INSTITUTE FOR THE

STUDY OF

INTELLECTUAL

BEHAVIOR

An Empirical Thesaurus:

Meaning Norms for 90 Common Words,

Complete Tables

C. A. Nickerson and D. S. Cartwright

University of Colorado

Institute for the Study of Intellectual Behavior

University of Colorado

Boulder, Colorado 80309

ABSTRACT

    An empirical thesaurus of meanings and meaning frequencies for a
list of 90 common English words drawn from the Paivio, Yuille, and
Madigan (1968) and the Toglia and Battig (1978) normative lists was
compiled as a supplement to previous word norms studies to aid re-
searchers concerned with linguistics and/or verbal behavior in the
selection and calibration of verbal materials.

    This technical report contains the complete method and tables
referenced in the shorter paper by Desmond S. Cartwright and C. A.
Nickerson, "An Empirical Thesaurus: Meaning Norms for 90 Common Words,"
The Modern Language Journal, 1979, 63 (in press).

An Empirical Thesaurus:

Meaning Norms for 90 Common Words

The demands of researchers concerned with linguistics and/or verbal behavior for information about the semantic properties of English words to be used in selecting or calibrating verbal materials has resulted in the publication of a wide variety of normative word lists. These lists present normative data on such semantic word properties as concreteness (Gorman, 1961; Paivio, Yuille, & Madigan, 1968; Spreen & Shulz, 1966; Toglia & Battig, 1978), imageability (Paivio, Yuille, & Madigan, 1968; Toglia & Battig, 1978), meaningfulness (Locascio & Ley, 1972; Noble, 1952; Paivio, Yuille, & Madigan, 1968; Spreen & Schulz, 1966; Toglia & Battig, 1978), frequency (Thorndike & Lorge, 1944), categorizability and categorization (Battig & Montague, 1969; Cohen, Bousfield, & Whitmarsh, 1957; Shapiro & Palermo, 1970; Toglia & Battig, 1978), familiarity (Toglia & Battig, 1978), number of features (Toglia & Battig, 1978), pleasantness (Toglia & Battig, 1978), pronunciability (Spreen & Schulz, 1966), and associates (Battig, 1964; Palermo & Jenkins, 1964; Perfetti, Lindsey, & Garson, 1971; Postman & Keppel, 1970). Interestingly, there are no empirical norms available for word meanings, pre-sumably because researchers have relied upon dictionary and thesaurus meanings when information is needed about this particular semantic attribute. Reliance upon dictionary and thesaurus meanings is an unsatisfactory solution, however, because

subjects may know all the possible dictionary or thesaurus
meanings of a word, they may also know only some or even none
of them, and they may even be aware of word meanings which
would not ordinarily be listed in a dictionary or thesaurus,
such as technical terms and colloquial expressions. The
experimenter, therefore, has no guarantee that subjects are
responding to the meaning of the verbal stimulus that he thinks
they are responding to. This problem is compounded by the
fact that neither a dictionary nor a thesaurus gives any
indication of the likelihood that any particular meaning will
be the meaning responded to; the meanings in dictionaries and
thesauruses are not arranged from most to least common or
frequent, as is commonly supposed.

In recognition of this problem, the present study presents
empirical meanings and frequencies for a short list of 90 common
English words. These words were drawn from the Pavio, Yuille,
and Madigan (1968) and Toglia and Battig (1978) normative lists
so that information about the other semantic properties of the
words might be readily available. It is hoped that these
meaning norms will prove a useful supplement to the battery
of normative tools already available for choosing and calib-
rating verbal materials and that they will also serve as an aid in
interpreting the semantic ratings of words in the previous
normative studies. For example, many of the words in the
Paivio, Yuille, and Madigan (1968) list have multiple meanings.
In rating a word for concreteness, different subjects may have

been rating different meanings of the word. If some of the meanings rated are abstract, while others are concrete, then mean concreteness ratings of about 4 on a 1 (abstract) to 7 (concrete) scale may indicate not that the word is characterized by an "intermediate" level of concreteness but that multiple meanings of the word have been rated.

Method

Subjects

One hundred and ninety-seven University of Colorado students enrolled in an introductory psychology course served as subjects in partial fulfillment of course requirements. All subjects spoke English as their native language.

Materials

The ninety stimulus words for which meanings were to be obtained were chosen from two sources. Thirty of these words comprise a short list that has been used in the preliminary testing of hypotheses regarding the nature of linguistic concreteness-abstractness (Cartwright, 1977). These words were originally drawn from the Paivio, Yuille, and Madigan (1968) normative list and were chosen so that ten of the words would have high concreteness ratings, defined as a Paivio, Yuille, and Madigan C rating of 7.0, ten would have medium concreteness ratings ($3.8 \leq C \leq 4.2$), and ten would have low concreteness ratings ($1.0 \leq C \leq 1.7$), and so that all words would have fairly high meaningfulness (M) ratings ($M \geq 5.32$).

The thirty words were as follows:

LOW CONCRETE	MEDIUM CONCRETE	HIGH CONCRETE
ANGER	DEED	ARROW
ANXIETY	DISASTER	AUTOMOBILE
CHANCE	DYNASTY	CAR
DEVOTION	LEGISLATION	MICROSCOPE
JOY	LORD	PENCIL
KNOWLEDGE	MARRIAGE	STRAWBERRY
LOYALTY	PRESENT	TREE
MOOD	SERIES	TRUCK
MORAL	SHOCK	TRUMPET
PASSION	VISION	WINDOW

An additional sixty words were chosen from the Toglia and Battig (1978) word norms. A frequency distribution of the concreteness (CON) ratings of the 2854 words in the Toglia and Battig list yields a bimodal distribution, with the modal points occurring at CON ratings of 3.0 - 3.5 and 5.5 - 6.0. This distribution was used to select CON values to define low concreteness, medium concreteness, and high concreteness for the set of sixty words drawn from the Toglia and Battig list. Low concrete words were defined as those having CON ratings less than or equal to the midpoint of the interval of the mode closest to the low concrete end of the scale (CON $\leq$ 3.25). High concrete words were defined as those having CON ratings greater than or equal to the midpoint of the interval of the mode closest to the concrete end of the scale (CON $\geq$ 5.75). Medium concrete words were then defined as those whose CON ratings placed them into the lowest portion of the trough between the two modal points (4.0 $\leq$ CON $\leq$ 5.0). Words were selected so that there were twenty high concrete, twenty medium

concrete, and twenty low concrete words, and so that all words had medium meaningfulness (MNG) values ($3.5 \leq MNG \leq 4.5$). The sixty words chosen were as follows:

LOW CONCRETE	MEDIUM CONCRETE	HIGH CONCRETE
BEING	ARCH	BASIN
CUSTOM	BASE	BEAR
DROP	CAPITAL	BELT
EVEN	COACH	BOW
FAULT	CRANK	CAMEL
FLOW	FELT	CARDINAL
GRACE	FILE	COLLAR
IDEAL	FLUSH	COTTON
IN	FUZZY	DOUGH
INTEREST	HAIL	EMERALD
MEMORY	LEAD	HEEL
MIGHT	MASS	KEY
PARDON	MINE	MOLE
PASS	PILE	OLIVE
RAISE	PLOT	PAGE
REFINED	ROLL	PALM
RULE	SLIP	SHELL
SOUL	SWALLOW	SKIRT
THINNER	WELL	TAIL
UTTER	WRAP	THREAD

In order to make the task a reasonable one for subjects to be able to complete within an hour, the list of ninety words was broken into two sets of forty-five words each. Five words from each of the three Paivio, Yuille, and Madigan concreteness categories and ten words from each of the three Toglia and Battig concreteness categories were randomly selected and assigned to word set 1; the remaining words were assigned to word set 2. Each subject listed meanings for the stimulus words of one word set only.

Each of the stimulus words was typed, centered and capitalized, at the top of a single page. A test booklet consisted of

the forty-five stimulus word pages for a given word set, plus
a cover sheet of instructions for the subject. The order of the
stimulus word pages in each word booklet was randomized, so that
the stimulus words were presented in a different order to each subject.

Procedure

Subjects were run in small groups of ten to twenty. Test book-
lets were randomized before distribution so that within each small
group some subjects received word set 1 and some word set 2. The
instructions printed on the cover sheet read as follows:

INSTRUCTIONS

The purpose of this experiment is to find out
what meanings people commonly give to various words.
The procedure will be as follows: at the top of each
page in this mimeographed booklet is typed a word.
You will be given 30 seconds to write down on the page
beneath the word as many different meanings of the
word as occur to you, in whatever order they occur to
you. For example, if the word is MARK, you might write
down the meanings

> a boy's name
>
> to grade papers
>
> a foreign coin

etc. Please write only one meaning per line as shown
in the example. When the 30 seconds are up, the experi-
menter will request you to turn the page. You are to

stop writing immediately and turn to the next

page where there will be another word for which

you are to write down meanings. This procedure

will be repeated for a total of 45 words.

Should it happen that you are unable to

read a word because of its being too lightly

printed, wait quietly until the 30 seconds for

that word are up and then when the experimenter

requests you to turn the page, turn the page and

begin writing meanings for the next word.

Do not turn the page until told to do so.

The thirty-second intervals were timed with a standard stop watch.

Results

Ninety-six subjects listed meanings for the stimulus words

in word set 1; one hundred and one subjects listed meanings for

the stimulus words in word set 2. A single meaning listed by a

subject for a stimulus word will hereafter be referred to as a

meaning-response. The actual phrasing of a meaning-response is

termed a meaning-expression. The difference between the terms

meaning-response and meaning-expression is rather subtle and is

best illustrated by an example. If twelve subjects have written

down "a scoundrel" for the stimulus word HEEL, there are twelve

meaning-responses but only one meaning-expression. Within a

single subject, however, a meaning-response is the meaning-

expression of that response; listing "a scoundrel" in response

to HEEL is both that subject's meaning-response and his meaning-expression of that response. The legible meaning-expressions given by subjects to any particular stimulus word were categorized as 1) MEANINGS, 2) CONFUSIONS, 3) MISTAKES, 4) ASSOCIATES, or 5) BLANKS.

MEANINGS

If a meaning-expression listed by a subject as his meaning-response to a given stimulus word could be found in a dictionary, thesaurus, slang dictionary, technical reference, foreign language dictionary, or other published reference work, or was recognized as being a common usage of the stimulus word, it was accepted as a legitimate meaning of that word. Legitimate meanings included:

1. dictionary-type definitions

    examples: LEAD - "the starring role in a play"

    MOLE - "a dark spot on the skin"

2. synonyms

    examples: BASIN - "a washbowl"

    ANGER - "wrath"

3. names of persons, or the meaning-expression "a name"

    examples: JOY - "a girl's name"

    ARCH - "short for Archie"

4. geographical place names

    examples: EMERALD - "a bay in North Lake Tahoe"

    PALM   - "Palm Springs"

5. team names

    examples: CARDINAL - "a football team"

    BEAR   - "a team name"

6. slang terms

    examples: CRANK - "heroin"

    BEAR - "something that is hard to do"

7. definition by example

    examples: AUTOMOBILE - "Chevy"

    DYNASTY   - "Ming Dynasty"

8. metaphorical, poetic, or symbolic usage

    examples: BEAR - "someone who is big"

    MOLE - "a person with small eyes"

    OLIVE - "a peace symbol"

9. the completion of a phrase in which the word is
    often found

    examples: CAPITAL - "capital punishment"

    CARDINAL - "cardinal sin"

10. commercial product names (including beverage names),
    brand names, company names

    examples: JOY   - "a dishwashing liquid"

    ARROW - "a shirt company"

    PASSION-"a drink"

11. technical or specialized terms

    examples: CAMEL - "a skiing or iceskating maneuver"

    FILE - "a deck of cards" (computer science
    term)

12. abbreviations

    examples: MASS   - "the abbreviation of Massachusetts"

            CUSTOM - "short for customers"

13. foreign words

    examples: DROP   - "licorice in Dutch"

            PARDON - "a French word"

14. parts of words

    examples: IN - "a prefix"

            IN - "a reagent in chemistry" (a suffix)

15. interjections, exclamations, and expressions

    examples: WELL - "expression"

            PARDON -"sorry"

            HAIL   -"Southern pronunciation of 'hell'"

16. references to games, groups, records, and songs

    examples: ARROW   - "a card game"

            CHANCE   - "a card in Monopoly"

            DEVOTION- "a song by Earth, Wind, and Fire"

17. names of flowers, trees, and plants

    examples: PASSION - "a flower"

            COTTON - "a plant"

18. book titles and characters and places in books, in
    the movies, or on television

    examples: OLIVE   - "Popeye's girl friend"

            EMERALD - "Emerald City (in The Wizard
                       of Oz)"

Different meaning-expressions denoting the same underlying
idea were combined into a single meaning-class. Thus, the meaning-

expressions "a fool", "a bad guy", "a cad", "a scoundrel", "a
jerk", "a fink", "an undesirable character", and "a creep" for
the stimulus word HEEL were combined into the same meaning-class.
Any one meaning-class may be composed of meaning-expressions
representing one or several of the different kinds of legitimate
meanings listed above. Generally however a meaning-class contains
meaning-expressions which belong to only one syntactical class, i.e.
the meaning-expressions within a meaning-class will refer only to
nouns or only to verbs, etc. The set of all meaning-classes for a
stimulus word constitutes the MEANINGS category of the stimulus word.

Each table lists the MEANINGS meaning-classes for a stimulus
word. The different meaning-expressions within a meaning-class
are separated by commas and are given exactly as the subjects wrote
them, except that punctuation and spelling may have been changed to
conform to ordinary English usage, an article "a", "an", or "the"
may have been added to the meaning-expressions which refer to nouns,
and meaning-expressions which are verbs or verb phrases are always
given in the infinitive form. The meaning-expressions listed in a
meaning-class are not exhaustive; there may be other meaning-
expressions which belong to a meaning-class which are not listed.
An effort was made to select the most frequent or most representa-
tive examples of the meaning-expressions included in a meaning-
class, in order to prevent the repetition of meaning-expressions
which are trivially different and to prevent the tables from be-
coming impossibly long. The table also lists, for each meaning-
class, the number of subjects listing as their meaning-response

one or more of the meaning-expressions in that meaning-class
($\underline{F}$) and the number of subjects who listed as their first meaning-
response one of the meaning-expressions in that meaning-class
($\underline{F(1st)}$).

CONFUSIONS

The second category of meaning-expressions listed in the
tables is CONFUSIONS. A CONFUSION occurred when the subject mis-
took the spelling of the stimulus word to be that of another word,
usually a word which has a similar or identical pronunciation.
Thus, the meaning-expression "a milk bag" for UTTER is a CONFUSION
for the word udder. Generally, a subject who had as one or more
of his meaning-responses meaning-expressions which were CONFUSIONS
listed the CONFUSIONS in addition to one or more meaning-responses
which were MEANINGS meaning-expressions. CONFUSIONS meaning-
expressions were grouped into meaning-classes and tabulated in the
same way as MEANINGS meaning-expressions, and the interpretation
of $\underline{F}$ and $\underline{F(1st)}$ is the same for CONFUSIONS meaning-classes as it
is for MEANINGS meaning-classes.

MISTAKES

MISTAKES occurred when the subject misread the stimulus word
as a completely different word and listed meanings-responses for
that word rather than for the stimulus word. For example, four
subjects misread MIGHT as RIGHT and listed meaning-responses for
RIGHT, and one subject misread MIGHT as MIDGET and listed meaning-
responses for MIDGET. By definition, subjects whose meaning-
responses were classified as MISTAKES meaning-expressions never
listed as meaning-responses meaning-expressions which could be

MEANINGS or CONFUSIONS meaning-expressions for the stimulus word. The meaning-expressions for MISTAKES were not grouped into meaning-classes as were the meaning-expressions for MEANINGS and CONFUSIONS. Instead, an entry in the table merely states the fact that the stimulus word was mistaken to be some other word, specifies what that word was, and gives the number of subjects (F) who mis-read the stimulus word to be that other word. F(1st) has the same interpretation as F for MISTAKES.

ASSOCIATES

An ASSOCIATE occurred when a meaning-expression could not be classified as a MEANING, a CONFUSION, or a MISTAKE. This meaning-expression was usually a word or a phrase related to the stimulus word but not a meaning of it. Thus, "contact lense" was an ASSOCIATE of VISION and "chipped" was an ASSOCIATE of BASIN. ASSOCIATES were deleted from the analysis and are not listed in the tables.

BLANKS

The fifth category, BLANKS, occurred 1) when a subject listed no meaning-responses to a stimulus word, 2) when a subject listed no meaning-responses which could be classified as MEANINGS, CONFUSIONS or MISTAKES meaning-expressions - i.e. he listed only ASSOCIATES, or 3) when a word page was inadvertantly omitted or was otherwise miss-ing from a subject's word set. F indicates the number of subjects whose word page for a stimulus word was BLANK. F(1st) has the same interpretation as F for BLANKS.

The MEANINGS, CONFUSIONS, MISTAKES, and BLANKS for each

stimulus word are listed in a separate table. The tables for the

stimulus words are arranged in alphabetical order. Each table

indicates the number of subjects (n=96 or n=101) listing meaning-

responses for that stimulus word. As mentioned above, the meaning-

expressions in the meaning-classes for MEANINGS and CONFUSIONS are

given exactly as written by subjects. Any comments or clarifica-

tions by the authors are enclosed in square brackets. Some of

the more common clarifications occur:

1. when it is unclear whether the meaning-expressions in

    a MEANINGS or CONFUSIONS meaning-class refer to the

    noun form or to the verb form of a stimulus word which

    can be interpreted as either a noun or a verb

    example: ARCH - "to bend, to curve"

                   - "a bend, a curve"

                   - "bend, curve [noun or verb unspecified]"

2. when the meaning-expressions in a MEANINGS or CONFUSIONS

    meaning-class for a stimulus word which is an emotion do

    not specify the exact nature of the emotion but merely

    state "an emotion", or "a feeling"

    example: ANGER - "madness, being mad, ire, wrath,

                      fury, hostility"

                   - "an emotion [unspecified]"

3. when it may not be immediately apparent that the meaning-

    expressions in a MEANINGS or CONFUSIONS meaning-class refer

    to a slang usage of the stimulus word

    example: CRANK - "speed, heroin [slang]"

4. when the underlying denotation of a MEANINGS or
   CONFUSIONS meaning-class may not be immediately
   obvious

   example: ANXIETY - "nervousness, uneasiness, fear
                       apprehension, tenseness, uptightness,
                       worried anticipation [a negative emotion]"
                     - "anticipation, expectancy, anxiousness
                       [a neutral emotion]"
                     - "eagerness, longing, hopefulness [a
                       positive emotion]"

5. when a MEANINGS or CONFUSIONS meaning-class consists of
   many meaning-expressions which are definitions by example

   example: CAR - "an automobile, a vehicle, an auto, a motor
                   vehicle [and any specified make of car]"

6. as explanations of CONFUSIONS

   example: THREAD - "a tire surface [confusion with tread]"

7. as explanations of MISTAKES

   example: SOUL - "[word mistaken as SOUR]"

Within a category, the MEANINGS meaning-classes, CONFUSIONS
meaning-classes, or MISTAKES explanations are ordered from most
frequently to least frequently occurring meaning-classes or explana-
tions, that is, from highest to lowest F. If the Fs for two (or
more) meaning-classes are equal, the meaning-classes are listed in
order from highest to lowest $F(1st)$.

When the number of BLANKS for a stimulus word exceeds five,
an explanation is given in a footnote to the table of that
stimulus word.

References

Battig, W.F. Single-response free word associations for 300
    most frequent four-letter English words. Unpublished
    manuscript, 1964. (Available from the Department of Psychology,
    University of Colorado, Boulder, CO. 80309).

Battig, W.F., & Montague, W.E. Category norms for verbal items
    in 56 categories. Journal of Experimental Psychology Monograph
    Supplement, 1969, 80(3, Pt. 2).

Cartwright, D.S. Concreteness-abstractness of verbal stimuli: Is
    it a dimension? (Technical Report No. 70). Boulder: University
    of Colorado, Institute for the Study of Intellectual Behavior,
    November, 1977.

Cohen, B.H., Bousfield, W.A., & Whitmarsh, G.A. Cultural norms
    for verbal items in 43 categories. Technical Report No. 22,
    1957, University of Connecticut, Contract Nonr. 631(00),
    Office of Naval Research.

Gorman, A.M. Recognition memory for nouns as a function of
    abstractness and frequency. Journal of Experimental Psychology,
    1961, 61, 23-29.

Locascio, D., & Ley, R. Scaled-rated meaningfulness of 319 CVCVC
    words and paralogs previously assessed for associative
    reaction time. Journal of Verbal Learning and Verbal Behavior,
    1972, 11, 243-250.

Noble, C.E. An analysis of meaning. Psychological Review, 1952,
    59, 421-430.

Paivio, A., Yuille, J.D., & Madigan, S.A. Concreteness, imagery,
    and meaningfulness values for 925 nouns. Journal of
    Experimental Psychology Monograph Supplement, 1968, 76(3,Pt.2)

Palermo, D.S., & Jenkins, J.J. Word association norms: Grade
school through college. Minneapolis: University of
Minnesota Press, 1964.

Perfetti, C.A., Lindsey, R., & Garson, B. Association and
uncertainty: Norms of association to ambiguous words.
Pittsburgh, PA: University of Pittsburgh, Learning Research
and Development Center, 1971.

Postman, L., & Keppel, G. Norms of word association. New York:
Academic Press, 1970.

Shapiro, S.I., & Palermo, D.S. Conceptual organization and class
membership: Normative data for representatives of 100
categories. Psychonomic Monograph Supplements, 1970,
3(No. 11, Whole No. 43), 107-127.

Spreen, O., & Shulz, R.W. Parameters of abstraction, meaningfulness,
and pronunciability for 329 nouns. Journal of Verbal Learning
and Verbal Behavior, 1966, 5, 459-468.

Thorndike, E.L., & Lorge, I. The teacher's word book of 30,000
words. New York: Teachers College, Columbia University,1944.

Toglia, M.P., & Battig, W.F. Handbook of semantic word norms.
Hillsdale, N.J.: Lawrence Erlbaum Associates, 1978.

FOOTNOTES

COMPLETE TABLES

Listed on the following pages are the complete tables of meanings and meaning frequencies for the following 90 words:

ANGER	FELT	PARDON
ANXIETY	FILE	PASS
ARCH	FLOW	PASSION
ARROW	FLUSH	PENCIL
AUTOMOBILE	FUZZY	PILE
BASE	GRACE	PLOT
BASIN	HAIL	PRESENT
BEAR	HEEL	RAISE
BEING	IDEAL	REFINED
BELT	IN	ROLL
BOW	INTEREST	RULE
CAMEL	JOY	SERIES
CAPITAL	KEY	SHELL
CAR	KNOWLEDGE	SHOCK
CARDINAL	LEAD	SKIRT
CHANCE	LEGISLATION \	SLIP
COACH	LORD	SOUL
COLLAR	LOYALTY	STRAWBERRY
COTTON	MARRIAGE	SWALLOW
CRANK	MASS	TAIL
CUSTOM	MEMORY	THINNER
DEED	MICROSCOPE	THREAD
DEVOTION	MIGHT	TREE
DISASTER	MINE	TRUCK
DOUGH	MOLE	TRUMPET
DROP	MOOD	UTTER
DYNASTY	MORAL	VISION
EMERALD	OLIVE	WELL
EVEN	PAGE	WINDOW
FAULT	PALM	WRAP

ANGER

n=101

MEANINGS	F	F(1st)
madness, being mad, hatred, ire, wrath, fury, hostility	76	64
an emotion, a feeling [unspecified]	25	17
frustration	22	14
to get someone else angry, to make someone mad, to irritate, to enrage	13	2
to become angry	3	1
a name	3	0
CONFUSIONS		
airplane anger [confusion with airplane hanger]	1	0
clothes anger [confusion with clothes hanger]	1	0
MISTAKES	0	0
BLANKS	3	3

ANXIETY

n=101

	F	F(1st)
MEANINGS		
nervousness, uneasiness, fear, apprehension, tenseness, uptightness, worried anticipation [a negative emotion]	77	66
anticipation, expectancy, anxiousness [a neutral emotion]	15	6
an emotional state, an emotion, feelings [unspecified]	14	12
stress	7	6
eagerness, longing, hopefulness [a positive emotion]	7	2
a psychological term, a Freudian term	3	2
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS[a]	7	7

[a] The high number of BLANKS is due to the large number of subjects listing only associates and no meanings.

ARCH

<u>n</u>=101

	F	F(1st)
MEANINGS		
a part of the foot, the curve in one's foot	35	21
a building structure, an architectural term, a structure	26	14
a hallway, a gate, an archway, a tunnel [the notion of entryway]	26	14
a bent line, a rainbow shape, a shape like this ∩ , ⌒ , half of a circle, a half circle shape	22	13
to bend, to curve, to lean back	22	7
a part of a bridge, a bridge	13	4
the St. Louis Landmark, the Arc de Triomphe, a monument	10	6
a part of the back	8	2
most, top, highest (as in arch enemy)	6	1
bend, curve [noun or verb unspecified]	5	3
short for Archie, a name	5	2
a curved structure	5	2
a movement, a movement of the body	5	1
a curve, something curved, anything curved	4	1
a structural support, a support	4	1
to arch, to engage in archery	3	1
a natural formation, a rock formation	3	0
to describe an arched course	2	0
a part of a shoe	1	1
to raise an eyebrow	1	1

	F	F(1st)
MEANINGS		
a rainbow	1	1
a parachuting position	1	1
a part of the mouth	1	0
mean	1	0
a trajectory	1	0
CONFUSIONS		
a boat [confusion with ark]	2	1
MISTAKES	0	0
BLANKS	3	3

ARROW

n=96

	F	F(1st)
MEANINGS		
weaponry, a bow and arrow, a projectile, a hunting weapon, a spear	86	68
a directional symbol, a pointer, ↑ , an indicator	45	10
a car model	16	3
a shirt company	15	5
straight, be straight, straight as an arrow	13	5
a name, a dog's name	7	1
an arrowhead	4	3
a sorority symbol	3	0
a record label	1	0
a formation	1	0
an alcoholic beverage	1	0
a card game	1	0
CONFUSIONS		
a spice [confusion with arrowroot]	1	0
MISTAKES	0	0
BLANKS	1	1

AUTOMOBILE

$\underline{n}$=101

	F	F(1st)
MEANINGS		
something to drive, a vehicle, a car, a truck, a bus, a motor vehicle [and any specified make of car]	85	81
transportation, mode of transportation, method of transportation, means of transportation	42	19
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	1	1

BASE

$n=101$

MEANINGS	F	F(1st)
first base, a part of a baseball diamond, home plate [any reference to baseball]	60	24
the bottom of an object	32	22
a foundation, what something is built upon, a support	23	11
an army base, a military installation, military headquarters [military specified]	22	4
alkaline, not acid, opposite of acid, a solution	21	8
coarse, vulgar, crude, lowly, common, primitive	17	4
a pedestal, a stand, a platform	14	6
the beginning, where you begin, the starting point	14	1
a home office	10	5
a home base [unclear whether reference is to baseball or to a home office]	10	2
the main part, the main purpose, a basis	7	5
a station, an installation [military not specified]	4	1
a square root, a mathematical root	3	1
the main mixture	3	1
a mathematical term	3	0
a safe place	3	0
a triangle part, a geometric term	2	1
the amount of snow	2	1
the bottom of a column	1	1
a goal	1	0

	F	F(1st)
MEANINGS		
a baseboard	1	0
a name	1	0
a root word	1	0
CONFUSIONS		
a drum, a cello, a musical instrument, a guitar [confusion with bass]	10	3
the lower key in music [confusion with bass]	8	0
remedial [confusion with basic]	1	0
MISTAKES	0	0
BLANKS	0	0

BASIN

n=96

	F	F(1st)

MEANINGS

a washbowl, a washbasin, a tub, a sink, a waterbowl [a water container]	76	55
a geographical feature, a bowl like valley, a dried lake, a lowland	61	16
a bowl, a container	23	15
a pool, an enclosed water area, a lake, a launch [an aquatic geographical feature]	16	3
a hollowed area, a depression [not specifically geographical]	10	3
a ski resort	9	1
Basin Street New Orleans, Basin Street Blues	4	0
basin tub and tile cleaner, tub and tile	2	1
a bird bath	1	0

CONFUSIONS

a musical instrument [confusion with bassoon]	1	1

MISTAKES   0   0

BLANKS   1   1

BEAR

$\underline{n}=101$

	F	F(1st)
MEANINGS		
an animal, a furry animal, a polar bear, ursa [and any specified type of bear]	98	86
to put up with, to tolerate, to stand, to withstand, to endure	28	4
to support, to carry, to hold	20	4
a grouch, a grump, a mean person	9	1
something that is hard to do, a difficult task	4	1
a name, a nickname	3	0
to put pressure on, to bear down	2	0
a kind of hug	2	0
to have, to possess	2	0
a team name	2	0
to act oppressively, to be overbearing	1	0
to have children	1	0
a drink	1	0
a toy	1	0
a rug	1	0
to produce	1	0
to give	1	0
to give as testimony, to tell a lie	1	0
someone who is big	1	0
CONFUSIONS		
naked, nude [confusion with bare]	18	4

	F	F(1st)
MEANINGS		
to lay bare, to uncover [confusion with bare]	1	0
MISTAKES	0	0
BLANKS	1	1

BEING

$\underline{n}$=96

	F	F(1st)
MEANINGS		
existing, existence, living, surviving	69	39
a person, a human being [human]	55	31
the verb form of be, is, a present tense	31	4
a creature, something that lives or exists [human not specified]	30	6
the self, the soul, the spirit	11	9
God	9	5
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	2	2

BELT

n=101

MEANINGS	F	F(1st)
something to hold up pants, an article of clothing, goes around the waist, tightens dresses and skirts, suspenders	94	62
to hit, to slug, to punch, to spank, to hit someone, to strike	52	14
a drink, a shot of whiskey, a drink of liquor, a stiff drink	29	2
a zone, an area, a geographical area, a region, the corn belt, the green belt	21	4
hit, punch, slug [unspecified noun or verb]	13	5
a drive part, goes with a pulley, a fan belt	11	4
a hit, a punch, a hard blow	8	2
to drink, to drink whiskey	5	1
drink [unspecified noun or verb]	5	0
a conveyor belt, something used to send packages up a ramp	5	0
a seat belt	3	2
a strap, a strip	3	2
anything which encircles	3	1
a karate level	2	1
a name	1	0
to fasten	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	1	1

BOW

$\underline{n}=96$

	F	F(1st)
MEANINGS		
a bow and arrow, a weapon	66	37
a ribbon, a hair ribbon, a package ribbon	36	14
to bend down at the waist, to curtsey	32	11
the front of a ship, a part of a boat	23	3
a bow tie, a necktie	17	5
curtsey [unspecified noun or verb]	16	7
a curtsey, a formal gesture, a gesture of respect, a man's greeting	15	7
bow-wow, a dog's bark	11	3
to bend	8	3
a part of a musical instrument	7	1
a bow knot	3	1
a bend, an arc	3	1
bend [unspecified noun or verb]	1	1
CONFUSIONS		
a boyfriend [confusion with beau]	3	0
a branch [confusion with bough]	2	1
a boy's name [confusion with Beau]	1	0
MISTAKES		
[word mistaken as ROW]	1	1
BLANKS	0	0

CAMEL

$\underline{n}$=101

MEANINGS	$\underline{F}$	$\underline{F(1st)}$
an animal, a humped animal, a desert animal, a dromedary	100	86
a cigarette brand	75	13
a tan color, a color, beige	23	1
a soft material, a material used for coats	5	0
a group's name	2	0
a World War I plane	1	0
a name	1	0
a paintbrush	1	0
a skiing or iceskating maneuver	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	1	1

CAPITAL

n=101

	F	F(1st)
MEANINGS		
money, money accumulated, money free to use, money for investments, income	55	33
a city, the main city, the main city of a state, the main city of a country [city specified]	49	21
capital letters, large letters, upper case letters	47	18
the government, an important place for leaders, the political area of a state, the seat of government [government specified]	26	8
the head of a state, the primary area of a state [neither city nor government specified]	20	8
gains and losses, gathered goods, possessions, property	10	2
good, excellent	10	2
important, central, primary	10	0
capital punishment, punishment	4	1
the center of importance	3	3
the capitalistic system	2	0
an architectural term	1	0
CONFUSIONS		
a building [confusion with capitol]	19	5
MISTAKES	0	0
BLANKS	0	0

CAR

$n=96$

	F	F(1st)
MEANINGS		
an automobile, a vehicle, an auto, a motor vehicle [and any specified make of car]	89	88
transportation, means of transportation	44	8
a train unit	13	0
a toy	6	0
a part of a ride at the carnival	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	0	0

CARDINAL

n=96

	F	F(1st)
MEANINGS		
a bird, a red bird	84	50
a religious official, a religious office, a priest, a Catholic official, a Catholic office, a Catholic priest, a religious ruler [reference to "Catholic" or to "religious"]	77	28
a baseball team, a football team, a team name	45	7
a color, red	24	3
primary, chief, important, principal, first	14	3
a cardinal sin	14	1
the cardinal numbers, a mathematical term	13	2
the cardinal rule	12	1
a flower	1	1
a name	1	0
the points of the horizon	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	0	0

CHANCE

n=96

	F	F(1st)
MEANINGS		
an opportunity, a try	41	26
a gamble, a risk, a guess, a dare, a bet	40	18
fate, luck, fortune	34	14
a happening, a coincidence, a circumstance, a random event, an uncertain event	17	10
probability, odds, percentage, likelihood	17	9
possibility, maybe, could be	12	4
to try something, to take a risk, to "chance it"	10	3
a name	7	2
a game	6	1
a Monopoly card	5	4
a lottery ticket, a raffle ticket	3	1
a cigarette brand	1	0
to come upon, to find	1	0
a music group	1	0
CONFUSIONS		
[confusion with change]	5	2
MISTAKES	0	0
BLANKS	2	2

COACH

$\underline{n}$=96

	F	F(1st)
MEANINGS		
an instructor in a sport, a sports teacher, a supervisor in sports or athletics, the leader of an athletic team, a teacher of athletics [reference to sports]	50	42
a carriage, a buggy, a stage, a horsedrawn vehicle, a conveyance, a wagon, a vehicle, an Old West vehicle	50	15
to help, to instruct, to advise, to guide, to teach, to encourage [no reference to sports]	42	13
a tutor, a helper, a supervisor, a leader, a teacher, an advisor, a manager [no reference to sports]	26	15
a type of plane fare, an airplane fare, second class, certain seats on an airline	18	4
to train an athletic team, to lead a team, to guide a team, to teach a team [reference to sports]	11	2
a nickname for an instructor	3	1
a name for a bus	2	1
a type of shoe	1	0
CONFUSIONS		
a sofa [confusion with couch]	2	2
MISTAKES	0	0
BLANKS	1	1

COLLAR

$n=101$

	F	F(1st)
MEANINGS		
a shirt collar, a coat collar, a part of a shirt	78	53
a dog collar, an animal collar	45	21
to grab, to arrest, to catch, to capture	31	8
anything that circles the neck	10	4
the status of a worker, blue collar, white collar	9	3
a necklace	5	3
a preacher's collar, a priest's collar	5	2
an edge, a rim	4	0
a restraint	3	2
to put a collar on	3	0
a machine collar, a tool collar	3	0
to encircle, to surround, to go around	3	0
a binding, something that goes around	2	1
an arrest	2	1
to hit	2	1
a chemistry instrument	1	0
CONFUSIONS		
a disease [confusion with cholera]	2	0
greens [confusion with collards]	1	0
MISTAKES	0	0
BLANKS	2	2

COTTON

n=96

MEANINGS	F	F(1st)
a fabric, a cloth, a material, a clothing fiber, a material for making clothes, a material for making shirts	74	40
a plant	43	21
a ball of cotton, a fluffy white ball, a cosmetic puff	26	15
a cotton boll, a soft ball picked from a plant, a seed ball	11	8
to like, to be in harmony with	11	3
a fiber	8	4
a name, a last name, an animal's name	8	2
candy	5	0
a swab	4	2
a feeling in your mouth, a dryness of the mouth	3	1
a tree	2	0
cottonmouth [unclear whether reference is to mouth dryness or to a snake]	2	0
a kind of oil	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	0	0

CRANK

n=101

	F	F(1st)
MEANINGS		
to turn something, to wind, to turn a handle	68	41
a crabby person, a mean person, a grump, someone in a bad mood	65	25
something to turn, a handle, a shaft, a tool, a lever	41	19
to start up (as a car or engine)	14	4
a part of a car machinery, a part of a machine	9	5
a crank call, a prank call	8	1
an eccentric, a fool, a crazy person	5	3
a prank, a joke	5	0
speed, heroin [slang]	4	1
fake, phony, false	4	1
a noise	3	0
to shift	1	0
a penis [slang]	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	1	1

CUSTOM

n=101

	F	F(1st)
MEANINGS		
a tradition, the ways of society, a ritual, norms, social ways of behaving, cultural practices [reference to a cultural or societal way of doing things]	85	67
individually made, custom made, personally made, made to order, made to individual specifications	36	9
a baggage check, a check when entering another country	22	5
a habit, an individual's way of doing something [reference to a personal way of doing things]	15	11
customary, what's usual, something always done, everyday things, a usual way of doing something [cultural or personal way of doing things not specified]	7	7
short for customers	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	2	2

DEED

n=96

	F	F(1st)
MEANINGS		
a property title, a writ of ownership, proof of ownership, a lease, a mortgage, a land title, a will [document of property ownership implied]	69	45
an action, something that is done, an event, an act	51	27
a good action, a favor, a kind act	46	15
a legal document, a contract, an agreement [document, ownership of property not implied]	17	8
a bad action	4	0
a last name	2	1
to give title to property	2	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	0	0

DEVOTION

$\underline{n}=101$

	F	F(1st)
MEANINGS		
fidelity, faithfulness, dedication, zeal, allegiance, commitment [notion of loyalty]	76	73
love, adoration, affection [notion of love]	35	12
worship, prayers, religious rites [religious]	23	9
a song by Earth Wind and Fire	3	3
a perfume name	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	4	4

DISASTER

$n=101$

	F	F(1st)
MEANINGS		
a calamity, annihilation, a catastrophe, a terrible happening, a cataclysm, a holocaust, a tragedy, a misfortune, a crisis	94	94
an emotional disturbance, emotional distress, trauma	7	2
a mistake	2	1
the failing of an enterprise	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	4	4

DOUGH

$n=101$

	F	F(1st)
MEANINGS		
batter, unbaked bread or cookies, a water and flour mixture, stuff that turns into bread when cooked	99	70
money, cash	79	28
something like dough, clay, a gooey substance	7	0
a doughboy	4	1
a name	1	1
fat	1	0
the color of a pale person	1	0
CONFUSIONS		
a musical note [confusion with do]	1	0
MISTAKES		
[word mistaken as TOUGH]	1	1
BLANKS	0	0

DROP

n=101

MEANINGS	F	F(1st)
to let fall, to let go, to let down	80	63
a water drop, a piece of rain or water, a rain drop, a tear drop, a bit of liquid, a dribble	44	14
to leave off, to quit, to drop a class, to get rid of a class	23	4
fall, slip [unspecified noun or verb]	12	8
a small amount	11	1
to fall	10	4
to get rid of, to dispose of	5	0
candy	4	0
a measure, an amount	3	1
drip [unspecified noun or verb]	3	1
to break up a relationship	3	0
to forget	2	2
eye medicine	2	0
a drop off, a cliff	2	0
a book drop	1	0
licorice in Dutch	1	0
a fall	1	0
to land	1	0
to leave	1	0
to go below	1	0

	F	F(1st)
MEANINGS		
a kind of kick	1	0
something that falls	1	0
a dropcloth	1	0
to drop the subject	1	0
a cookie	1	0
to drop dead	1	0
a difference in height	1	0
decline in performance [unspecified noun or verb]	1	0
a lowering	1	0
to write (as in "drop a line")	1	0
the background of a set	1	0
a necklace	1	0
a con man's term	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	3	3

DYNASTY

$\underline{n}=96$

	F	F(1st)
MEANINGS		
a ruling family, a long lasting rule [reference to family]	34	30
empire, rulers, kingdom [no reference to family]	34	28
sovereignty, regime, power, supremacy [no reference to family or to government]	25	11
an era, the period of a rule, a time period [a time span]	21	17
Ming Dynasty	13	5
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	5	5

EMERALD

$\underline{n}$=96

	F	F(1st)
MEANINGS		
a stone, a jewel, a rock, a gem, a green gem	91	77
a color, a green color, green	65	10
Emerald City (in The Wizard of Oz)	24	5
a name, a girl's name	8	1
a bay in North Lake Tahoe, Emerald Sea, Emerald Pool in Yellowstone, a lake in Canada[aname of an aquatic geographical feature]	6	1
the Emerald Isle, Ireland	2	0
a perfume name	1	0
a cutting form for precious stones	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	2	2

EVEN

n=101

	F	F(1st)
MEANINGS		
equal, even-steven, same	62	35
the opposite of odd, divisible by 2, 2 4 6 8... numbers, multiples of 2	52	35
level, balanced, flush	25	6
fair	10	5
not jagged, straight, smooth	10	2
a tied score	9	3
also, too, including	9	1
to get even, revenge	8	2
although, though, except, however	8	1
a word indicating more validity, an intensive, even if, moreover, just as if, in spite of	8	0
to make flat, to make even, to balance	5	2
straight	4	2
parallel	4	2
not in debt	3	1
an adverb	3	0
still	2	1
maybe	2	0
square	1	1
to make equal	1	0
a name	1	0
night	1	0

	35T	
	$\underline{F}$	$\underline{F(1st)}$
MEANINGS		
symmetrical	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	2	2

FAULT

$\underline{n}=96$

	F	F(1st)
MEANINGS		
an earthquake area, a crack in the earth, uneven rocks, a fracture, a rock fault, a crevice	67	36
a mistake, responsibility, the cause of wrong doing, a failure, an error, negligence	64	37
blame [unspecified noun or verb]	25	12
a tennis error, a foul, a tennis term	20	4
a weakness, a failing, a wrongness, a bad point, a defect, an undesirable trait, an imperfection	19	3
to blame	10	4
a bad spot in material	2	0
to err	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	0	0

FELT

$\underline{n}=96$

	F	F(1st)
MEANINGS		
a material, a fabric	80	55
the past tense of feel, have feeled	39	12
touched	32	20
emotions, feelings, sensations, experienced emotion	29	7
a sexual pass	3	0
roofing paper	1	0
CONFUSIONS	0	0
MISTAKES		
[word mistaken as FOOT]	1	1
BLANKS	1	1

FILE

n=96

	F	F(1st)
MEANINGS		
to put in order, to arrange, to categorize	50	27
a tool, a smoothing tool, a nail file, a wood file	50	20
a cabinet, a container for documents, a cabinet with papers in it, a place to store material	45	26
to trim down, to smooth, to sand	25	4
records, a group of papers, a group of documents	19	3
a row, a line	17	3
an ordering arrangement, a means to categorize items, an index	10	5
to move in a line, to file out	8	1
a folder, an envelope	6	3
a deck of cards [computer science term]	3	1
to put in a request (as in "to file for a divorce")	3	0
a computer file	1	1
on file for reference	1	1
to degrade	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	1	1

FLOW

n=96

MEANINGS	F	F(1st)
to run smoothly, to glide easily, to slide smoothly, to run smoothly, to stream forth [no reference to water]	34	29
a rush of liquid, a river's movement, a movement of liquid, a rush of water, a stream of water, running water [reference to water]	21	15
to move liquid, to make water run, to gush water	14	9
a river	12	8
a movement, a motion	8	1
stream, gush, trickle [unspecified noun or verb]	7	6
the direction, the direction things are going, the way motion is going	7	5
a continuous motion, continuity	7	5
a trend of mind, a state of mind, a mood	5	2
a stream	4	1
water running [unspecified noun or verb]	3	2
a diagram, a chart in computer programming	3	1
the stuff inside ski boots	3	1
energy movement, electron flow	3	1
a flow of words, a flow of thoughts	3	0
that which slides smoothly, a smooth rush of something	2	1
ebb and flow	2	1
let it flow, let it go	2	1

	F	F(1st)
MEANINGS		
the rate of streaming, speed	2	1
a movement of air	2	0
a natural progression	1	1
to flair out (as a flowing gown)	1	1
the mainstream of something	1	1
the movement of sound	1	0
the movement of a game	1	0
something making good sense	1	0
CONFUSIONS		
a name [confusion with Flo]	5	1
a type of ice [confusion with floe]	3	2
MISTAKES	0	0
BLANKS	0	0

FLUSH

n̲=96

	F̲	F(1st)
MEANINGS		
to wash out with a rush of liquid, to drain, to flush the toilet, to clean off, to dispose of, to rinse, to get rid of	82	48
a poker hand, a card hand, a royal flush	32	12
to blush, to turn red, to turn pink, to color	18	7
a red face, a blush	14	7
blush [unspecified noun or verb]	11	7
to expel, to cause to come out, to force out, to scare out, to hunt	11	4
immediately adjacent, right next to, together tightly, true-even	9	2
red, pink	7	2
pale	6	2
to be embarrassed	5	2
to be hot	2	0
to become pale	1	1
a nickname	1	1
to look ill	1	1
wealthy	1	0
to exterminate [slang expression]	1	0
to be angered	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	0	0

FUZZY

$\underline{n}$=96

	$\underline{F}$	F(1st)
MEANINGS		
furry, woolly, fluffy, hairy, soft, linty	79	58
not clear, blurry, unfocused, vague	44	23
fuzzy-wuzzy the bear, a bear's name	8	6
referring to a person's hair	6	2
a creature, a toy	4	2
a pet's name	3	0
CONFUSIONS		
the police [confusion with fuzz]	1	0
MISTAKES	0	0
BLANKS	5	5

GRACE

n=96

MEANINGS	F	F(1st)
a girl's name	62	35
a prayer, thanks, a prayer before meals	60	22
style, charm, poise, elegance, finesse, manners, smoothness [a personality quality]	42	12
physical grace, fluidity of movement, balance, not clumsy [a physical quality]	29	9
the favor of God, God's gift, God's blessing, a state of holiness	28	9
mercy, clemency, forgiveness, understanding, lenience, kindness	17	8
the period of time allowed for performance of an act or obligation	4	0
goodness, decency	3	1
a mythological personage	1	0
to honor	1	0
to enhance or decorate	1	0
the title of a religious person	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	0	0

HAIL

$n=101$

MEANINGS	F	F(1st)
frozen rain, ice balls, precipitation, ice, a weather form	89	55
to praise, to show respect, to worship, to honor, to pay homage, to cheer	51	21
salutation, greetings	22	8
to call out, to cry out	19	9
to flag down, to summon, to call a cab	11	1
to greet	5	3
Southern pronunciation of "hell"	2	0
song title	1	1
to precipitate hail, to rain ice	1	0
a lot of things coming down at once	1	0
CONFUSIONS		
Nathan Hail [confusion with Nathan Hale]	1	1
hearty [confusion with hale]	1	0
MISTAKES	0	0
BLANKS	2	2

HEEL

$n=101$

	F	F(1st)
MEANINGS		
a part of the foot, the end of a foot	74	54
a fool, a bad guy, a jerk, a fink, an undesirable character, a cad, a scoundrel, a creep	55	13
a dog following you closely, a dog walking at your heels, a dog sitting at your heels, a command to a dog	53	11
a part of a shoe, a part of a boot	41	19
the end of a loaf of bread	17	3
the back part, the base	5	0
to walk, to step	3	0
a part of the hand	1	0
CONFUSIONS		
to cure [confusion with heal]	3	0
MISTAKES	0	0
BLANKS	1	1

IDEAL

n=96

	F	F(lst)
MEANINGS		
perfect, preferred, best, just right, best possible, ultimate, utopian	79	57
a goal, a standard, something looked up to, a model, a mental notion of perfection, something strived for, an aspiration	38	17
a toy company, a trademark for toys	27	10
an idea, a thought, a belief	13	7
the name of a market, the name of supermarkets, a furniture store	9	5
a trademark, a brandname	6	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	0	0

IN

$\underline{n}=101$

	F	F (1st)
MEANINGS		
opposite of out, not out	48	40
denoting what's in fashion, in vogue, hip, with it, fashionable	35	7
indoors, inside a house [reference to entering a house or room]	29	21
inside, not outside	23	15
within, being in, contained	17	8
belonging, accepted by peers	7	3
a reference to a location, a certain space	4	2
a connection, an "in"	4	0
into	3	2
the in crowd	3	0
present	2	0
a reagent in chemistry [suffix]	1	1
internal	1	0
a prefix	1	0
an entrance	1	0
an opening	1	0
CONFUSIONS		
a hotel [confusion with inn]	4	0
MISTAKES	0	0
BLANKS	2	2

INTEREST

n=101

	F	F (1st)
MEANINGS		
money accrued, dividends, money compounded on account, the return on money	55	32
to fascinate, to care about, to intrigue, to excite, to like, to stimulate, to want to know about	40	24
something you like, something you desire to do, an attraction, a like, a liking, what you want or desire	26	17
curiosity, attention, wonderment	11	8
a hobby	8	5
interest, concern, like [unspecified noun or verb]	7	5
knowledge, a field of study	5	2
financial control	1	0
to make someone aware of	1	0
enthusiasm for	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS[a]	8	8

[a] The high number of BLANKS is due to the large number of subjects listing only associates and no meanings.

JOY

$n=96$

	F	F(1st)
MEANINGS		
happiness, gladness, ecstasy, elation	95	83
a girl's name, a name	69	12
a dish soap, a soap, a detergent, a dishwashing liquid	30	1
a perfume	2	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	0	0

KEY

n=96

	F	F(1st)
MEANINGS		
an instrument to unlock something, a device to unlock a lock, an object to open a door	89	68
a clue, a solution, an explanation, an answer	62	19
the answer sheet for an exam	12	2
important	11	1
a means of gaining entrance	9	3
the tonic part of the scale	6	1
a key for deciphering a map	4	0
to focus in on something	3	0
an index	2	1
a drug measure	2	0
a geographical term, an inlet	2	0
a magazine name	1	1
typewriter keys	1	0
to key in, to enter	1	0
a symbol	1	0
decipher code [unspecified noun or verb]	1	0
anything like a key	1	0
a key club	1	0
a part of a basketball court	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	0	0

KNOWLEDGE

n=96

MEANINGS	F	F(1st)
wisdom, understanding, experience, intelligence [a personal quality]	49	31
what is known, facts, information, concepts, facts known, truth, certainties, stored information, what a person knows [facts that are known]	42	35
knowing, to know something, learning, awareness, cognition, perception [a cognitive process]	31	18
know how, gaining new skills, common sense [competence in performance]	11	5
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS[a]	7	7

[a] The high number of BLANKS is due to the large number of subjects listing only associates and no meanings.

LEAD

$\underline{n}=101$

	F	F(lst)
MEANINGS		
to lead someone, to guide, to take charge, to demonstrate, opposite of to follow, to show the way	68	38
a metal, a mineral, an ore	56	28
a pencil lead, pencil graphite	37	17
an element	20	7
a heavy material, something that is heavy	17	3
the front	8	3
a bullet	4	2
the head of something, the leader	2	1
a protective shield	2	1
the starring role, a head role in a play	2	0
a weight	2	0
a leash or rope	1	1
a clue in a mystery	1	0
an example (as in "to take my lead")	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	0	0

LEGISLATION

$n=96$

	F	F(1st)
MEANINGS		
laws, rules, rulings, enforcements, amendments, decrees [decisions made]	49	32
the creation of laws, the passing of laws, deciding issues, legal decisions, enacting laws, the passage of laws, the making of laws, passing bills [the making of decisions]	44	33
bills, matters under consideration, suggestions of new modes of governing, issues, proposals [decisions to be made]	18	8
CONFUSIONS		
a governmental branch, a body of government, a group that writes laws, a body of rulers, government [confusion with legislature]	36	22
MISTAKES	0	0
BLANKS	1	1

LORD

$\underline{n}$=101

MEANINGS	F	F(1st)
God, Jesus, Krishna, a religious name	92	68
a nobleman, nobility, royalty	24	8
a king, a ruler	24	5
an expression, an exclamation, a curse word	15	1
a master, a superior	14	7
a feudal lord, a medieval rank, a medieval landowner	13	5
to rule over	6	0
a man of high rank, an important figure, a person with authority	5	3
a title	5	0
the keeper of the house in olden times, the master of the house, the head of the manor	3	2
a nickname, a name	3	1
a wealthy man	1	1
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	0	0

LOYALTY

n=101

	F	F(1st)
MEANINGS		
the quality of being loyal, the state of being loyal, devotion, dedication, obedience, faithfulness, allegiance, being true to someone, steadfastness	85	85
a tie	1	1
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS[a]	15	15

[a] The high number of BLANKS is due to the large number of subjects listing only associates and no meanings.

MARRIAGE

$\underline{n}=96$

	F	F(1st)
MEANINGS		
the joining of man and woman, wedlock, matrimony, the legal bond of man and wife, the legal relationship of man and wife, the commitment of man and wife [the joining of persons]	75	63
a union, a combination, a joining, a merger, a bond [the joining of, persons or things not specified]	24	12
a wedding, a wedding ceremony, a ceremony	12	5
the joining of two things, the unity of something, the joining of two objects, the connection between two things [the joining of things]	10	3
a sacrament	2	2
the integration of two concepts	1	0
symbiosis	1	0
the king and queen in pinochle	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS[a]	11	11

[a]The high number of BLANKS is due to the large number of subjects listing only associates and no meanings.

MASS

$\underline{n}$=101

	$\underline{F}$	F(1st)
MEANINGS		
a religious service, a church service, a ceremony, a Catholic ritual	76	37
a weight, the measurement of substance, a quantity of matter, a physics term [a quantity of material]	56	28
a great deal of, a great number, lots of, abundance, a bunch of, a lot of, a large amount [a quantity; people or material not specified]	34	12
a large crowd, a large number of people, a group of people [a quantity of people]	31	12
a group of things, a group of something, a group of objects	23	7
the abbreviation of Massachusetts	11	4
to come together	3	0
directed towards the body of people (as in mass media)	2	1
a part of a ship	2	0
the people or the workers	1	0
mass production	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	0	0

MEMORY

n=101

	F	F(1st)

MEANINGS

	F	F(1st)
recall, one's process of recalling, the ability to recall things, the system of storing information, the act of remembering, the part of the mind for remembering [a process or system for remembering]	85	64
a recollection, something that is remembered, a past event, a reminiscence, past thoughts [what is remembered]	40	25
remembrance, recollection [unclear whether reference is to what is remembered or to a process]	10	8
a part of a computer, a part of a calculator	8	0
a brand name	1	0
a game	1	0
in memory of	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	4	4

MICROSCOPE

n=101

	F	F(1st)
MEANINGS		
a device which magnifies small objects, a machine used to view small objects, a scientific instrument, a magnifier, a high power lens	94	94
CONFUSIONS		
very small, precise [confusion with microscopic]	9	1
MISTAKES	0	0
BLANKS[a]	6	6

[a]The high number of BLANKS is due to the large number of subjects listing only associates and no meanings.

MIGHT

$\underline{n}$=96

	F	F(1st)
MEANINGS		
strength, power, force	80	59
maybe, probability, possibility, could possibly, may, perhaps	76	25
CONFUSIONS	0	0
MISTAKES		
[word mistaken as RIGHT]	4	4
[word mistaken as MIDGET]	1	1
BLANKS[a]	7	7

[a]The high number of BLANKS is due to the large number of subjects listing only associates and no meanings.

MINE

$\underline{n}$=101

	F	F(1st)
MEANINGS		
that which belongs to me, expressing possession or ownership, not yours	84	60
a pit for excavating minerals, an excavation site, an ore deposit, a gold mine, a coal mine	55	16
to dig for minerals, to dig	15	9
a tunnel, a hole in the ground, a cave	13	5
an explosive, a bomb	9	0
CONFUSIONS		
a German word [confusion with mein]	1	0
MISTAKES	0	0
BLANKS[a]	11	11

[a]The high number of BLANKS is due to the large number of subjects listing only associates and no meanings.

MOLE

n=101

	F	F(1st)
MEANINGS		
an animal, a gopher, a burrowing animal, a rat, a rodent, a mouselike animal, a small mammal	88	48
a pigmentation of the skin, a freckle, a dark spot on the skin, a beauty mark, a birth mark, a wart	79	29
a chemical measure, a gram weight, Avogadro's number	27	12
a hermit, an introverted person	3	0
dark (as in "mole dark")	2	1
a club	1	0
an ugly person	1	0
a cartoon character	1	0
a bookworm	1	0
someone with poor eyesight	1	0
a type of hole	1	0
a nickname	1	0
a person with small eyes	1	0
someone who likes the dark	1	0
CONFUSIONS	0	0
MISTAKES		
[word mistaken as MOLD]	1	1
BLANKS [a]	10	10

[a] The high number of BLANKS is due to the large number of subjects listing only associates and no meanings.

MOOD

n=96

	F	F(1st)
MEANINGS		
a state of mind, emotion, feeling [any specified mood]	89	77
atmosphere, tone, setting	16	4
an attitude, a disposition	12	8
a temperament	7	4
a kind of music	3	1
the setting of a story	2	1
a grammatical tense	1	0
CONFUSIONS	0	0
MISTAKES		
[word mistaken as HOOD]	1	1
BLANKS	0	0

MORAL

n=101

	F	F(1st)
MEANINGS		
an idea accepted by society, ideas of right and wrong, values, ideology, standards of goodness, ethics, principles	63	48
ethical, straight, just, decent	32	19
a part of a story, the message of a story [reference to story]	22	11
a lesson to be learned, a meaning, a message, a lesson, a theme [no reference to story]	11	6
a name	5	0
morale	4	4
sexual inhibitions	1	1
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS[a]	12	12

[a]The high number of BLANKS is due to the large number of subjects listing only associates and no meanings.

OLIVE

n=101

MEANINGS	F	F(1st)
a food, a black or green food, a vegetable, a fruit, a black olive, a green olive, the fruit put in martinis	85	62
a color, green, a green color	47	19
a girl's name	21	2
Popeye's girl friend, a cartoon character	19	4
a tree	13	3
an oil	13	1
a complexion color	5	0
a branch	3	0
a peace symbol	2	0
a mountain	1	0
a street name	1	0
a city in Europe	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS[a]	10	10

[a]The high number of BLANKS is due to this word page not being included in some of the test booklets.

PAGE

<u>n</u>=101

MEANINGS	F	F(1st)
a book page, the leaves of a book, a piece of paper in a book, a part of a booklet to be written on or read	66	35
a piece of paper, paper to write on	64	43
to call, to summon	40	8
a medieval servant boy, a king's servant, a courtier	31	4
a guide, a delivery boy, a messenger, a Senate messenger	27	8
a name, a last name, a first name, a girl's name	14	3
to turn pages	5	0
a haircut	3	0
to mark or number	1	0
an event (as a page in history)	1	0
an announcement	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	0	0

PALM

n=96

	F	F(1st)
MEANINGS		
the hand, the inside of the hand, a part of the hand	87	49
a tree	76	43
a leaf, a branch, a frond	16	2
to steal	6	0
to place in the hand, to hold, to use one's hand, to carry	5	0
to conceal in the hand, to hide in the hand	5	0
the name of a garden, the name of a beach, Palm Springs	5	0
a basketball violation, holding a basketball	4	0
to get rid of	3	0
to slap	2	0
a name	2	0
to beg	2	0
to deal cards	2	0
to wave	1	0
CONFUSIONS	0	0
MISTAKES		
[word mistaken as PAIN]	1	1
BLANKS	1	1

PARDON

n=96

	F	F(1st)
MEANINGS		
to forgive, to exonerate, to release, to dismiss, to excuse	67	55
an apology, sorry, pardon me, excuse me, a polite expression, courtesy, said to excuse one's self	39	21
freedom from legal penalties, official release from guilt, amnesty, what Nixon got	27	8
to free from legal penalties, to let a criminal off the hook, to grant legal amnesty	12	8
reprieve, forgiveness, dismissal, dismissal of guilt	11	4
a French word	2	0
a name	2	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	0	0

PASS

$\underline{n}$=101

	F	F(1st)
MEANINGS		
to go by something, to move forward, to go ahead, to go on, to overtake	62	31
to not fail, to make the grade, to succeed on an exam	36	18
a mountain traverse, a mountain road, a road, a mountain crossing	32	15
to throw a ball, to throw, to throw something	20	4
a sexual advance, a sexual move	18	8
a paper indicating the right to travel past a point, a ticket, a passport, a paper giving rights	18	7
to hand over, to give to	17	6
to play in football, a football throw	10	5
to pass up, to forego, to not take, to skip, to waive, to not accept	8	1
to let go by	6	1
to ignore, to disregard, to pass over	5	0
throw [unspecified noun or verb]	3	1
to pass out [may or may not be "to faint"]	2	1
to neglect to take a turn	2	0
a throw	1	1
leave [unspecified noun or verb]	1	1
to die	1	0
a name	1	0
to get through	1	0

	F	F(1st)
MEANINGS		
movement past	1	0
to faint	1	0
a leave	1	0
to show partiality	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	1	1

PASSION

n=96

	F	F(1st)
MEANINGS		
love, strong feelings for another person [attraction to or a feeling for a person]	59	38
a strong feeling, an emotion, intensity of feeling [no reference to attraction or to a feeling for a person]	55	41
physical desire, physical attraction, sexual attraction, lust [physical or sexual feelings]	20	6
a desire [attraction, no reference to a feeling for a person]	9	3
the name of a plant, a flower	9	3
devotion to, involvement with, dedication, obsession with something	8	1
a religious play, an Easter pageant	6	1
the name of a fruit, a fruit	6	0
an outbreak of anger, hate	6	0
the sufferings of Christ	3	1
joy	2	1
a drink	2	0
pink, a color	2	0
a goal	1	0
a book title	1	0
CONFUSIONS		
kindness, gentleness [confusion with compassion]	2	1
MISTAKES	0	0
BLANKS	0	0

PENCIL

<u>n</u>=101

	<u>F</u>	<u>F</u>(1st)
MEANINGS		
something to write with, a writing utensil, a writing implement, a pen, a writing tool, any description of a pencil	96	94
to mark, to write in, to etch, to write, to sketch in, to write with a pencil	20	2
pencil-like, thin	4	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	5	5

PILE

$\underline{n}=96$

	F	F(1st)
MEANINGS		
a heap, a group, a lot of, a mound, a stack, a collection	75	60
to heap, to stack, to put on top of, to load	40	13
heap, group, stack [unspecified noun or verb]	10	8
piling, stakes, a beam, a post	8	2
a hemorrhoid, acne, a sore	6	2
a part of a carpet, the nap	6	2
to all jump on, to climb on	4	1
to crash, to plow into, to pile into	4	0
a nuclear reactor	2	2
fur, a coat lining	1	0
a name	1	0
CONFUSIONS		
Gomer Pile [confusion with Gomer Pyle]	9	2
MISTAKES	0	0
BLANKS	4	4

PLOT

n=96

	F	F(1st)
MEANINGS		
the theme of a novel, a story theme, the story line, a movie theme, the main action, the meaning	62	36
a piece of land, a tract of land	39	15
a grave, a cemetery piece of land, a burial ground	31	14
an action taken against something, a plan, a conspiracy, an attempt, a scheme, an idea, an evil plan	31	13
to connive, to plan, to scheme, to plan against, to devise	27	9
to make a map, to note, to mark points, to put in position on a graph, to graph, to draw, to set down	22	3
plan, scheme [unspecified noun or verb]	15	5
a garden patch, a grass patch	5	0
graph, chart, sketch [unspecified noun or verb]	5	0
a graph or map	1	1
to lay out an area	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	0	0

PRESENT

n=96

	F	F(1st)
MEANINGS		
a gift	84	51
here, be in attendance, being in a place, at	50	13
time now, now, right now, here and now	42	17
to give to, to award to	42	8
to show	11	2
to introduce, to announce	8	2
to give a report, to offer an idea, to speak on a subject	8	0
a tense	1	1
existing, being	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	2	2

RAISE

n=96

	F	F(1st)
MEANINGS		
to elevate, to make higher, to lift	88	67
more wages, an increase in salary, a pay hike	64	17
to bring up, to rear children	17	1
to increase prices, to increase rent	13	2
to leaven, to raise bread	8	1
to cultivate, to grow	7	2
to arouse from the dead	3	3
to get up out of bed, to awaken	3	0
to bring up a subject or mention	1	0
to get excited	1	0
to multiply	1	0
CONFUSIONS		
the sun, sunshine [confusion with rays]	3	0
to destroy [confusion with raze]	2	2
MISTAKES	0	0
BLANKS	1	1

REFINED

n=96

	F	F(1st)
MEANINGS		
cultivated, well mannered, cultured, gracious, dignified, sophisticated, mannerly, genteel, elegant	58	36
made pure, purified, impurities, removed, perfected, improved, made better, cleaned	47	35
processed, not in a raw state	13	8
polished, not rough, smoothed	12	5
fined again	6	1
more detailed, more specific, more precise, more exact	5	4
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS[a]	7	7

[a] The high number of BLANKS is due to the large number of subjects who listed only associates and no meanings.

ROLL

n=96

	F	F(1st)
MEANINGS		
bread, a bun, a pastry, a biscuit, a muffin, a croissant, a doughnut	74	54
to turn over and over, to make a circular motion, to spin, to turn, to somersault, to tumble, to rotate, to flip	65	29
a circular motion, a movement	10	0
fat, fat around the waist	7	2
a money word, a cylinder of coins or bills	7	0
material rolled up, paper rolled up	6	1
a somersault, a movement in gymnastics	6	1
a list of names, a roster	5	1
to fix a joint, to roll a cigarette	4	2
to make something flat, to flatten, to flatten pie crust	4	1
rock and roll music	4	1
a drum roll	4	1
to rob, to steal from	4	0
to push along	4	0
a rolling movement (as in throwing dice)	2	1
fall [unspecified noun or verb]	2	1
to wrap, to fold	2	0
to make into a cylinder	2	0
to make circular, to make round	2	0

	F	F(1st)
MEANINGS		
to laugh	1	0
something round	1	0
a hairdo	1	0
progressing or going well	1	0
a sexual term	1	0
a game	1	0
to roll film	1	0
to crash a car	1	0
CONFUSIONS		
a part in a play [confusion with role]	2	0
MISTAKES	0	0
BLANKS	1	1

RULE

n=101

	F	F(1st)
MEANINGS		
a law, a policy, a regulation, a code [a formalized rule]	63	41
to govern, to control, to dictate, to command, to lead	46	14
an instrument of measure, a rule, a yardstick, something used to measure	36	12
something to be followed, something to obey	21	18
a rule of thumb, a guideline, directions, a standard	15	7
to decide, to judge, to make a judgement	9	3
how to play a game, directions to a game	3	2
a slide rule	3	1
the reign of a king	3	0
to put lines on, to rule paper	3	0
a line	2	1
line [unspecified noun or verb]	1	1
a theorem	1	0
power over others	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	1	1

SERIES

$\underline{n}$=101

	F	F(1st)
MEANINGS		
a sequence, an ordered sequence, an order, one thing following another, one after another in sequence, a relationship in succession, a progression	81	56
the world series, baseball games, baseball playoffs, a set of games	61	29
a television show, a number of shows on some topic, soap operas	28	6
progressive numbers, numbers, numbers having a pattern	7	5
a book series, a magazine series	7	3
an electrical circuit	5	2
a money series	2	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	0	0

SHELL

n=96

	F	F(1st)
MEANINGS		
the shell of an animal, a sea shell, an animal covering, the covering of sea animals, a tortoise shell	77	60
an oil company, a gas company, an oil trademark, a gas trademark, a gas station	40	14
an encasing, a case, an outer covering, protection, a protective covering	29	14
to take off the shell, to take off the skin, to peel, to crack open, to remove the hard covering from something	8	2
to give out, to shell out	8	1
an impersonal attitude, hiding one's self, being shy	8	0
ammunition, the casing for ammunition, a bullet shell	7	2
a nut shell, a peanut covering	7	0
egg shell	5	0
to bombard, to bomb	5	0
a blouse, a sweater	4	0
macaroni, a food	3	0
a name, a nickname	3	0
a weapon	2	0
to clean off, to husk	2	0
a camper shell	2	0
a shelter	2	0
a part of a house, the framework of a house	2	0
an atomic theory	1	1
to scoop	1	1

	F	F(1st)
MEANINGS		
a band shell	1	0
a boat	1	0
one's body	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	1	1

SHOCK

<u>n</u>=101

	F	F(1st)
MEANINGS		
an electrical shock, voltage, electricity, a current	69	31
medical symptoms, a physiological state, a medical state, a body condition	24	13
surprise [unspecified noun or verb]	17	10
a surprise, something unexpected, an unexpected happening	11	4
an emotional state	11	3
to scare	10	5
surprise, amazement, response to an unexpected event	10	5
to surprise, to amaze, to startle	10	2
shock absorbers, a part of a car	8	3
to electrocute	4	2
shock treatment	4	2
scare [unspecified noun or verb]	4	1
a trauma	4	1
disbelief	3	3
fright	3	3
to horrify, to appall	3	0
a shock of hair	3	0
a stimulus	2	2
a stun	2	2
hurt [unspecified noun or verb]	2	1

| | 85T | |
	F	F(1st)
MEANINGS		
future shock, culture shock	2	1
a scare	2	0
to stun	2	0
to give hurt to	2	0
a tremor, an earthquake	2	0
fear [unspecified nour or verb]	1	1
extreme fear [noun]	1	1
stun [unspecified noun or verb]	1	1
shock troops	1	1
a shock wave	1	1
a bunch of cornstalks	1	0
a jolt	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	2	2

SKIRT

$\underline{n}$=101

	F	F(1st)
MEANINGS		
a dress, clothing, an article worn by a girl, a woman's garment, a half-dress	100	90
to go around, to walk around, to go close to but around, to go around the edges, to skim around the edges	29	3
to avoid, to avoid an issue	24	5
the material covering something, the skirt of a tablecloth, a bed skirt, a Christmas tree skirt	16	0
tank skirts, car skirts, car molding, machine skirt, an equipment cover	6	0
the outside of something, the outer edge	5	0
to move quickly, to jump along, to scoot along	3	2
to border on	1	0
outskirts	1	0
to wrap around	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	1	1

SLIP

n=96

	F	F(1st)
MEANINGS		
an undergarment, clothing, lingerie, a petticoat	77	38
to fall, to trip, to stumble, to lose your footing	53	21
a piece of paper	45	8
fall [unspecified noun or verb]	22	16
to slice	21	6
a mistake	11	2
to say something inadvertently, to let out secrets	9	1
to make a mistake, to goof	8	0
a clumsy move, a fall, a loss of balance	5	3
something said inadvertently	5	1
to depart secretly, to break off	5	0
a piece of something	3	0
to give to secretly	3	0
to insert	2	0
to do poorly	2	0
a geological feature	2	0
to get by	1	0
to give someone the slip	1	0
a place where you put a boat	1	0
liquid clay	1	0

MEANINGS	F	$F(1st)$
to put on	1	0
referring to smallness	1	0
a receipt	1	0
an acrobatic movement	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	0	0

SOUL

n=101

	F	F(1st)
MEANINGS		
the spirit, the mind, the essence, being, the inner self, the inner being	93	70
soul music, black music, a type of music	39	12
black feeling, black awareness, related to blacks and black culture	22	5
soul food, food	14	3
depth of feeling	8	1
soul brother	5	1
a together feeling	4	1
rhythm, black rhythm	3	1
dancing	3	1
the base of something	1	0
CONFUSIONS		
a shoe part [confusion with sole]	8	2
a type of fish [confusion with sole]	4	1
the bottom of the foot [confusion with sole]	4	1
the capital of Korea [confusion with Seoul]	1	0
single [confusion with sole]	1	0
MISTAKES		
[word mistaken as SOUR]	1	1
BLANKS	1	1

STRAWBERRY

n=101

MEANINGS	F	F(1st)
a fruit, a berry, a food	94	83
a color, reddish-pink	42	10
a scent, a fragrance, a smell	20	1
a flavor, a taste, a flavoring	20	1
a burn on the skin, a scrape, a cut, a bruise	14	0
a complexion, a haircolor, blond	5	0
a birthmark	4	1
a perfume	4	0
a name	3	0
a plant	1	1
a lipstick	1	0
a record store	1	0
a type of horse - strawberry roan	1	0
CONFUSIONS		
a buzz, an insult [confusion with raspberry]	2	0
MISTAKES	0	0
BLANKS	4	4

SWALLOW

$\underline{n}=101$

	F	F (1st)
MEANINGS		
a bird	77	46
to eat, to digest, to chew, to gulp, to drink, to go through the throat, to ingest	61	33
gulp, drink [unspecified noun or verb]	31	17
a gulp, a drink	9	1
to be taken in, to believe	5	1
to engulf	4	1
to accept, to handle	4	0
to swallow one's pride	2	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	2	2

TAIL

n=96

MEANINGS	F	F (1st)
the back part of an animal, a long hairy appendage, a fifth appendage	85	60
the end of something, the back end, the rear end	44	16
to follow, to trail, to track	25	6
the backside, the ass, the butt	8	4
the back of a coin, a side of a coin	7	2
a kite tail	7	1
the last	5	1
the tail gate, the end gate, the end of a truck, the end of a car	4	2
a part of a plane	4	1
a tuxedo, a suit	3	0
a following car	1	0
slang for a girl	1	0
a tail wind	1	0
to taper off	1	0
CONFUSIONS		
a story [confusion with tale]	4	0
MISTAKES		
[word mistaken as TALL]	2	2
BLANKS	1	1

THINNER

n=101

MEANINGS	F	F(1st)
not as fat, slimmer, skinnier, not wide, narrow, not fatter	80	62
paint thinner, a dilutant, turpentine	68	27
not thick, diluted, made less in consistency	15	6
more thin [unclear whether this is "not fat" or "not thick"]	5	2
a name	2	1
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	3	3

THREAD

n=96

MEANINGS	F	F(1st)
a thin string, a material to sew with, a string to sew with, yarn, a filament, a thin cord, a fiber, a ribbon, a material used with a needle	93	80
to pass through a tube, to thread a needle, to work through a hole	35	7
to make one's way through, to wind through, to wind one's way through, to move through a crowd	11	3
clothes [slang]	9	2
a line of connectors, small connectors, a tiny part of something	8	0
the grooves on a screw, a groove in a bolt	5	0
to intersperse, to weave through	5	0
a small amount	3	1
something threadlike or hairlike	2	1
to throw a difficult pass in football	2	0
extending in time	1	0
a small clue	1	0
CONFUSIONS	2	1
a tire surface [confusion with tread]		
MISTAKES	0	0
BLANKS	1	1

TREE

n=96

MEANINGS	F	F(lst)
a plant, a shrub, wood [and any specified kind of tree]	94	91
a geneological chart, family descendents	10	1
a shoe tree, a hat rack, a rack [a rack]	7	1
to trap in a tree, to chase into a tree	5	1
a graph, a diagram	4	0
a name	1	0
a Biblical reference to the Cross	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	2	2

TRUCK

<u>n</u>=96

MEANINGS	<u>F</u>	F(1st)
a vehicle, a big vehicle, an automobile, a car, a pickup [and any specified make of truck]	85	70
to move, to move on, to keep going, to leave	37	6
to walk, to walk jauntily, to strut	22	4
to move, to carry, to haul an item, to cart	22	4
transportation, mode of transportation	13	6
a hauling device, a cart	8	2
a large person, a strong person	6	0
to take care of business, to deal	4	1
a part of a skateboard	3	0
a truck farm	2	0
to have a good time	1	1
to dance	1	0
a name	1	0
to move via a truck	1	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	2	2

TRUMPET

$n=101$

MEANINGS	F	F(1st)
an instrument, a musical instrument, a horn, a cornet, a bugle	94	93
an elephant's call, a swan's call	14	0
to blast, to blare, to sound off, to bellow loudly, to make a loud noise	13	2
a call, a yell, a noise made	8	0
to make an announcement, to pronounce	6	0
a kind of swan	3	0
a big nose	2	0
a device to detect sound, a hearing device	2	0
a bugler	1	1
the noise that a trumpet makes	1	0
to make a big deal about something	1	0
a blossom	1	0
to make a noise like a trumpet	1	0
to sing	1	0
to use a trumpet	1	0
a fish species	1	0
CONFUSIONS		
a bridge term [confusion with trump]	1	0
MISTAKES	0	0
BLANKS	5	5

UTTER

n=96

MEANINGS	F	F(1st)
to speak, to whisper, to say suddenly, to mumble, to mention	91	81
complete, absolute, total, the ultimate, sheer	35	7
CONFUSIONS		
a part of a cow, a milk bag [confusion with udder]	18	7
MISTAKES		
[word mistaken as OTTER]	1	1
BLANKS	0	0

VISION

$\underline{n}=101$

	F	F(1st)
MEANINGS		
sight, the ability to see, eyesight, perception through the eyes, a sense	95	81
a premonition, a sight of the future, a prophecy, a clairvoyant prediction	22	4
seen in the imagination, seen in the mind	15	4
a spiritual experience, a spiritual image, a miracle, a religious experience	13	3
a hallucination, an apparition, an illusion	12	1
a sight, an image, a perception	10	4
insight, understanding	10	1
a dream	10	0
enlightenment, revelation, truth	8	2
something beautiful or astounding to see	2	0
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	1	1

WELL

$\underline{n}=96$

MEANINGS	F	F(1st)
a water well, a water source, a drinking hole, a deep pit usually for water, a hole in the ground for water, a reservoir for water, a hole where water is found [reference to water]	79	40
healthy, feel well, opposite of ill	55	18
expression, exclamation, oh well, well?, interjection, indicates pause or hesitation	49	9
fine, good, satisfactory, in a good way	26	16
something like a well, a wishing well	11	4
a hole, a hole in the ground	7	5
a deep hole used to extract a liquid, an oil well [no reference to water]	6	2
a container, an inkwell	3	0
to build up	2	0
a last name	1	1
CONFUSIONS	0	0
MISTAKES	0	0
BLANKS	1	1

WINDOW

$\underline{n}=96$

MEANINGS	F	F(1st)
an opening, a hole, something to look out of, a hole in the wall [an opening]	56	41
glass, a glass panel, a pane, a piece of glass [the glass]	46	33
a glass opening, glass to look out of, a hole in the wall covered with glass [an opening with glass]	14	12
the windows of my mind, insight	5	2
a lens	1	1
an area for entry	1	0
CONFUSIONS	0	0
MISTAKES		
[word mistaken as WIDOW]	1	1
BLANKS [a]	6	6

[a] The high number of BLANKS is due to the large number of subjects listing only associates and no meanings.

WRAP

<u>n</u>=101

MEANINGS	<u>F</u>	F(1st)
to enfold, to cover, to enclose, to envelop, to surround, to put a covering around	49	35
a scarf, a shawl, a coat, a sweater, a cloak	25	10
outside paper, plastic wrap, aluminum wrap, gift wrap, saran wrap	16	8
to cover a package, to cover a gift	16	2
to cover with paper, to enclose with paper	12	11
to cover, an outer layer, a covering, something used to cover	11	5
cover [unspecified noun or verb]	10	5
a clothing article	5	0
to wrap it up, to finish	4	0
to wrap someone around a tree	2	1
to tackle in football	1	1
to put on clothes	1	1
leg coverings	1	1
to embrace	1	1
to be preoccupied in	1	0
to conceal	1	0
a skirt	1	0
to tie up	1	0
CONFUSIONS		
to hit, to strike [confusion with rap]	12	6
to knock [confusion with rap]	8	1

MEANINGS	F	F(1st)
talk [unspecified noun or verb] [confusion with rap]	5	4
to talk [confusion with rap]	5	1
hit [unspecified noun or verb] [confusion with rap]	4	1
the blame [confusion with rap]	3	1
blame [unspecified noun or verb] [confusion with rap]	3	0
knock [unspecified noun or verb] [confusion with rap]	2	1
to blame [confusion with rap]	2	0
a court charge [confusion with rap]	1	0
a knock [confusion with rap]	1	0
a hit [confusion with rap]	1	0
a talk [confusion with rap]	1	0
MISTAKES	0	0
BLANKS	5	5