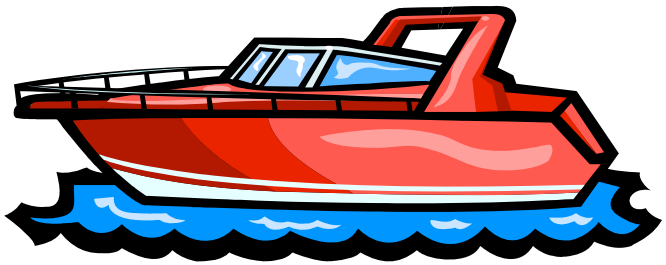


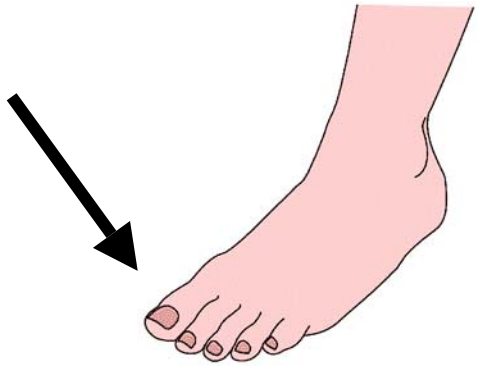


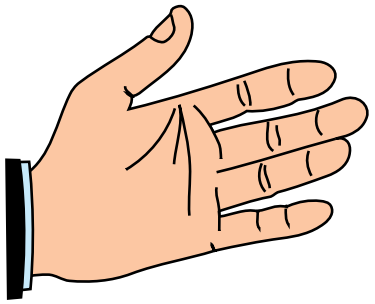


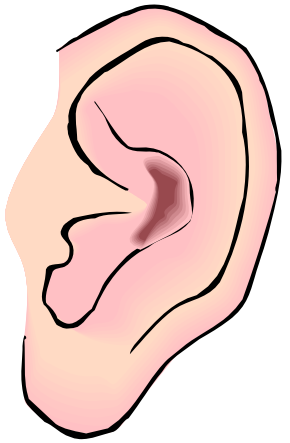


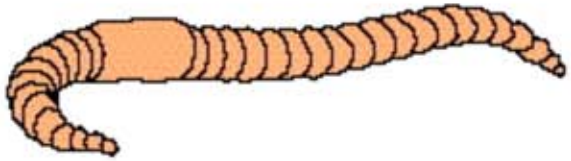


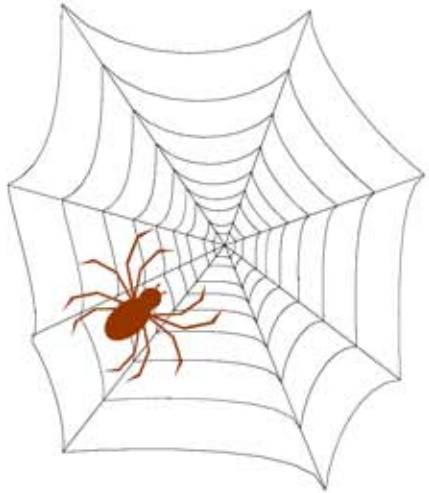


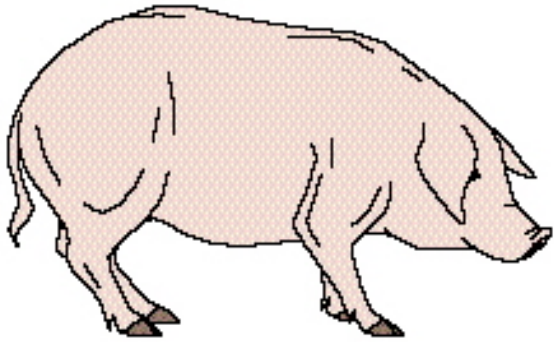


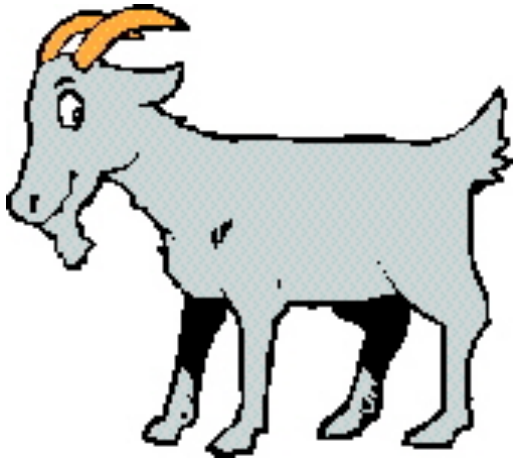


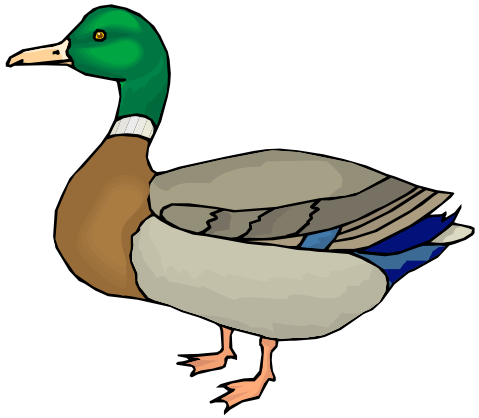


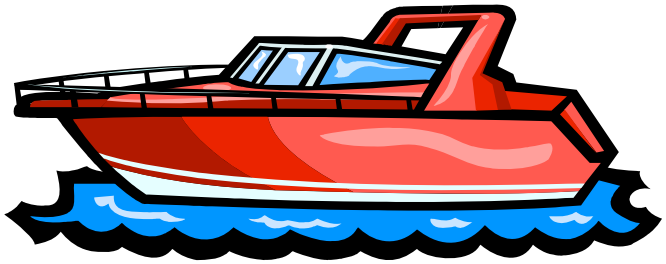


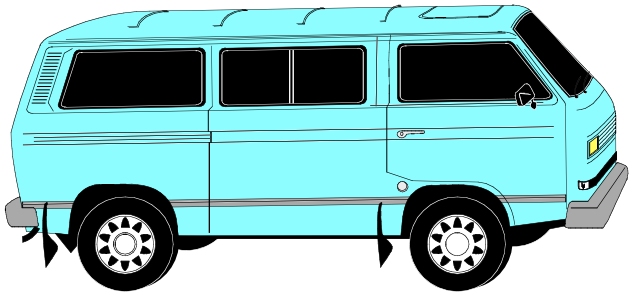


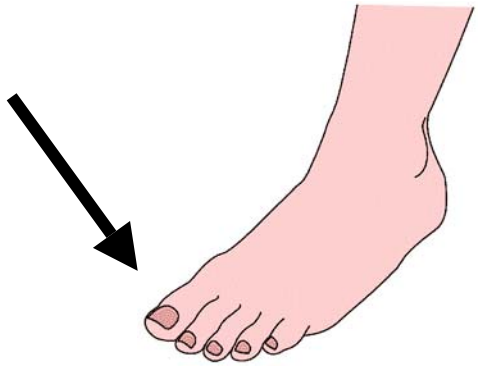


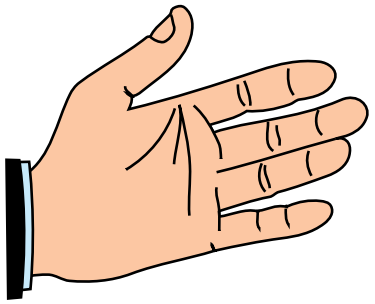


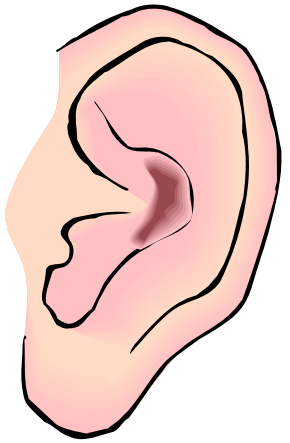












Subject ID _____ Date __ __ / __ __ / __ __ __ __

Examiner's initials __ __ __

Worksheet for Semantic Associates Test

Instructions: There are three practice items. For the practice items, please follow the directions exactly as given below. Plan to continue to administer the actual test even if a subject picks the wrong pair for each of the practice items. When you are finished with the practice items and begin the actual test, do not name the items that are shown in the pictures, as done during the practice items. Instead, during the actual test, simply show the two pairs of pictures and have the subject point to the pair that "goes together."

During the actual test, if a subject picks the wrong pair, do not correct the subject. Instead, count this as an error and move on to the next item. During the actual test, if a subject says they cannot respond or that they "don't know," and this is not a more general approach the subject has taken to the testing, then the examiner can ask the subject to guess. If the subject does not want to guess, then count the item as incorrect.

PRESENTING THE 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 items."

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 subject 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 subject 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 subject 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 subject 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."

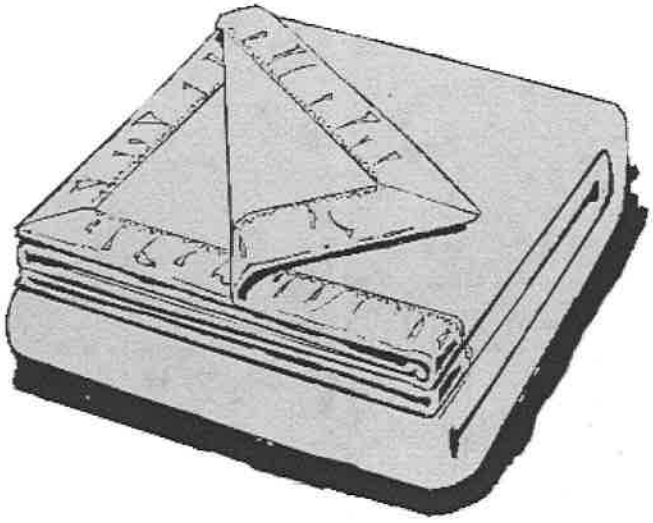
Turn to the third practice example, one of categorical relations. Point to the picture pair on the left and say: "This pair shows a sweater and a magnet." Then point to the picture pair on the right and say: "This pair shows a sweater and a dress. Which pair goes together?"

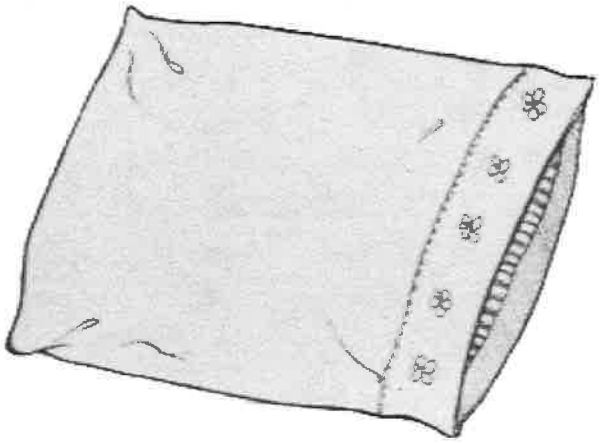
- If the subject points to the correct answer (sweater/dress), say: "Yes, a sweater and a dress go together because they are both articles of clothing, things you wear."
- If the subject points to the incorrect pair, say: "No, the sweater and magnet do not go together." Point to the correct pair and say: "The sweater and the dress go together because they are both articles of clothing, things you wear."

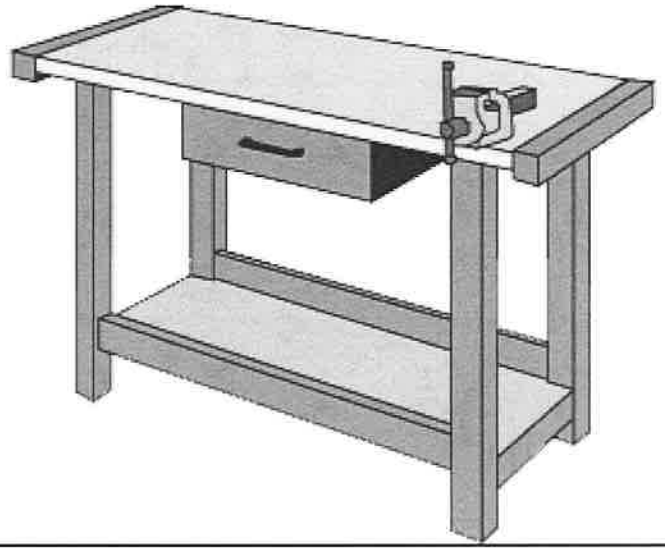
Scoring: One point is given for each correct item. Tally the number correct for each category (Animals and Tools), and calculate the total correct. Total possible points for this subtest = 16.

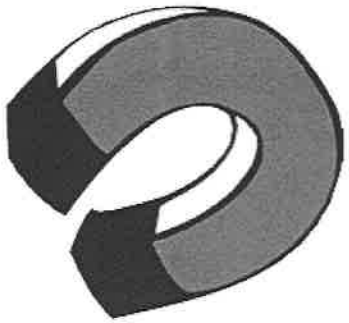
			CATEGORY	
	Target	Distracter	Animals	Tools
Example 1	sweater • blanket	sweater • pillow		
Example 2	sweater • chest	sweater • workbench		
Example 3	sweater • dress	sweater • magnet		
1	camel • saddlebag	camel • garbage can		
2	lion • meat	lion • corn		
3	mouse • cheese	mouse • drumstick		
4	hammer • 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):	

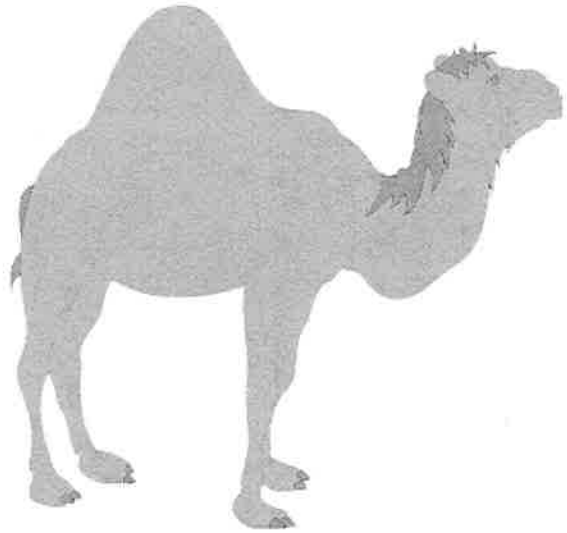
When test is complete, please transfer these scores to section 3 of Form C1F: FTLD Neuropsychological Battery Summary Scores.

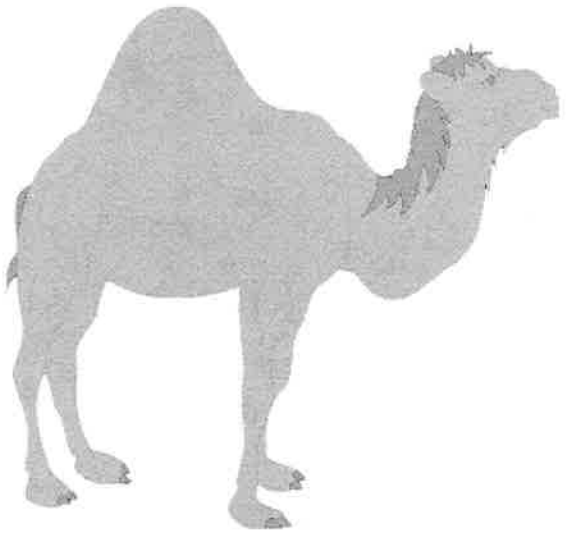


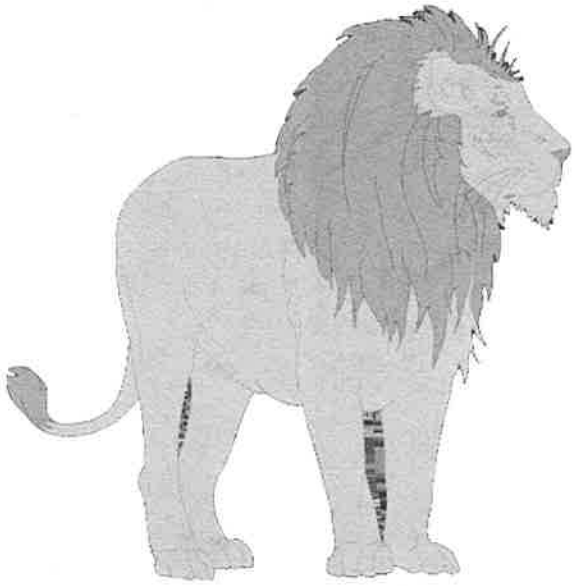


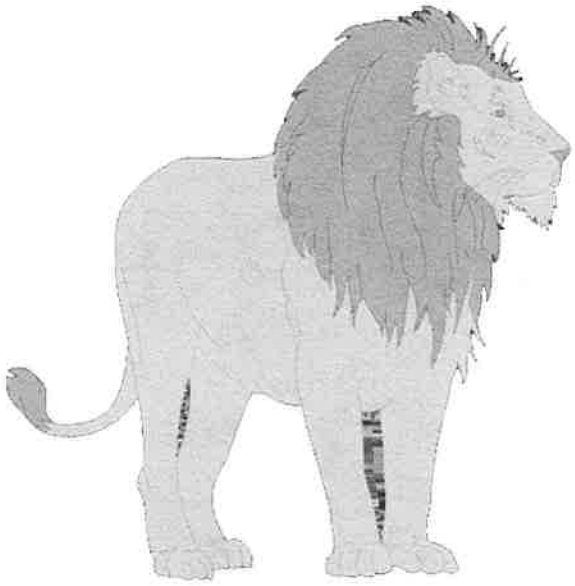


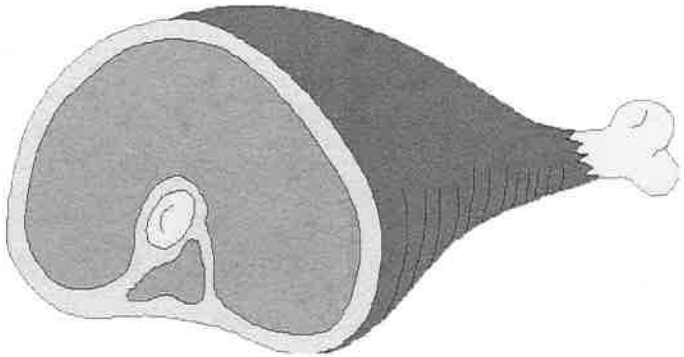


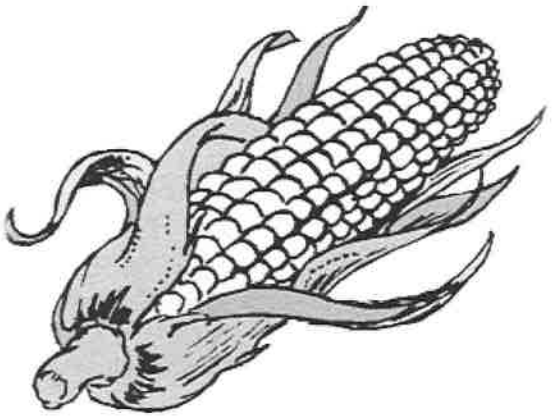


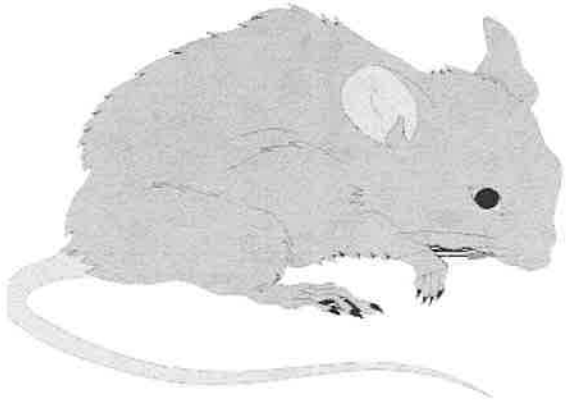


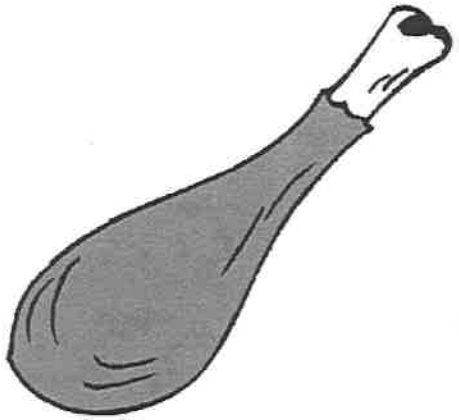


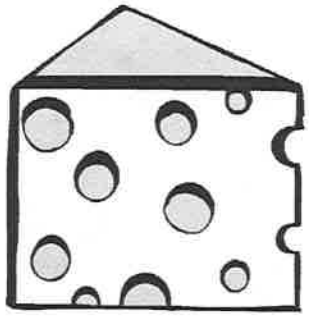


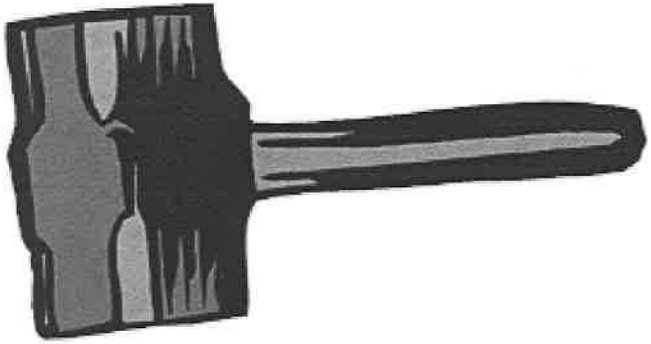


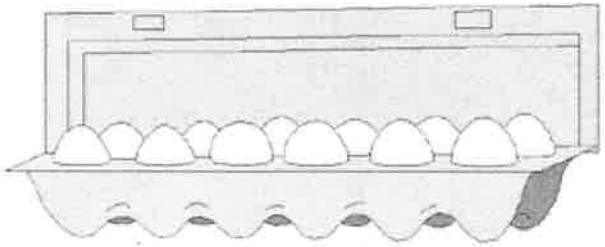


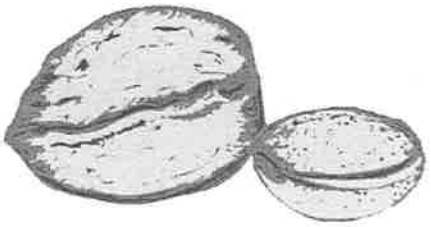


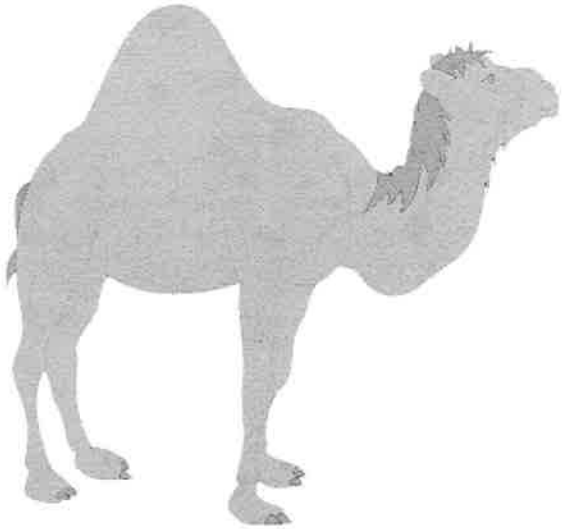


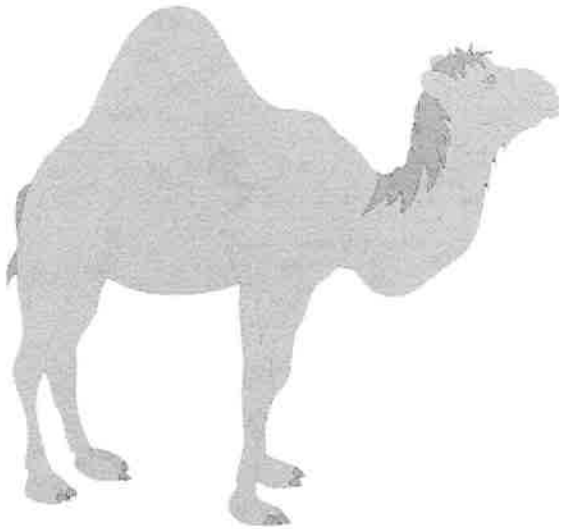


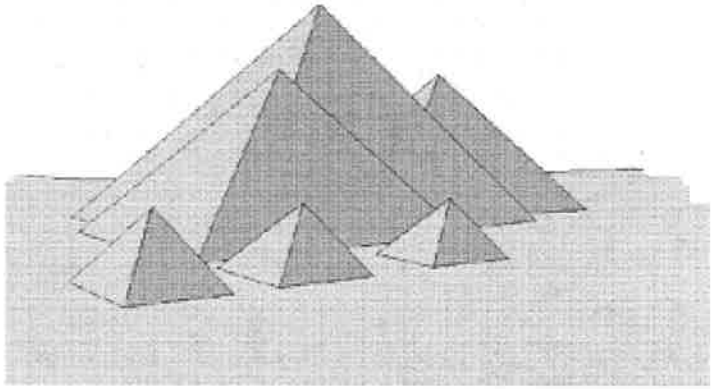


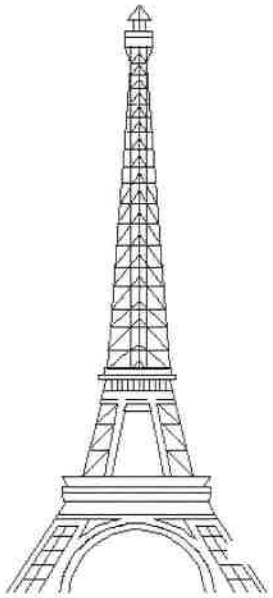


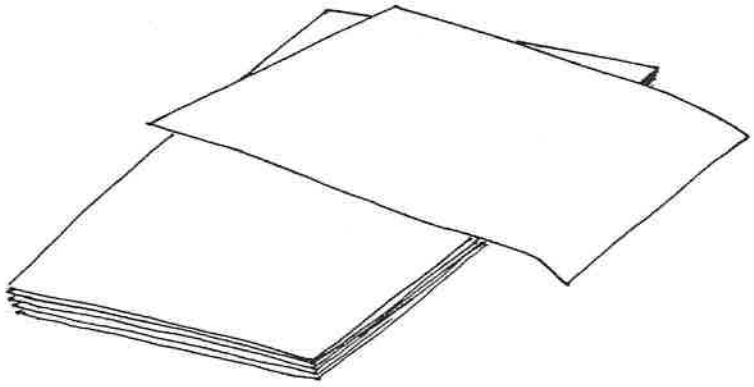


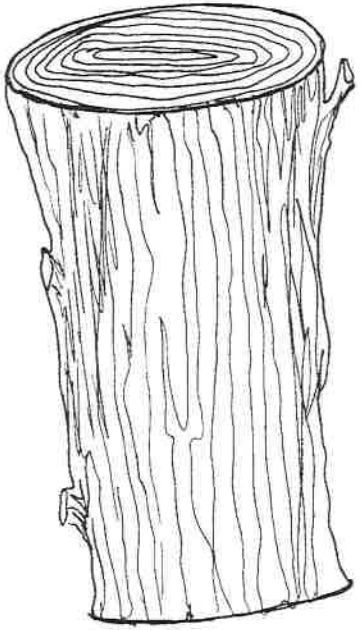


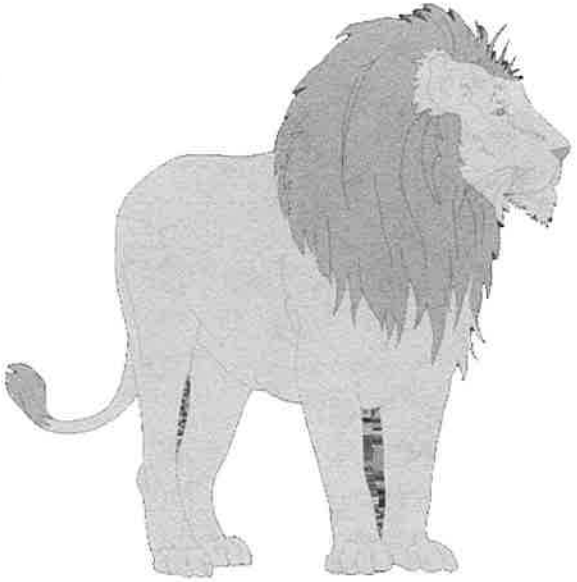


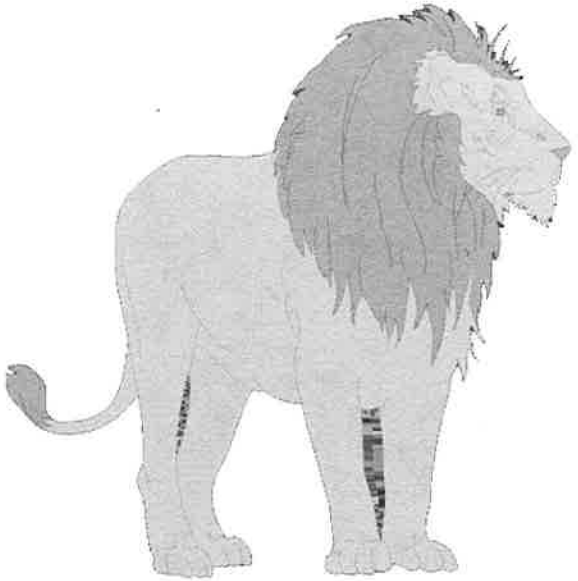


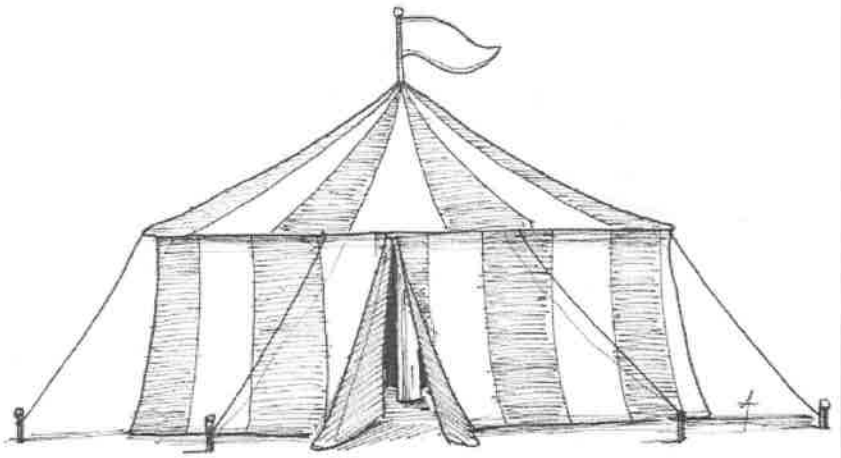


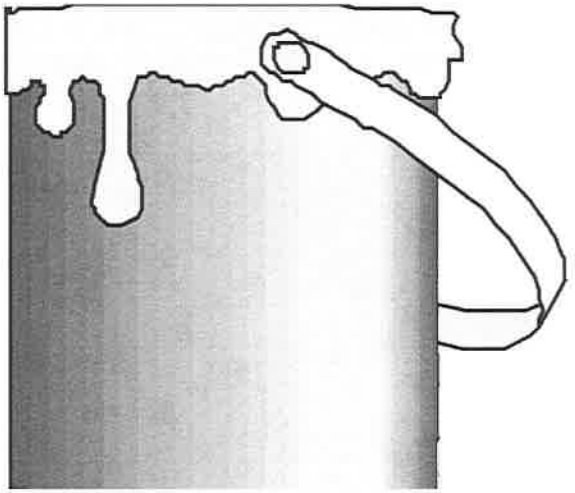


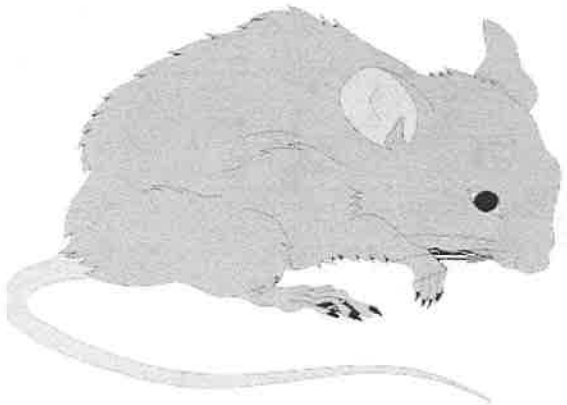


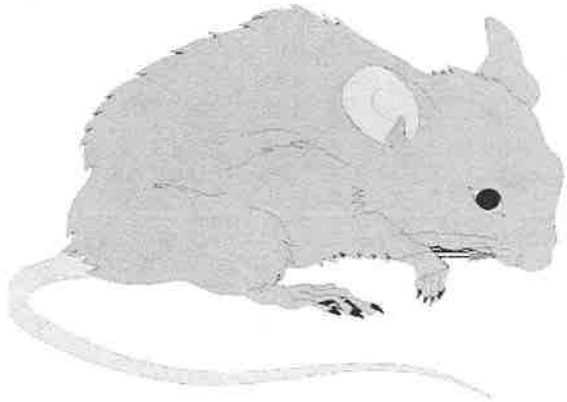


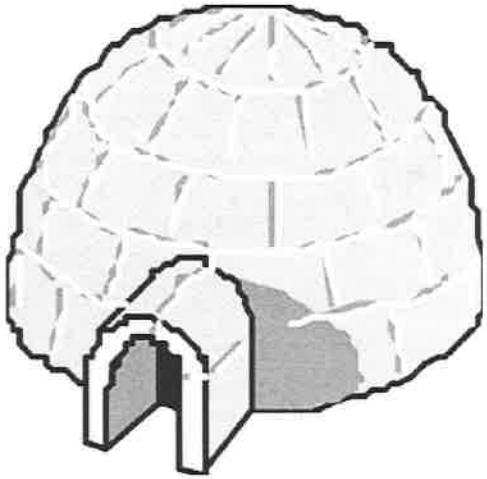


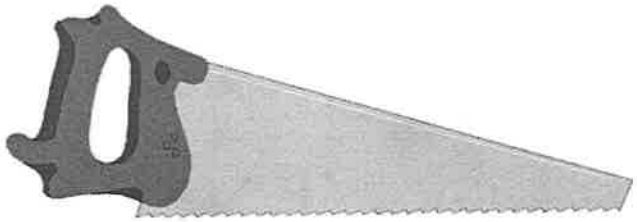


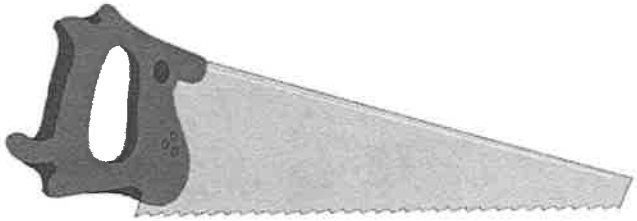


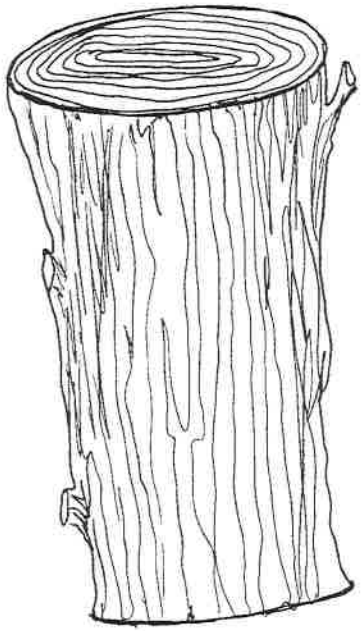


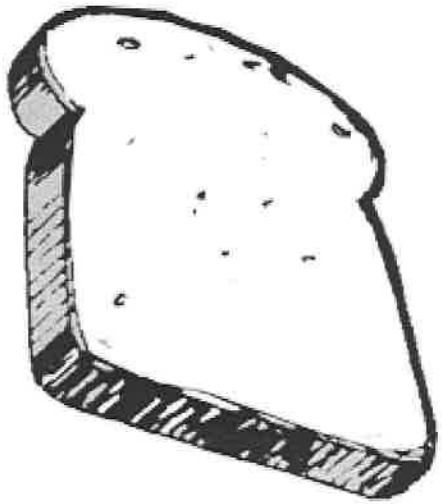


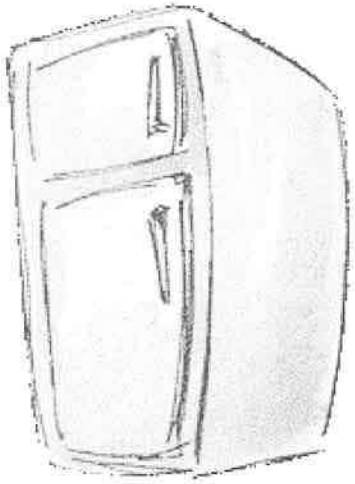


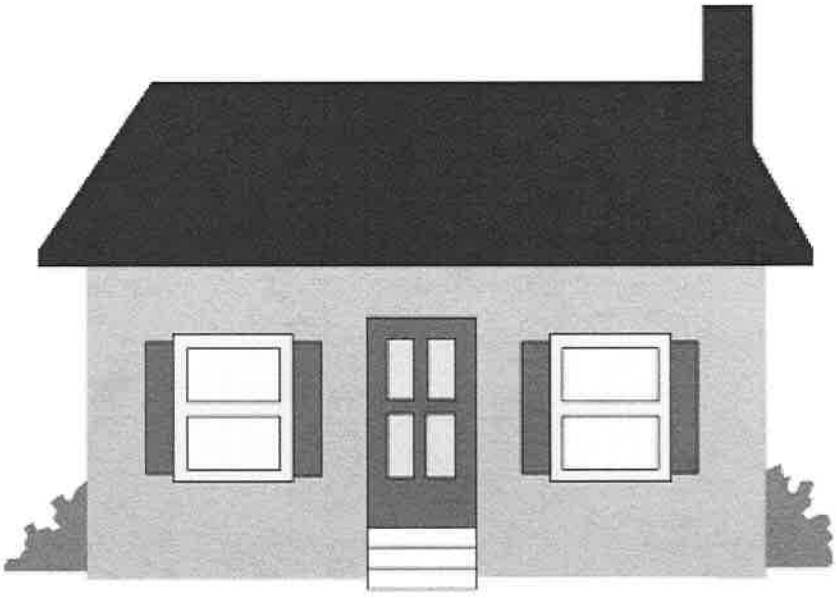


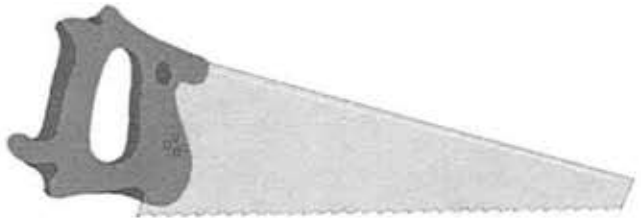


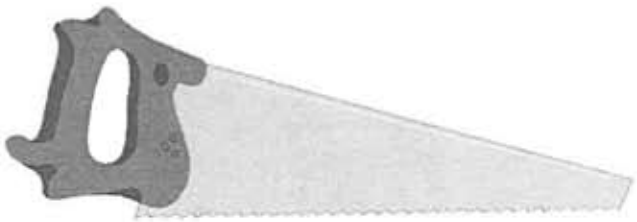


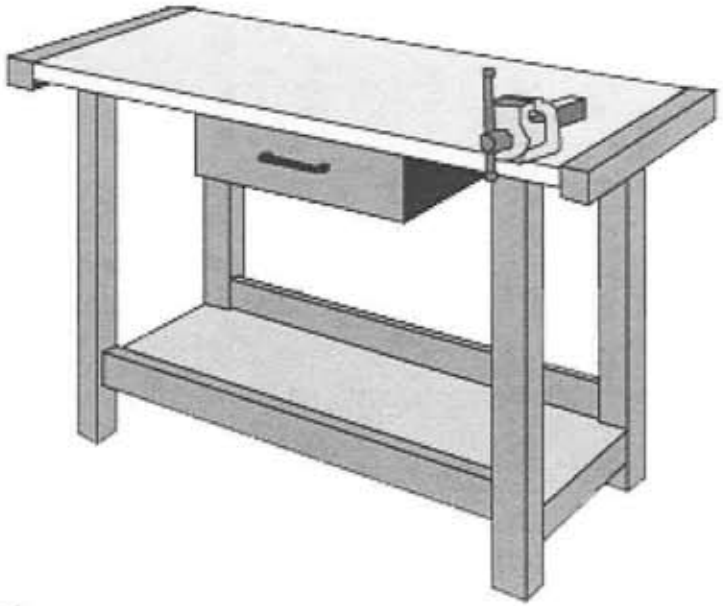


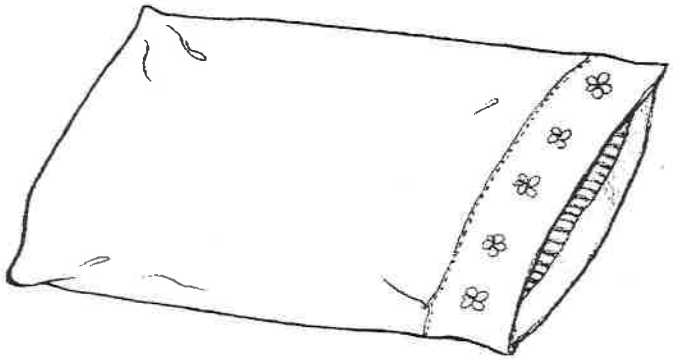


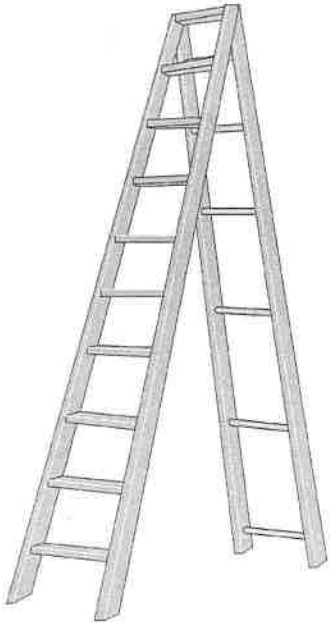












Subject ID _____ Date __ __ / __ __ / __ __ __ __

Examiner's initials __ __ __

Worksheet for Northwestern Anagram Test SHORT FORM[1]

CONSTRUCTION OF STIMULI FOR NORTHWESTERN ANAGRAM TEST

MATERIALS NEEDED:

1. Sheet with word stimuli
2. Stimulus pictures, one per test item
3. Thin cardboard sheets (8.5 x 11 inches) on which to copy the word stimuli and each of the picture stimulus cards
4. Plastic protector sleeves (matte surface, not shiny), with three holes for insertion into three-ring binder
5. Three-ring binder

STEPS:

Photocopy the word stimuli onto a thin cardboard sheet, and then cut them out following the lines around each word to make a small card for each word. (Note: The words for each stimulus sentence can be paper-clipped together to each stimulus card, ready for administration, and for storage when the test is not in use. Alternatively, an ice cube tray can be used to store the word cards for each test item.)

Photocopy each sample picture and each stimulus picture onto a thin cardboard sheet. Insert each of the resulting picture stimulus cards into a plastic protector. Next, insert these into the three-ring binder in sequence of administration. Insert the stimulus cards in such a way that they are visible on the back of each plastic sleeve. Thus, when the binder is open, the first page will be blank because it is the reverse side of the first stimulus sheet (practice item). By inserting stimulus sheets in this manner, the word cards can be placed on the blank sheet facing each stimulus page (the part of the binder resting on the desk on the subject's side) and the subject can use that surface to manipulate the word cards.

TEST ADMINISTRATION INSTRUCTIONS

Use a thick book or other means to elevate the front cover of the binder so that the stimulus pictures resting against the cover as the pages are turned are elevated for the subject's viewing. Administer practice item 1 according to the instructions below. If the subject fails the item, demonstrate the correct response. Then present the remaining items. If the subject completes an item, looks at it and then self-corrects, count the self-corrected response. Do not provide feedback as to whether an item is right or wrong.

(All text in **bold** is read aloud.)

Present the stimulus picture.

> **[Examiner]: "This picture shows a** (using subject's left and right for orientation, point to and name entity on the left side of the picture) **and a** (point to and name the entity on the right side of the picture). **The action is** (name the printed action)."

Present corresponding word cards, providing the first word of the target sentence, "Who" (underlined on the response form), in the upper left corner of the work space and distributing the remaining words in random array in the work space below "Who." Say,

[1] Weintraub S, Mesulam MM, Wieneke C, Rademaker A, Rogalski EJ, Thompson CK. The Northwestern Anagram Test: Measuring sentence production in primary progressive aphasia. *American Journal of Alzheimer's Disease & Other Dementias.* 2009 Oct–Nov;24(5):408-16.

[Examiner]: "Use these other word(s) to make a sentence to go with the picture. Be sure to use all of the words to make your sentence. Start the sentence with this word, 'Who.' "

Allow 30 seconds for subject to respond.

Practice item only: If the subject does not respond within 30 seconds or responds incorrectly, place the cards in the correct order.

Test items: Repeat instructions as given above. If a response is incorrect, enter the card order generated by the subject in the space provided on the score sheet. Gather up the cards and move on to the next item. Score as correct only if ALL words are in the order of the target sentence.

If the subject does not begin moving the cards by the time 15 seconds have elapsed, you may encourage them to try to do the best they can. If this behavior is repeated on subsequent items, continue to administer all items.

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

Source: Northwestern Anagram Test (Short Form, 2012), Cynthia K. Thompson, Sandra Weintraub, and Marsel Mesulam (https://flintbox.com/public/project/19927); further copying or distribution is forbidden without authors' permission. Form created as part of the FTLD Module to the Uniform Data Set of the National Alzheimer's Coordinating Center.

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 4 of Form C1F: FTLD Neuropsychological Battery Summary Scores

Source: Northwestern Anagram Test (Short Form, 2012), Cynthia K. Thompson, Sandra Weintraub, and Marsel Mesulam (https://flintbox.com/public/project/19927); further copying or distribution is forbidden without authors' permission. Form created as part of the FTLD Module to the Uniform Data Set of the National Alzheimer's Coordinating Center.

NORTHWESTERN UNIVERSITY

Northwestern Anagram Test®

Short Form

Picture Stimuli

Cynthia K. Thompson, Sandra Weintraub, and M-Marsel Mesulam

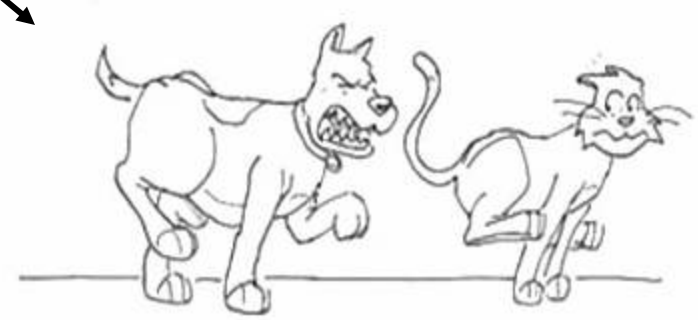
groom

bride

carry

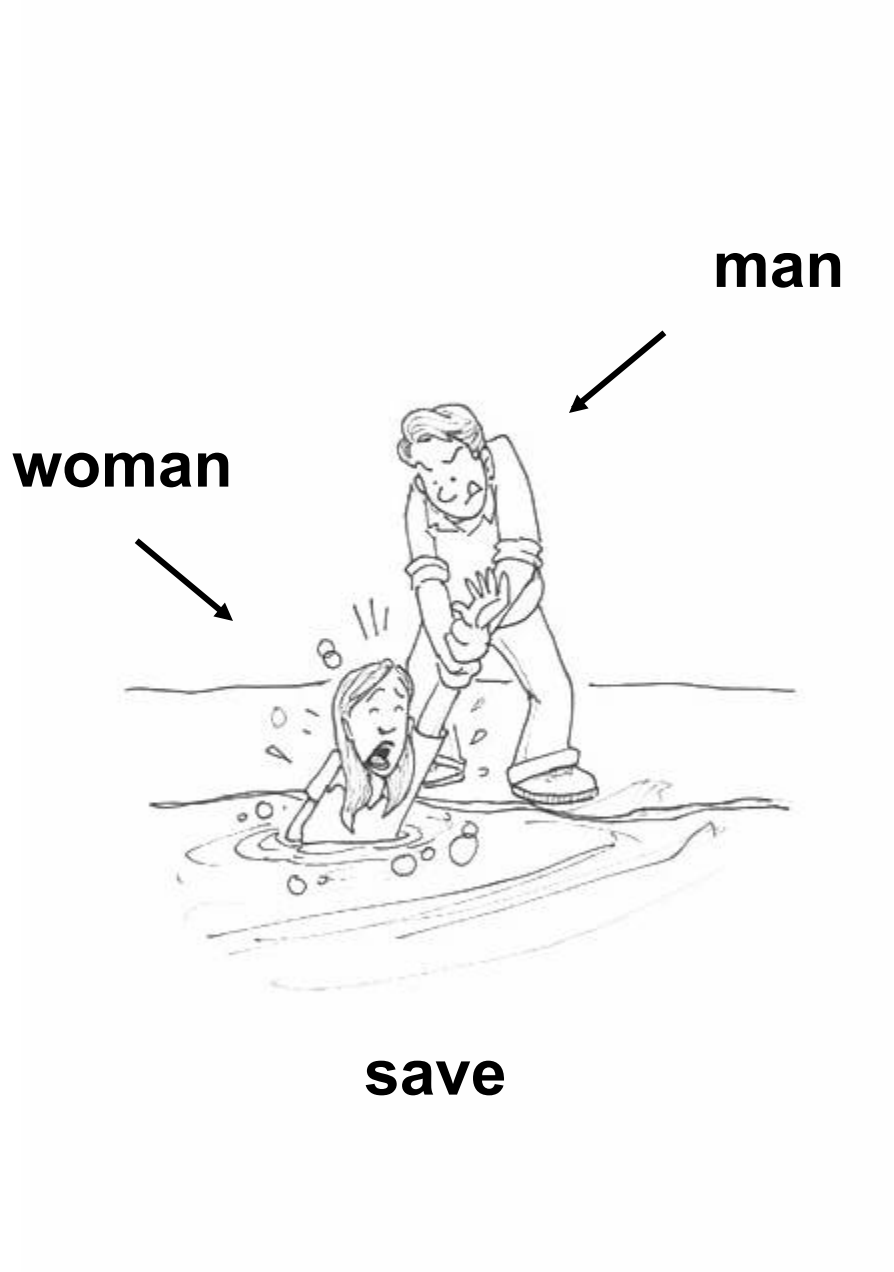
dog

cat



chase

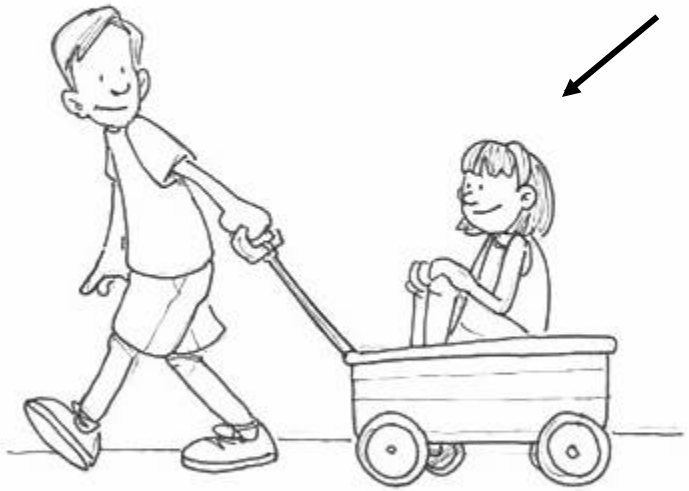
watch



save

boy

girl



pull

boy

girl

pull

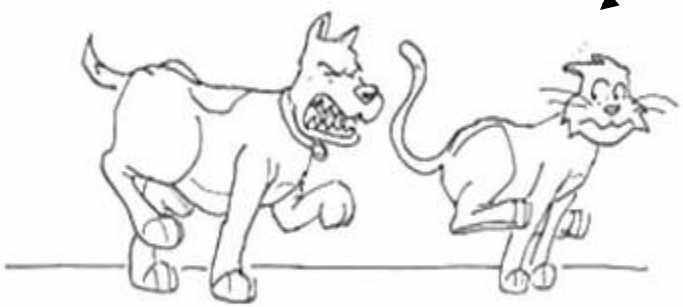
man

woman

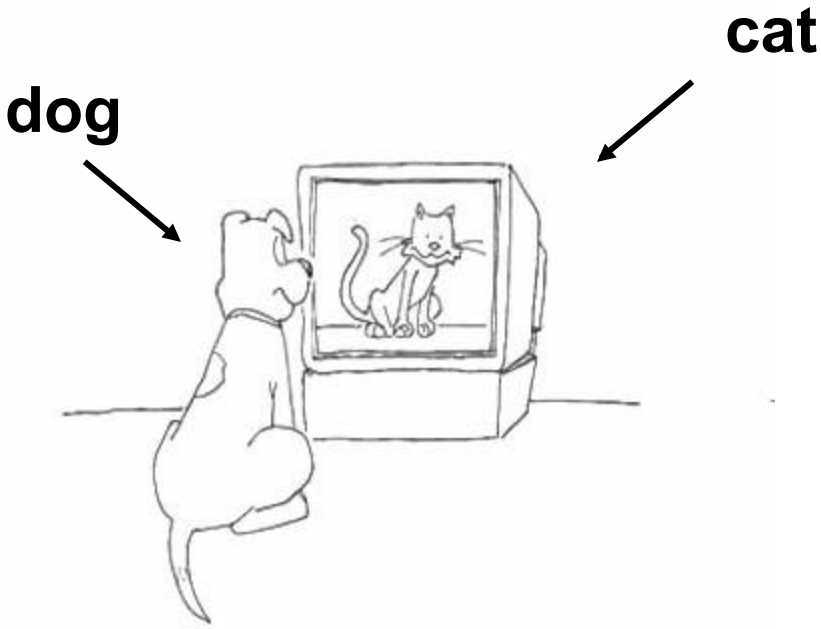
save

dog

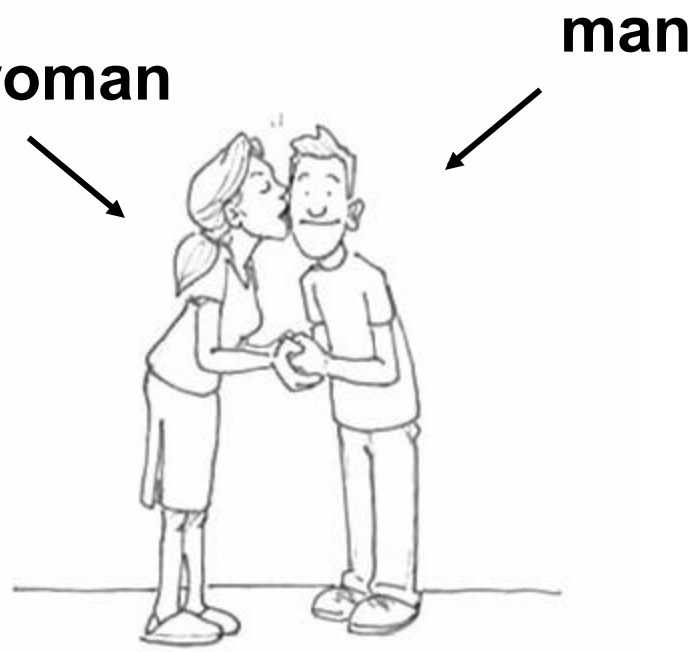
cat



chase



watch



kiss

kiss

Subject ID _____ Date __ __ / __ __ / __ __ __ __

Examiner's initials __ __ __

Worksheet for Sentence Repetition Test

Instructions

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

> **[Examiner]: "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 subject. One repetition of the sentence is allowed in cases where the subject did not hear the sentence, but only if the subject explicitly requests it.

If the subject does not repeat the sentence perfectly, transcribe his or her response verbatim in the space below the sentence. 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 sentences (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 5 of Form C1F: FTLD 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.

Subject ID _____ Date __ __ / __ __ / __ __ __ __

Examiner's initials __ __ __

Worksheet for Noun and Verb Naming Subtests

Items are presented one at a time for the subject to name. For each item, there is a time limit of 10 seconds. No cues or prompting are to be provided. If the item is not named in 10 seconds then move on to the next item. Before beginning this subtest, say,

> **[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."**

Show practice example (item p1, shoe), followed by action example (item p2, laugh).

> **[Examiner]: "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 subject 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 subject again names the object, it is counted as an error. If the subject provides a different answer to describe the stimulus presented (e.g., "putting on his coat" instead of "zip," then prompt the subject further (e.g,. say, "Yes, but can you tell me a more specific name for the action or the verb?"). If the subject again provides the incorrect response, 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. Alternative responses for each picture are not permitted. For example, for item p2, the correct response is "laugh" in any of its verb forms (i.e., laughs, laughing, laughed). A response such as "man rubbing belly" is not considered a valid response.

Subject ID _____ Date __ __ / __ __ / __ __ __ __

Examiner's initials __ __ __

Worksheet for Noun and Verb Naming Subtests

Nouns for confrontation naming				
	Frequency per million	Category	Response	Correct/ Incorrect
GLOVE	1.8	clothing		
PEPPER	1.7	fruit / vegetable		
CAT	1.5	animal		
TIE	1.5	clothing		
BROOM	1.4	tool		
APPLE	1.4	fruit / vegetable		
SNAKE	1.4	animal		
SUIT	1.4	clothing		
BELT	1.3	clothing		
SCISSORS	1.3	tool		
SOCKS	1.3	clothing		
ELEPHANT	1.2	animal		
MOUSE / RAT	1.0	animal		
ONION	1.0	fruit / vegetable		
HAMMER	0.8	tool		
CORN	0.6	fruit / vegetable		
MEAN	**1.3**			**TOTAL**

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

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

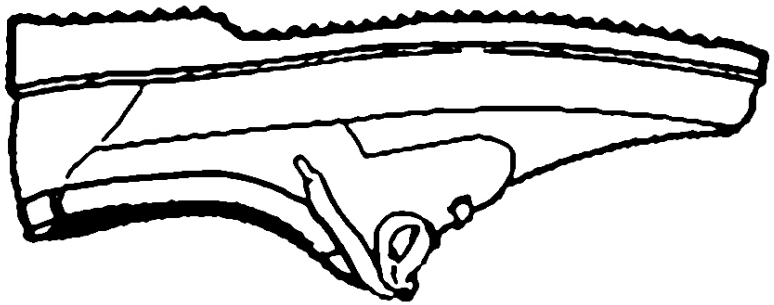
SCORING

Total nouns correct = _____ /16

Total verbs correct = _____ /16

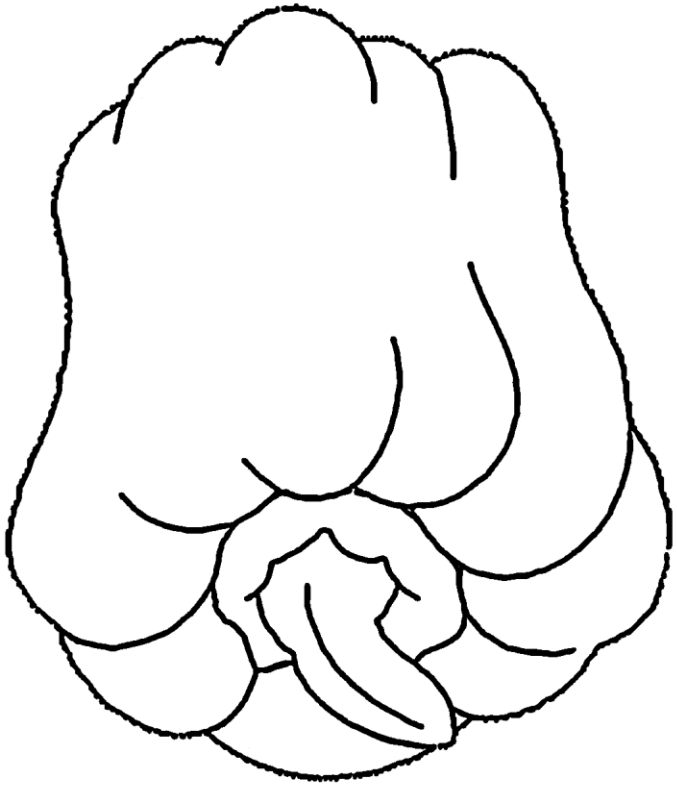
Noun-to-verb ratio:
total nouns correct / total verbs correct = _____ *If either the noun or verb score is zero, the noun-to-verb ratio cannot be calculated. In this case, please enter 88.88.*

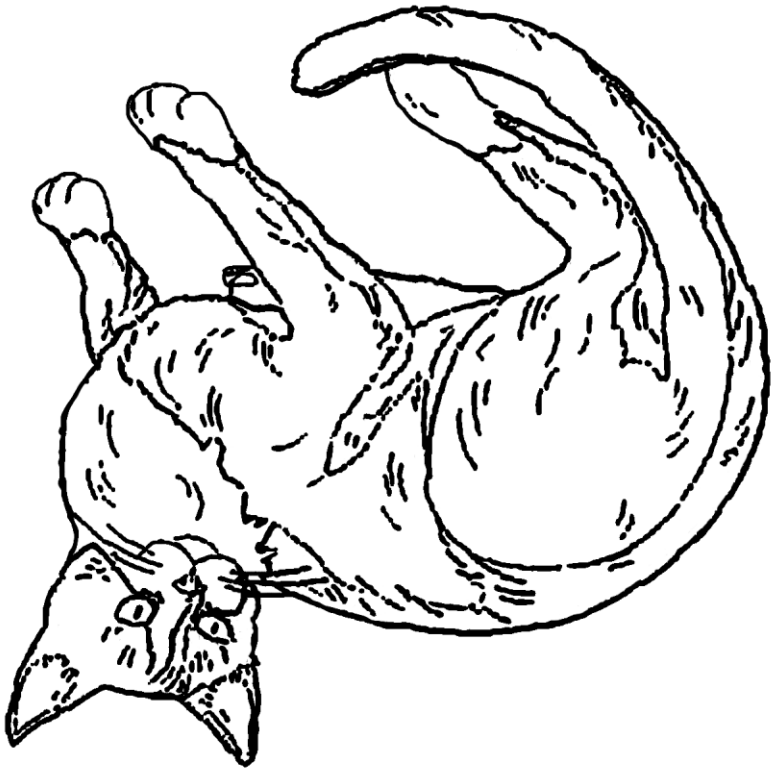
When test is complete, please transfer these scores to section 6 of Form C1F: FTLD Neuropsychological Battery Summary Scores.

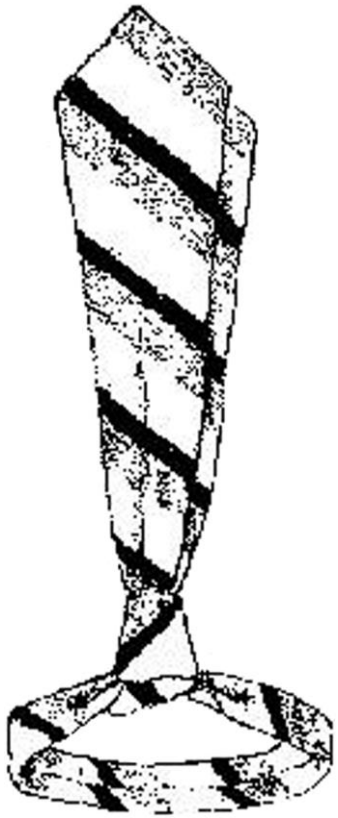


p1

Nouns

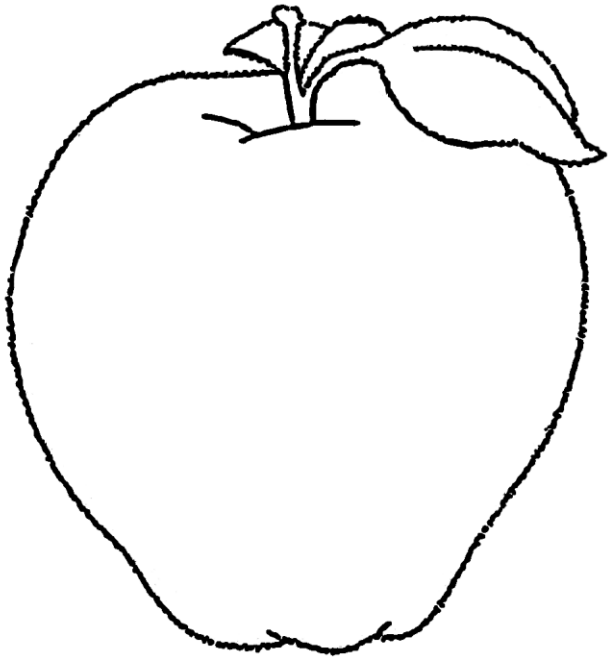


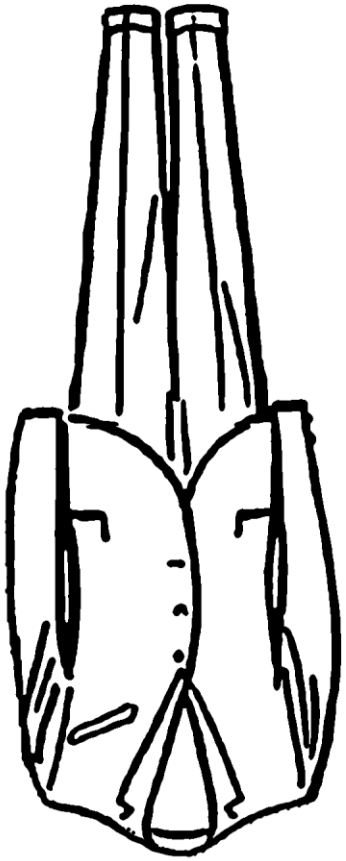


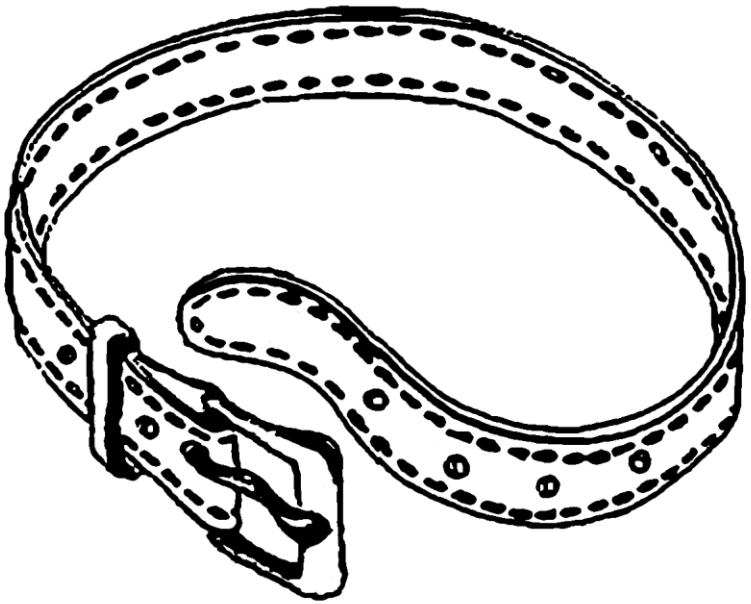


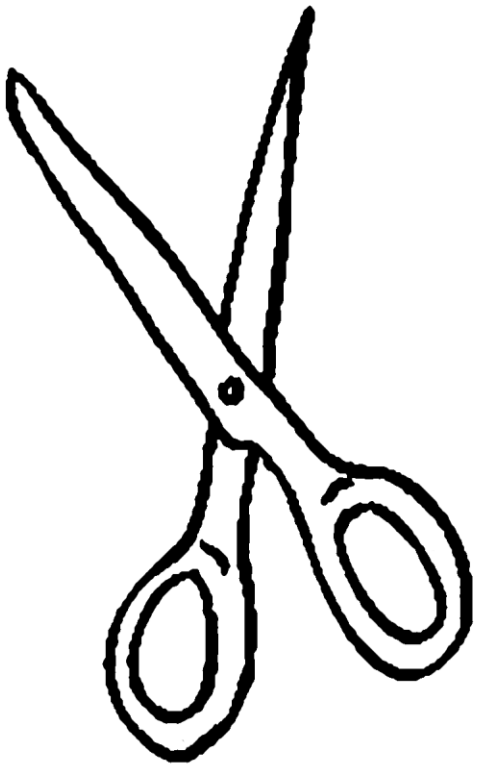
4

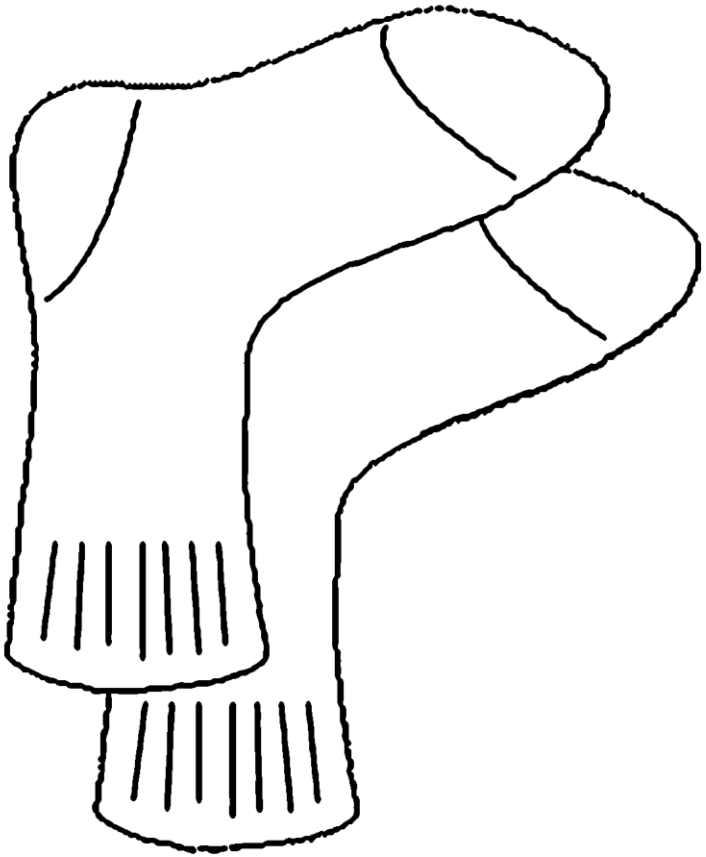
5

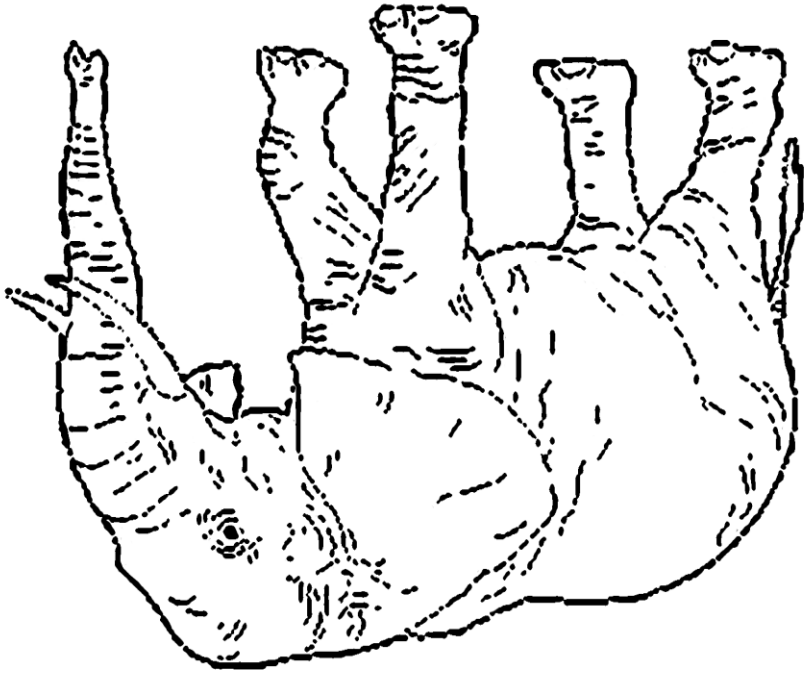


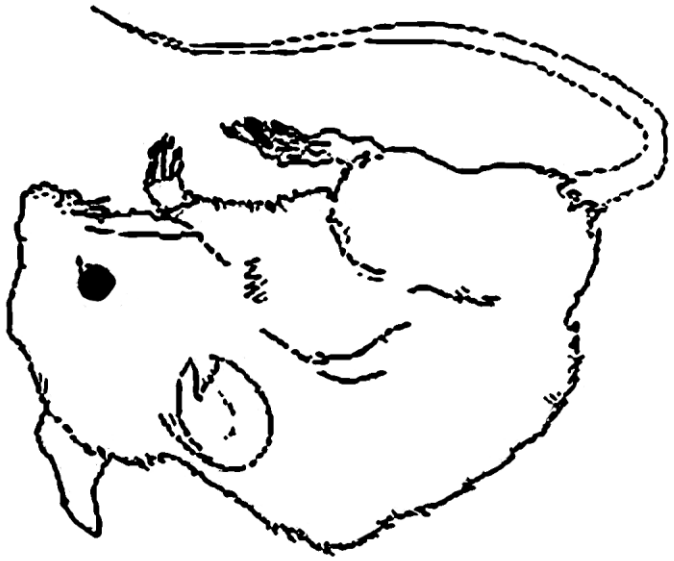


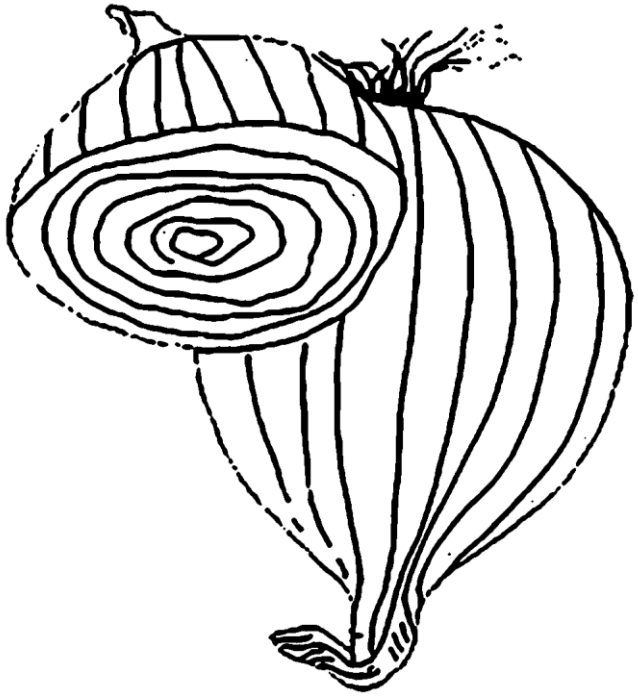


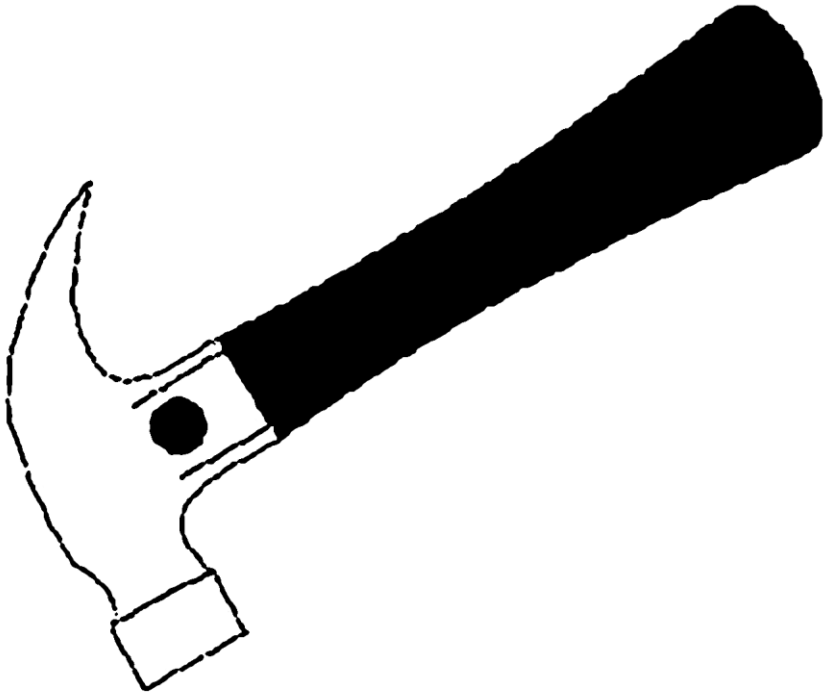




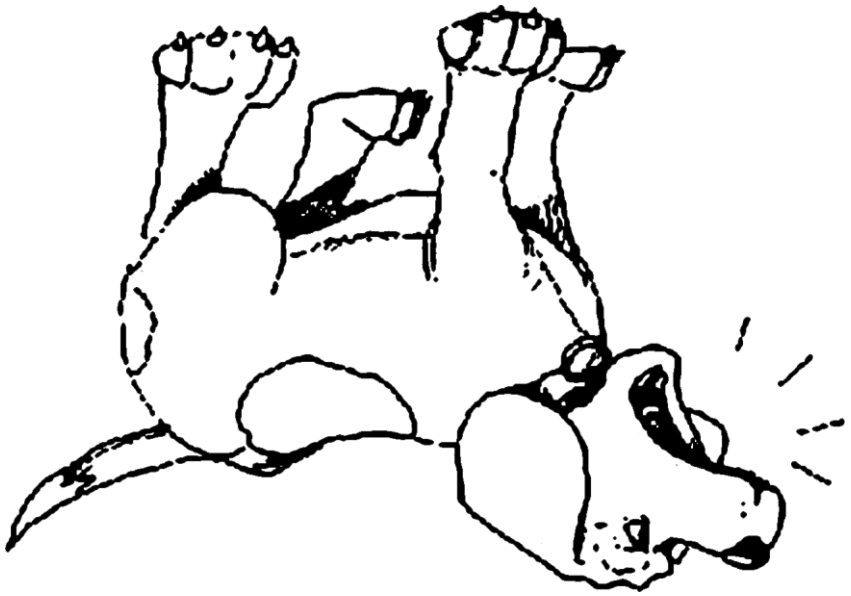


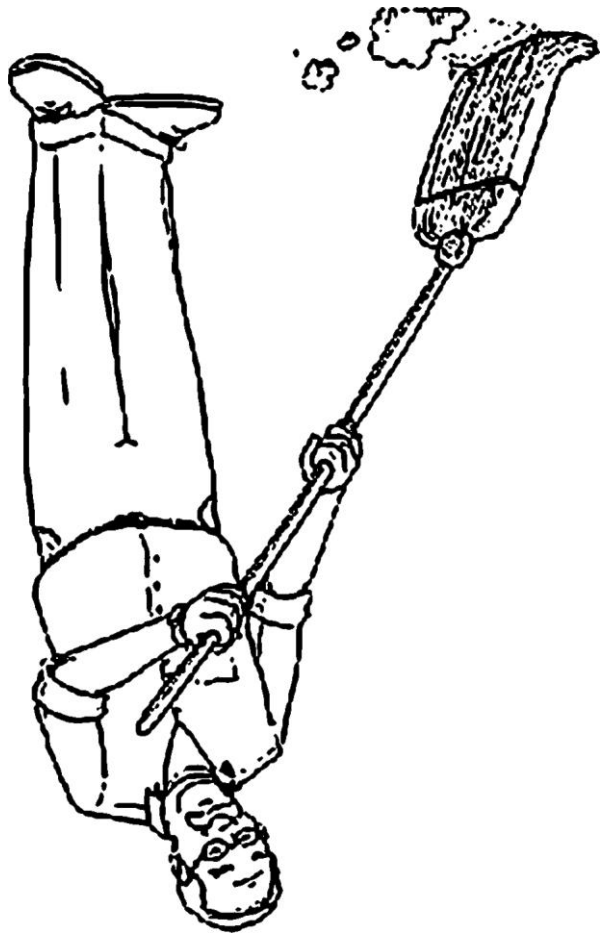


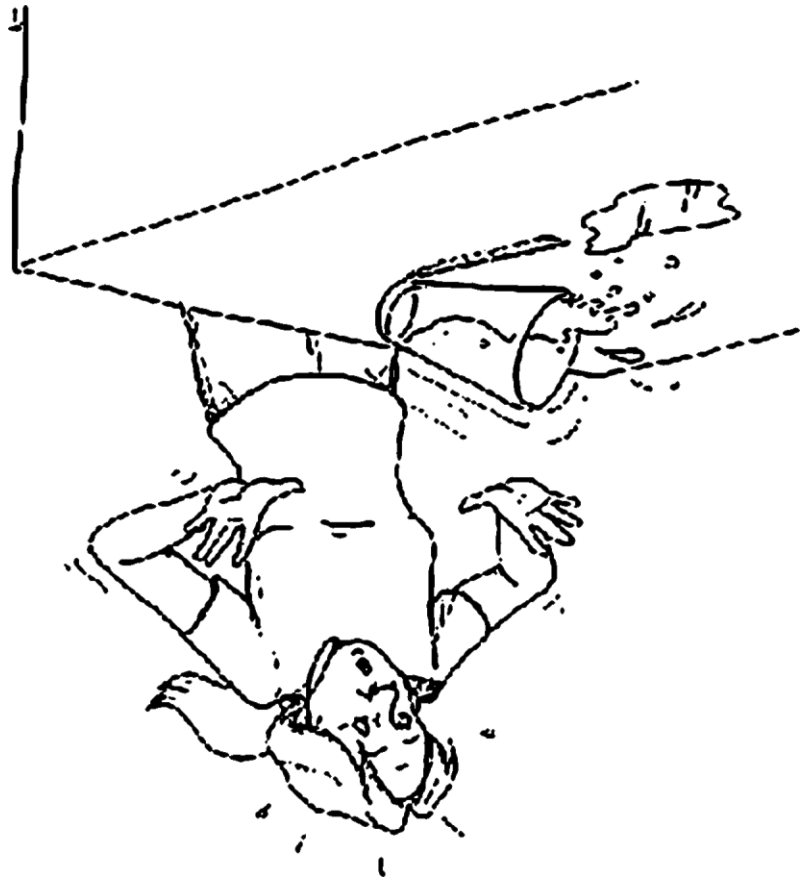


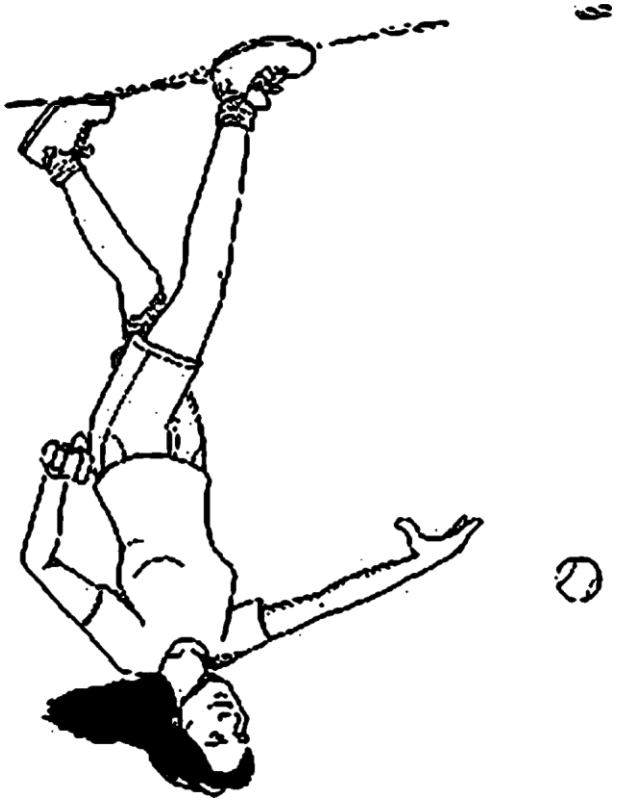


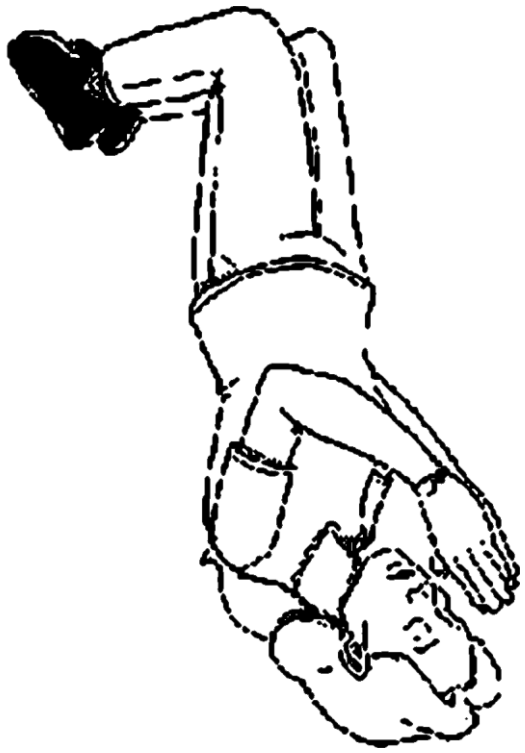
Verbs

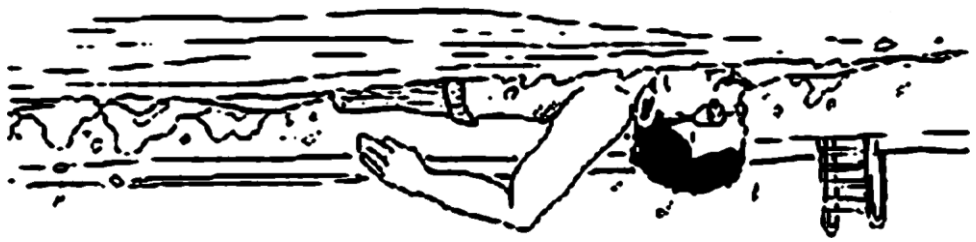


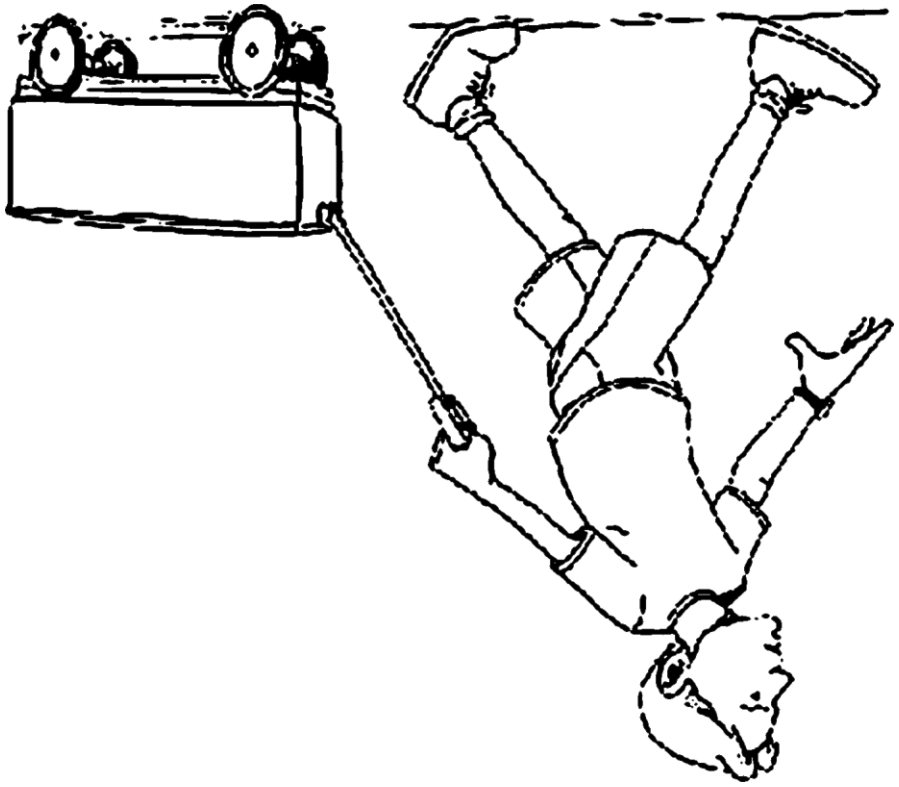


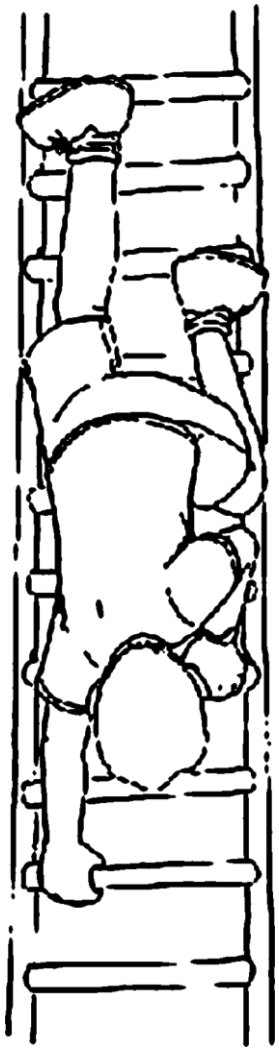


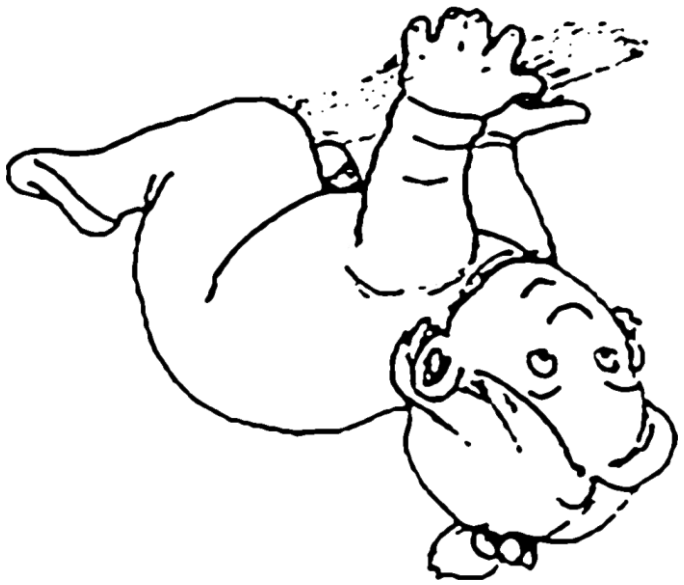












Subject ID _____ Date __ __ / __ __ / __ __ __ __

Examiner's initials __ __ __

Worksheet for Sentence Reading Test

Instructions

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

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

If the subject does not read the sentence perfectly, transcribe his or 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 sentences (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 7 of Form C1F: FTLD 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.