DOCUMENT RESUME

ED 193 264   TM 800 578

TITLE   Alaska Instructional Diagnostic System, 1978 Pilot
                Test Results: Technical Report.
INSTITUTION   Northwest Regional Educational Lab., Portland,
                Oreg.
SPONS AGENCY   Alaska State Dept. of Education, Juneau.
PUB DATE   78
NOTE   184p.

EDRS PRICE   MF01/PC08 Plus Postage.
DESCRIPTORS   Achievement Tests: Diagnostic Tests: *Educational
                Assessment: Educational Objectives: Elementary
                Education: *Elementary School Mathematics: *Reading
                Skills: *Scores: *State Programs: Testing Programs:
                Test Reliability: Test Validity
IDENTIFIERS   Alaska: *Alaska Instructional Diagnostic System

ABSTRACT
        Key findings of a pilot study of the Alaska
Instructional Diagnostic System (AIDS) are summarized. The AIDS pilot
test served to verify the appropriateness of the skills survey as
well as the validity and reliability of the items. The AIDS testing
system includes three components: (1) upper level skills surveys
(grades 3-8): (2) lower level skill surveys (grades 1-3): and (3)
reading and mathematics skill sheets (grades 1-8). Objectives and
test items correspond to content taught in grades 1-8, but there are
no specific levels. All pilot test levels include items covering
reading and mathematics. The lower level skills are divided into
levels one and two of the pilot test. The upper level skills are
divided into three levels: in levels three through five, all items in
the upper level skill survey are included. Objectives and subtests
covered include: phonetic analysis, structural analysis: vocabulary
building, reading comprehension, math computation, and math
application. The difficulty of the five levels increase within each
subtest area. The pilot study included 1658 students: generally a
favorable response to the pilot test was indicated. Tabular data
suggest high reliability and validity. Detailed tables and appendices
are included. (Author/GK)

ED193264

TM 800 578

Alaska Instructional Diagnostic System

1978 Pilot Test Results

Technical Report

Prepared by:

The Assessment and Measurement Program
Northwest Regional Educational Laboratory
710 S.W. Second Avenue
Portland, Oregon 97204

for

The Alaska Department of Education

Fall 1978

JUL 2 9 1980

TABLE OF CONTENTS

LIST OF TABLES

In the spring of 1978, a systematically selected sample of Alaska students, grades 1-8, participated in a pilot study of the Alaska Diagnostic Instructional System (AIDS)[1].

The purpose of the study was to gather student performance data to help users determine the quality of AIDS and give AIDS developers a basis for making necessary revisions. This technical manual presents the data derived from the pilot study. A report entitled <u>Alaska Instructional Diagnostic System Summary Report for Teachers and Administrators</u> summarizes the key findings. It is available from the Alaska Department of Education.[2]

The Alaska Instructional Diagnostic System

In the early 1970s the Alaska Department of Education recognized the advantages an organized diagnostic system would offer in helping pinpoint students' strengths and needs. Reading and mathematics were chosen as major topic areas for initiation of such a system. Setting up the system involved several steps. Panels of Alaska curriculum specialists, classroom teachers and university subject area specialists were brought together to develop content blueprints: careful designs of topics (within the selected subject areas) taught in grades 1-8 in Alaska. Based on those blueprints, specific student educational objectives were written.

Skilled item writers then prepared test questions designed to measure precisely the skill called for by each objective. Before use, questions were checked by a review panel for content, concept and readability. Unlike any other diagnostic testing system, AIDS has a special supporting feature: the objectives which serve as the basis for the diagnostic system also serve as the basis for the Alaska Statewide Assessment Test, administered at grades 4 and 8. Thus, teachers using the diagnostic system can obtain information on key objectives tested statewide.

---

[1]Appreciation is expressed to Buckland, Chalkyitsik, Chignik Bay, Floyd Dryden, Iditarod, Kaltag, Larsen Bay, Nenana, Nordale, Rowan Bay, Sterling, St. Mary's, Tatitlek, and Tudor schools for their participation in this study.

[2]This pilot study report is only one part of the documentation of the development and use of AIDS. Contact the Alaska Department of Education for additional information.

AIDS is a unique testing system. It is an advantageous compromise between the "one shot" test and broader programs that are both expensive and time consuming. Teachers have great flexibility in administering AIDS, especially in deciding student entry points and interpreting test results.

The system includes three major testing components:

1. The Upper Level Skill Surveys (Grades 3-8) measure students' competency in six basic skill areas:

    *   Phonetic Analysis
    *   Structural Analysis
    *   Vocabulary Building
    *   Reading Comprehension
    *   Computational Skills
    *   Mathematics Application

2. The Lower Level Skill Surveys (Grades 1-3) measure students' competency in four basic skill areas:

    *   Phonetic Analysis
    *   Structural Analysis
    *   Vocabulary Building
    *   Computational Skills

    Lower Level Skill Survey Sheets are carefully designed for easy use by younger students. Each sheet covers part or all of one objective, and there are no separate answer sheets. Copy is set in primary type.

3. Reading and Mathematics Skill Sheets (Grades 1-8) allow teachers to more specifically diagnose students' capabilities in six areas covered by the Upper and Lower Skill Surveys:

    *   Phonetic Analysis
    *   Structural Analysis
    *   Vocabulary Building
    *   Reading Comprehension
    *   Computational Skills
    *   Mathematics Application

    Skill Sheets can also be used to determine competency on a single objective following instruction--or they can be used as worksheets to accompany remediation.

AIDS objectives and test items correspond to content taught in grades 1-8. But there is no specific level-grade match. Classroom teachers can use the materials to gather information on whatever objectives relate most directly to current instruction. The survey tests have variable starting points so that teachers can adjust the level of difficulty for each student.

DESIGN OF THE PILOT TEST

AIDS is continually evaluated, with an eye toward possible future revisions. The evaluation also helps users determine the quality of AIDS, and decide how best to use it with their students. The spring 1978 pilot test was one part of that ongoing evaluation.

Tests

The AIDS pilot test was designed to collect data on the difficulty level, validity and reliability of AIDS items. The Lower Level skills were divided into Levels I and II, each containing a sample of items taken from each Lower Level skill sheet. Upper Level skills were divided into three levels. Levels III through V included all items in the Upper Level Skill Survey. All five pilot test levels included reading and math items. Each AIDS objective was measured by two or more items. Appendix A shows which objectives and subtests (Phonetic Analysis, Structural Analysis, Vocabulary Building, Reading Comprehension, Math Computation and Math Application) were covered in each level of the pilot test. The appendix also shows which items in the pilot test covered each objective. The five levels were graduated in difficulty within each subtest area.

Table 1 displays the total number of items and specifies the related skill sheets or item sets included in each pilot level.

Sample

The student sample for the pilot study was selected on the basis of both practical and statistical considerations. Close attention was given to ensuring adequate representation of racial, regional and urban/rural groups.

A proportionate stratified sampling plan was used to obtain a sample of Alaska students in grades 1-9 representative of the different types of "typical" students who attend Alaskan public schools. Schools were the sampling units chosen at random within each of the strata.

Strata were developed in the following way. The state was divided into seven areas. First, the city-borough school districts were divided into large, medium and small districts (three areas). Then, the Regional Educational Attendance Areas (REAAs) were divided geographically into Seward Peninsula, Southeast, Central and Western rural areas (four areas). The number of first through ninth grade students attending schools in these areas was totaled, omitting students in Bureau of Indian Affairs, private and on-base schools. From the total of approximately 90,000 students, the percent of students attending in each of the seven strata was figured and then multiplied by the desired sample size of 2000 (a figure which, it was agreed, would provide adequate data within the budgeted cost estimate). The sample size was designed to provide statewide data rather than data separately for each of the seven living

Table 1

Number of Items and Portion of AIDS Included in the Pilot Test Levels

| | Lower Level Skill Survey | | | | Upper Level Skill Survey | | | | | |
| | Level 1 | | Level 2 | | Level 3 | | Level 4 | | Level 5 | |
	No. Items	Skill Sheet Number[b]	No. Items	Skill Sheet Number	No. Items	Skill Set	No. Items	Skill Set	No. Items	Skill Set
Word Identification Skills	85		93		66		66		66	
Phonetic Analysis	40	1-18	43	19-35	42	Col. 1-2	24	Col. 3	--	
Structural Analysis	17	1-6	18	7-12	--		30	Set I	24	Set III
Vocabulary Building	28	1-7	31	8-15	24	Set I	12	Set I	42	Set III
Reading Comprehension	--		--		64	Set I[c]	64	Set III	64	Set VI
Math Computation	45	1-9	44	10-15	53	Set I	54	Set IV	54	Set VI
Math Application	--		--		60	Set I	60	Set IV	60	Set VI
TOTAL	130		137		243		244		244	

[a]Levels One through Five refer to the five pilot test levels composed from the AIDS Lower and Upper Level Skill Surveys as indicated.

[b]Skill Sheet Number refers to the skill sheets in the Lower Level Skill Survey of AIDS. Skill sets refer to the parts of the Upper Level Skill Survey. One needs to be familiar with the organization of AIDS to best understand the relationship between the pilot test formats and AIDS.

[c]Readability for Set I = Grades 2-3
Set II = Grades 3-5
Set III = Grades 3-7
Set IV = Grades 4-8
Set V = Grades 5-9
Set VI = Grades 6-9

These readabilities were established through use of a computer program which calculates passage readability using six different formulas. The grade levels given are the range of the items' average readabilities.

8

areas. From a table of random numbers, schools were selected for each
area until the desired number was reached. Table 2 presents data on the
selected sample. Table 3 shows, by grade, the number of students who
took each AIDS pilot test level.

Table 2

Sample Design for AIDS Pilot Test

Strata	Student Population	Randomly Selected Schools Returning Data	Grades	Estimated Enrollment	% of Estimated Sample in Each Stratum	Tests Returned	% of the Returned Tests
Large District	43.4%	School A	K-6	476			
		School B	K-6	411	53%	1,082	64%
		School C	7-9	593			
				1480			
Medium District	36.1%	School D*	1-8	510			
		School E	K-8	411	34%	255	15%
		School F	K-8	21			
				942			
Small District	9.2%	School G	K-8	105	1%	211	12%
		School H	K-8	143			
				248			
Seward Penninsula	1.3%	School I	1-8	37	--	36	2%
Southeast	1.3%	School J	1-8	25	--	13	1%
Central	4.6%	School K	1-12	79	4%	66	4%
		School L	K-11	23			
				102			
Western	4.0%	School M	K-11	22	2%	40	2%
		School N	K-9	33			
				55			
		Totals		2,797		1,703	

*Partial returns reduced sample size.

Table 3

Number of Students Participating in AIDS Pilot Test

	Level 1	Level 2	Level 3	Level 4	Level 5	Total
Grade 1	204	---	---	---	---	204
Grade 2	101	81	---	---	---	182
Grade 3	86	102	79	---	---	267
Grade 4	---	87	73	---	---	160
Grade 5	---	---	---	99	80	179
Grade 6	---	---	---	77	89	166
Grade 7	---	---	---	55	206	261
Grade 8	---	---	---	---	239	239
TOTAL	391	270	152	231	614	1658

NOTE: Students were also tested in Grade 4 with Level Four, Grade 5 with Level Three, and Grade 9 with Level Five. However, insufficient tests were returned for these groups to be included in the analysis.

12

RESULTS AND INTERPRETATION

Results are provided for six areas of interest:

o   Summary statistics on student performance (means, standard
     deviation and average percent of items answered correctly) by
     grade, level, subtest and objectives

o   Item characteristics (item difficulty, discrimination and
     reliability indices) by grade, level and subtest

o   Internal reliability coefficients for objectives and subtests

o   Correlations between AIDS and a standardized achievement test

o   Comparisons of bilingual and nonbilingual students' performance

o   Results of student attitude questionnaire

Summary of Student Performances

Where possible, objectives covered in AIDS are arranged in specific
order. Objectives covered in the lowest level are considered
prerequisite to those covered in a higher level. Not all objectives,
however, are necessarily addressed in all curricula in a definite
sequence. Moreover, not all schools cover the same objectives at a given
grade level. Given these variations, one would expect a general--but not
invariable--trend of improved performance corresponding to an increase in
grade level. Students in consecutive grades took each pilot test level
to determine the extent to which Alaska students would follow this
pattern on AIDS. For example, students in grades 2, 3 and 4 took Level
II. (See Table 3.)

Table 4 shows performance for each grade on the five AIDS pilot test
levels. Under each topic heading, means, standard deviations and percent
of items correct are provided. Appendix B contains similar information
for each objective covered in the tests.

The data in Table 4 support the assumption that AIDS indeed is
arranged generally according to the predominant sequence of skills taught
in Alaska schools.[3] The table also provides a general idea of how
students at a given grade level are likely to perform on a specific part

_____

[3]The grade 7 results on Level IV initially do not appear to support
   this generalization. However, notice that the results are lower on all
   subtests rather than varying from one to the other. This pattern
   suggests that the students tested were not an adequate representation of
   seventh graders, not that there was a problem with the sequence of
   skills tested.

Table 4
Level of Performance by Grade and AIDS Pilot Test Level

Pilot Test Level	n	Phonetic Analysis			Structural Analysis			Vocabulary Building			Total Word Identification			Reading Comprehension			Math Computation			Math Application		
		%[b]	Mn	sd	%	Mn	sd	%	Mn	sd	%	Mn	sd	%	Mn	sd	%	Mn	sd	%	Mn	sd
Level One	[a]																					
Grade 1	(284)	75	30.4	7.4	41	7.2	3.2	68	18.8	6.6	68	50.4	13.3	--	----	----	49	21.5	8.8	--	----	----
Grade 2	(101)	83	33.2	7.3	59	10.1	3.3	71	20.5	7.4	75	63.9	13.8	--	----	----	67	30.2	10.9			
Grade 3	(86)	80	32.3	7.9	65	10.6	3.6	82	23.5	5.1	79	66.6	13.3	--	----	----	00	36.2	8.2	--	----	----
No. of Items=			(40)			(17)			(28)			(85)						(45)				
Level Two																						
Grade 2	(81)	65	28.1	10.3	79	15.1	4.7	81	25.0	5.8	73	68.4	17.9	--	----	----	25	11.0	5.7	--	----	----
Grade 3	(102)	86	36.6	6.1	90	17.3	2.9	90	28.3	3.4	89	82.9	11.2	--	----	----	57	24.8	6.0	--	----	----
Grade 4	(87)	88	37.7	5.6	95	18.2	1.6	91	29.4	2.2	91	85.3	8.4	--	----	----	80	35.3	6.9	--	---	----
No. of Items=			(43)			(19)			(31)			(93)						(45)				
Level Three																						
Grade 3	(79)	81	34.3	7.3	--	----	---	88	21.4	4.3	85	55.6	10.4	63	40.4	14.1	62	32.1	10.3	58	35.0	15.1
Grade 4	(73)	80	36.8	5.2	--	----	---	96	22.7	2.1	89	59.4	6.1	73	47.2	10.5	85	44.6	10.0	72	43.1	14.6
No. of Items=			(43)						(24)			(67)			(64)			(53)			(60)	
Level Four																						
Grade 5	(99)	83	19.6	4.4	77	23.4	6.1	83	9.7	2.2	80	52.8	11.3	67	42.5	12.3	44	24.5	7.2	50	29.7	10.6
Grade 6	(77)	83	20.2	4.8	83	25.3	5.4	83	10.0	1.0	85	56.1	9.9	73	46.6	12.2	63	33.8	12.1	63	37.6	11.8
Grade 7	(55)	67	15.8	6.5	70	21.2	6.3	75	8.1	3.2	68	45.1	15.3	59	38.0	15.8	59	25.0	11.0	45	27.4	13.0
No. of Items=			(24)			(30)			(12)			(66)			(64)			(54)			(60)	
Level Five																						
Grade 5	(80)	--	----	----	75	10.0	5.0	76	32.2	8.1	76	50.3	12.8	53	34.4	11.6	30	16.2	7.5	45	26.8	8.3
Grade 6	(09)	--	----	----	83	20.0	4.3	86	35.5	6.6	86	55.7	9.9	63	40.0	11.2	37	20.1	8.9	50	20.6	9.9
Grade 7	(206)	--	----	----	88	20.9	3.4	88	36.6	6.5	88	57.5	9.5	67	43.2	11.8	54	29.5	13.4	60	36.1	9.5
Grade 8	(239)	--	----	----	03	20.5	3.8	88	36.7	6.8	86	57.1	10.1	66	42.5	13.0	61	32.7	13.0	58	35.4	11.6
No. of Items=						(24)			(42)			(66)			(64)			(54)			(60)	

[a] The numbers in parentheses indicates the number of students for whom results are reported.

[b] The % column indicates the average percent of items answered correctly by the students at a given grade level.

of AIDS. For example, if a teacher were just beginning to use the Math Computation portion of AIDS with a new second grade class, he or she could learn from this table that, on the average, students at the end of the second grade in the pilot study got 67 percent of the items correct on Level I and only 25 percent of the items correct on Level II. By looking back to Table 1, the teacher would see that Level I Math Computation corresponds to Skill Sheets 1-9 and Level II corresponds to Skill Sheets 10-15. Using this information, while carefully reviewing the objectives measured by each test level, the teacher can decide which AIDS components to use.

Table 5 presents the <u>percentage of students</u> who correctly answered 80 percent or more of the items in a subtest.[4] It was anticipated that the number of items correctly answered would increase as the grade level of the students increased. For example, on Level II, three of the Phonetic Analysis items (or 7 percent) were answered correctly by 80 percent or more of the second grade students while 34 of the items (or 79 percent were answered correctly by 80 percent or more of the third grade students. And 100 percent of the items were answered correctly by 80 percent or more of the fourth graders.

Table 5 reveals that in all but one instance (Phonetic Analysis, Level I) the expected increase occurred within Levels I-III. For students taking Levels IV and V the percent of items answered correctly by 80 percent or more of the students increased except for the uppermost grade taking each test. The performance of seventh grade students on Level IV and eighth grade students on Level V dropped or remained constant for all subtests. The consistency of this finding across subtests suggests that the sample may have been biased toward lower performing students, and that the discrepancy was not the result of a problem with the test.

The results indicate that indeed AIDS is appropriately designed to measure student mastery of objectives. It is important to keep in mind, however, that the teacher needs to decide what part(s) of AIDS to use, based on what objectives seem most appropriate, and the level of mastery desired in a local school or classroom. These data are intended only to assist teachers in building realistic student performance expectations.

---

[4]An 80% level is used here only to serve as a convenient reference point for comparison purposes.

Table 5
Number of Items Which 80% or More of the Students Answered Correctly
by Grade and Level

	AIDS Pilot Test Level				
	Level One	Level Two	Level Three	Level Four	Level Five
Phonetic Analysis					
Grade 1	18/40=45%				
2	29/40=73%	3/43=7%			
3	24/40=60%	34/43=79%	29/42=69%		
4		33/33=100%	35/42=83%		
5				18/24=75%	
6				17/24=71%	
7				3/24=13%	
Structural Analysis					
Grade 1	0/17=0%				
2	3/17=18%	9/19=47%			
3	4/17=24%	18/19=95%			
4		19/19=100%			
5				18/30=60%	12/24=50%
6				25/30=83%	16/24=67%
7				9/30=30%	21/24=88%
8					20/24=83%
Vocabulary Building					
Grade 1	6/28=21%				
2	7/28=25%	19/31=61%			
3	19/28=68%	27/31=87%	23/24=96%		
4		30/31=97%	24/24=100%		
5				7/12=58%	20/42=48%
6				7/12=58%	31/42=74%
7				3/12=25%	35/42=83%
8					34/42=81%
Reading Comprehension					
Grade 3			12/64=19%		
4			25/64=39%		
5				18/64=28%	2/64=3%
6				29/64=45%	11/64=17%
7				3/64=5%	21/64=33%
8					17/64=27%
Math Computation					
Grade 1	10/45=22%				
2	13/45=29%	4/45=9%			
3	29/45=64%	18/45=40%	16/53=30%		
4		22/45=49%	34/53=64%		
5				6/54=11%	0/54=0%
6				15/54=28%	0/54=0%
7				4/54=7%	1/54=2%
8					1/54=2%
Math Application					
Grade 3			5/60=8%		
4			19/60=32%		
5				1/60=2%	1/60=2%
6				11/60=18%	3/60=5%
7				0/60=0%	14/60=23%
8					3/60=13%

17

Item Characteristics

For each item within each test level, three item statistics were calculated: difficulty, discrimination and reliability indices. These are defined as follows.

Difficulty Index = The percent of students who answered the item correctly

Discrimination Index = A measure of the extent to which students who are judged to be good in terms of some standard succeed on the item, and those who are judged to be poor on the same standard fail it. In this analysis the index of discrimination is the difference in the proportion of correct responses between the groups of those scoring in the top 27 percent on the total test and the group scoring in the bottom 27 percent on the same test.

Item Reliability Index*= The correlation of an item with the total score for the given objective.

Appendix C presents these item statistics for all test levels by grade. Table 6 summarizes these statistics.

Item Difficulty Index

In a norm-referenced test, test developers aim for difficulty indices around .50, since items at that difficulty level discriminate best among students. In a criterion-referenced test (CRT), the focus is not on discrimination among students. Thus high difficulty indices are acceptable. High indices indicate that students of the grade tested have mastered the objective. The difficulty indices suggest what percent of students at a given grade level are likely to have mastered the objective being tested.

The difficulty indices also reveal whether items measuring a given objective are of approximately the same difficulty. Given a fairly narrowly defined objective, and items measuring that objective, one would expect that the item difficulty indices should be similar. With a broadly defined objective, it is likely that the indices would be more divergent. Since construction of CRTs depends on the isolation of fairly distinct and small unitary skills, one would expect that items for a given objective would have similar difficulty indices.

---

*Other definitions of item reliability index exist.

Table 6

Range and Median Values of Difficulty Indexes, Discrimination Indexes, Item Reliability Indexes, and Related Data for Selected Grade Levels on All AIDS Levels

Skill Area		Item Statistic														
		Difficulty Index					Discrimination Index					Item Reliability Index				
		Grade (Level)					Grade (Level)					Grade (Level)				
		2(I)	3(II)	4(III)	5(IV)	6(V)	2(I)	3(II)	4(III)	5(IV)	6(V)	2(I)	3(II)	4(III)	5(IV)	6(V)
Phonetic Analysis	Range	.35-.95	.45-.98	.40-1.00	.32-.96		.07-.70	.04-.75	.00-.65	.08-.58		.10-.70	.07-.69	.00-.05	.00-.70	
	Median	.05	.89	.90	.84		.30	.21	.15	.35		.57	.47	.31	.53	
Structural Analysis	Range	.09-.90	.77-.98		.38-.93	.50-.97	.00-.77	.04-.57		.15-.69	.04-.57	.05-.70	.21-.03		.25-.75	.21-.76
	Median	.59	.93		.79	.86	.58	.14		.38	.26	.54	.62		.53	.57
Vocabulary Building	Range	.31-.90	.54-1.00	.84-1.00	.54-.99	.53-.99	.26-.09	.00-.75	.00-.40	.04-.69	.00-.57	.34-.02	.00-.70	.00-.69	.17-.64	.10-.71
	Median	.75	.96	.95	.82	.88	.59	.07	.10	.27	.26	.65	.47	.44	.54	.48
Reading Comprehension	Range			.34-.97	.29-.92	.10-.87			.00-.65	.04-.01	.13-.65			.01-.68	.20-.65	.07-.67
	Median			.77	.68	.66			.30	.46	.35			.42	.44	.42
Math Computation	Range	.25-.90	.00-.96	.47-1.00	.04-.92	.08-.79	.26-.81	.00-.89	.00-.84	.00-.69	.00-.67	.32-.69	.00-.71	.00-.67	.02-.63	.01-.55
	Median	.67	.69	.09	.36	.36	.56	.19	.21	.31	.38	.56	.42	.38	.35	.35
Math Application	Range			.25-.99	.15-.80	.08-.80			.05-.89	.00-.77	.00-.74			.05-.77	.04-.58	.01-.61
	Median			.73	.51	.52			.47	.46	.39			.45	.45	.38

16

Revisers of the AIDS test should review the difficulty indices to
determine where discrepancies exist within objectives. If difficulty
indices within an objective and within a grade differ by more than .25,
the items should be reviewed to determine if they are indeed all
measuring the objective. Remember: Some objectives may be very broad.
In such cases, one could consider subdividing the objective, or
increasing the number of items measuring that objective to ensure that
all aspects of the objective are being adequately measured.

Reviewers should also note whether item difficulty indices increase
in correspondence to grade level. If given objectives are to be taught
and mastered at particular grade levels, the pattern of difficulty
indices should be consistent with that expectation.

Item Reliability Index

The item reliability indices should be reviewed along with the item
difficulty indices. They too indicate the degree to which an item
measures the same concept as the other items which address the same
objective. When reliability indices are studied it is important to bear
in mind that if an item's difficulty index is high (over .9), the
reliability index will be restricted. One could expect low reliability
indices to result from this restriction, rather than from an item's not
measuring the same concept.

Revisers of the test should study the three kinds of indices in
concert to determine which items to revise. In general, it appears that
based on these indices, few item revisions are needed.

Internal Reliability

The reliability of a test or subtest is the extent to which a set of
scores yields consistent results. The reliability measure could range
from 0 to 1.0. High reliabilities (above .7) indicate that the items
within the subtest are measuring highly related skills in a dependable
fashion. Table 7 presents reliability coefficients for the subtests.
These data suggest that AIDS is a highly reliable test.

Appendix D presents reliability coefficients for objectives within
each subtest.[5] Since reliability coefficients increase with test
length, one would expect coefficients for objectives to be lower than for
subtests. The coefficients by objectives can assist revisers of the test
in identifying those objectives within subtests which could, if revised,
increase the test's reliability. For example, in Level I, test revisers
should review carefully the items measuring plural and possessive noun
inflectional endings.

_____

[5]The Kuder-Richardson Formula 21 (KR$_{21}$) was used. The formula is
$\frac{ks^2 - \bar{X}(k-\bar{X})}{(k-1)s^2}$ where k = the number of items on the test, $\bar{X}$ = the mean for
all items measuring a given objective, and s = the variance.

Table 7
AIDS Subtest Reliability Measures

(KR_{20})*

	n	Phonetic Analysis	Structural Analysis	Vocabulary Building	Reading Comprehension	Math Computation	Math Application
Level One							
Grade 1	204	.90	.71	.91	---	.92	---
Grade 2	101	.92	.77	.94	---	.95	---
Grade 3	86	.93	.80	.91	---	.93	---
Level Two							
Grade 2	81	.94	.91	.90	---	.85	---
Grade 3	102	.89	.87	.85	---	.88	---
Grade 4	87	.89	.71	.73	---	.89	---
Level Three							
Grade 3	79	.91	---	.91	.95	.93	.96
Grade 4	73	.87	---	.75	.92	.95	.96
Level Four							
Grade 5	99	.87	.90	.74	.93	.82	.90
Grade 6	77	.91	.91	.58**	.94	.95	.93
Grade 7	55	.92	.89	.84	.96	.92	.94
Level Five							
Grade 5	80	---	.88	.92	.91	.83	.84
Grade 6	89	---	.87	.91	.91	.87	.88
Grade 7	206	---	.82	.92	.93	.95	.89
Grade 8	239	---	.85	.93	.94	.95	.92

*The Kuder-Richardson formula 20 (KR_{20}) is reported as a measure of the internal consistency of each subtest.

**Further investigation of this relatively low reliability coefficient suggests that the item related to irregular comparisons are in need of study to determine if they all are indeed measuring the same skill.   10

Correlation of AIDS and a Standardized Test

Test reliability is a necessary but not sufficient condition for test validity. Validity indicates whether a test measures what it is intended to measure. During development, AIDs items were reviewed by content experts to determine whether they were a valid measure of the objective.

In the pilot test a second type of validity check was done. Selected groups of students were administered the California Test of Basic Skills (CTBS, 1973 edition) as well as AIDS[6]. One would expect similar results on the two tests to the extent that subtests of the CTBS and AIDS are intended to measure the same objectives.

Tables 8 and 9 show correlations among subtests of CTBS and AIDS. The higher the correlations, the greater the degree to which the tests are measuring similar skills and abilities.

One would expect that reading subtests of one test would correlate more highly with reading subtests of the other test than with the math subtests of either. That is, the correlations in the dotted boxes in Tables 8 and 9 would be expected to be higher than those outside the boxes. Further, within the boxes, one would expect the highest correlations between the subtests designed to measure the same skill areas, i.e., (1) CTBS Reading Vocabulary and AIDS Vocabulary Building (Tables 8 and 9), (2) CTBS and AIDS Reading Comprehension (Table 8), (3) CTBS and AIDS Math Computation (Tables 8 and 9) and (4) CTBS and AIDS Math Application (Table 9). These coefficients are underlined in the tables.

The results show that these expectations are not consistently met. Apparently, the tests do not measure the same skills. But there are other reasons for this finding.

For one thing, correlation coefficients will be restricted if the range of test scores on either test is restricted.

Since AIDS, a criterion-referenced test, has many items with high difficulty indices, the range of scores is restricted in this way. The lowest AIDS difficulty indices are in Reading Comprehension, Math Computation and Math Application (with lower indices, scores are least likely to be restricted). Thus correlations with these subtests would likely be higher even if they were not measuring concepts similar to those measured by other subtests. Furthermore, even though two tests have the same name (e.g., Reading Comprehension) they may be measuring different specific objectives or skills within this area. Such differences would also affect the correlations. Test revisers are encouraged to review closely the content of the CTBS along with the correlations shown in Tables 8 and 9.

---

[6]This testing was limited to a subgroup because of the expense of administering a second test.

Table 8

AIDS and CTBS Correlation Coefficients for Third Grade Sample

CTBS Test Level 1*		Phonetic Analysis		Structural Analysis		Vocabulary Building		Total Word Identification		Math Computation	
		Level 1	Level 2	Level 1	Level 2	Level 1	Level 2	Level 1	Level 2	Level 1	Level 2
	n=	82	69	81	69	80	69	79	69	80	69
Reading Vocabulary		.42	.62	.60	.70	.66	.65	.64	.73	.44	.69
Reading Comprehension		.41	.58	.64	.62	.63	.67	.63	.70	.47	.62
Reading Total		.44	.63	.65	.69	.68	.70	.67	.75	.48	.69
Math Computation		.46	.67	.66	.53	.57	.64	.70	.71	.59	.75
Math Concepts		.31	.65	.52	.68	.56	.64	.58	.75	.45	.64
Math Application		.53	.60	.61	.56	.53	.60	.69	.67	.48	.72
Math Total		.51	.69	.72	.61	.62	.67	.76	.76	.61	.76

*Level 1 is recommended for use at grades 2.5 - 4.0.

Table 9

AIDS and CTBS Correlation Coefficients
for Seventh Grade Sample

		AIDS Skill Area													
		Phonetic Analysis	Vocabulary Building		Structural Analysis		Total Word Identification		Reading Comprehension		Math Computation		Math Application	
CTBS Test Level 3*		Level 4	Lv. 3	Lv. 4	Lv. 3	Lv. 4	Lv. 3	Lv. 4	Lv. 3	Lv. 4	Lv. 3	Lv. 4	Lv. 3	Lv. 4
	n=	35	35	192	35	191	35	191	36	192	36	195	36	196
Reading Vocabulary		.51	.66	.52	.57	.41	.64	.51	.69	.66	.63	.52	.81	.62
Reading Comprehension		.50	.65	.49	.64	.44	.66	.49	.83	.65	.71	.56	.84	.64
Reading Total		.53	.69	.54	.64	.45	.69	.54	.81	.70	.71	.58	.88	.68
Math Computation		.57	.53	.41	.56	.37	.64	.42	.63	.55	.79	.78	.75	.60
Math Concepts		.49	.65	.43	.67	.37	.66	.43	.74	.57	.79	.70	.77	.64
Math Application		.62	.59	.39	.60	.33	.69	.39	.74	.56	.81	.62	.84	.59
Math Total		.59	.59	.45	.61	.39	.68	.45	.71	.60	.83	.79	.82	.67

*CTBS Level 3 is recommended for use at grades 6 - 8.

21

26

Comparative Performance of Bilingual and Nonbilingual Students

Students taking the AIDS pilot test responded to the question, "Do you speak two languages?" For purposes of analysis, students who responded "yes" were considered bilingual. Table 10 presents the proportion of students who indicated they were bilingual. Of the 1591 students answering the question, 124, or 8 percent, indicated they spoke two languages.7

The purpose of the comparisons was to determine possible item bias. Differences in performance do not necessarily indicate bias. Rather, bias exists when irrelevant variables are measured by the test, or when irrelevant knowledge, more readily available to one group than the other, is required. For example, a general vocabulary test would be considered biased against urban students if the vocabulary were related to farming, and thus presumably more familiar to rural than to urban students.

Table 10

Proportion of Bilingual Students
in AIDS Pilot Test Sample

Grade 1	16/202 =	8%
Grade 2	19/197 =	10%
Grade 3	17/267 =	6%
Grade 4	9/87 =	10%
Grade 5	27/189 =	14%
Grade 6	16/168 =	10%
Grade 7	17/244 =	7%
Grade 8	3/237 =	1%
TOTAL	124/1591=	8%

_____

7Although one could argue that students' responses to the question of their bilingualness may not be totally valid, a Department of Education staff member indicated that other data support this percentage of bilingual students in the state.

However, on an agricultural vocabulary test, one would expect a randomly selected sample of rural farm students to perform better than a sample of urban students. Such a difference however, would not mean the test was biased. It would merely confirm the expectation that students in rural areas are more likely to know agricultural terms.

Similarly, differences in bilingual and nonbilingual students' performance do not necessarily indicate test bias. We must first ask whether certain logical expectations are confirmed. For example, it is logically conceivable that students who are learning a second language would find reading items more difficult than students who are not. But one would expect only minimal differences in performance on math items--except those requiring reading.

Keep in mind too that great care was taken during test development to reduce bias. Items were carefully reviewed for potential bias by Alaska teachers. Item writing specifications required that words and reading passages familiar to students across Alaska be selected.

Tables 11 to 15 present mean performance by groups of students in grades 1-8. The results indicate that differences in performance generally favor nonbilingual students--but only slightly. The results also confirm the logical expectation that differences in performance are smaller (or nonexistent) in math computation than in reading. Bilingual students' performance was higher than that of nonbilingual students on seven out of 15 Math Computation skill areas, on four out of 15 Phonetic Analysis skill areas.

All results for specific subtests and grades should be interpreted cautiously since the bilingual samples in each case were very small.

Table 11

Means and Standard Deviations
By Skill Area
for Bilingual (B) and
Non-Bilingual (N) Students

Level 1

		Grade 1		Grade 2		Grade 3	
		B	N	B	N	B	N
Phonetic Analysis	Mn=	21.3	31.2	29.3	33.5	28.6	32.6
40 items	sd=	9.1	6.7	10.6	6.9	8.7	7.7
	n =	16	186	6	93	8	78
Structural Analysis	Mn=	6.4	7.2	9.5	10.1	8.6	10.8
17 items	sd=	2.7	3.3	3.9	3.3	4.1	3.4
	n =	5	170	6	92	8	77
Vocabulary Building	Mn=	18.0	18.9	22.8	20.3	22.1	23.6
28 items	sd=	8.3	6.6	7.3	7.4	5.6	5.0
	n =	6	186	6	95	8	76
Math Computation	Mn=	25.3	21.4	31.2	30.1	31.6	36.7
45 items	sd=	5.1	8.8	9.2	11.0	7.4	8.1
	n =	6	184	6	95	8	76

Table 12

Means and Standard Deviations
By Skill Area
for Bilingual (B) and
Non-Bilingual (N) Students

Level 2

		Grade 2		Grade 3		Grade 4	
		B	N	B	N	B	N
Phonetic Analysis	Mn=	21.3	29.4	39.5	36.6	35.0	38.0
43 items	sd=	11.5	9.5	1.5	6.2	8.3	5.1
	n =	13	68	2	100	9	78
Structural Analysis	Mn=	15.0	15.1	18.0	17.3	16.9	18.3
19 items	sd=	6.6	4.2	1.0	2.9	3.0	1.2
	n =	12	68	2	100	9	78
Vocabulary Building	Mn=	25.1	25.0	27.0	28.4	28.6	29.5
31 items	sd=	6.8	5.6	1.0	3.5	2.4	2.1
	n =	12	68	2	100	9	77
Math Computation	Mn=	11.8	10.8	24.0	24.8	32.7	35.6
45 items	sd=	5.3	5.7	6.0	6.0	6.7	6.8
	n =	13	68	2	99	9	77

Table 13

Means and Standard Deviations
By Skill Area
for Bilingual (B) and
Non-Bilingual (N) Students*

		Level 3	
		Grade 3	
		B	N
Phonetic Analysis	Mn=	37.4	34.0
42 items	sd=	3.9	7.5
	n =	7	72
Vocabulary Building	Mn=	22.4	21.3
24 items	sd=	2.0	4.4
	n =	7	72
Reading Computation	Mn=	43.7	40.1
64 items	sd=	15.2	13.9
	n =	7	72
Math Computation	Mn=	33.6	33.1
53 items	sd=	7.6	10.5
	n =	7	70
Math Application	Mn=	35.3	34.9
60 items	sd=	17.4	14.9
	n =	6	69

*Grade 4 had only 1 bilingual student taking Level 3, so the
data are not reported for grade 4.

Table 14

Means and Standard Deviations
By Skill Area
for Bilingual (B) and
Non-Bilingual (N) Students

		Grade 5		Grade 6		Grade 7	
		B	N	B	N	B	N
Phonetic Analysis	Mn=	20.4	19.3	18.1	20.6	5.0	16.9
24 items	sd=	4.0	4.5	6.3	4.4	1.3	5.8
	n =	22	75	11	66	5	49
Structural Analysis	Mn=	24.6	23.1	23.8	25.5	9.6	22.4
30 items	sd=	4.8	6.4	5.6	5.3	1.7	5.4
	n =	22	75	10	66	5	49
Vocabulary Building	Mn=	9.7	9.7	10.1	10.0	2.4	8.7
12 items	sd=	2.0	2.3	1.4	1.8	1.2	2.7
	n =	22	74	10	66	5	49
Reading Computation	Mn=	46.0	41.5	38.1	48.0	13.4	40.4
64 items	sd=	11.8	12.3	15.3	11.0	2.3	14.4
	n =	22	76	11	66	5	50
Math Computation	Mn=	31.1	23.8	25.9	35.6	9.0	26.7
54 items	sd=	8.7	6.6	10.9	11.9	5.7	10.0
	n =	9	86	7	68	5	49
Math Application	Mn=	36.2	29.0	27.0	39.0	11.6	29.0
60 items	sd=	11.5	10.5	11.3	11.1	1.7	12.6
	n =	9	86	8	61	5	49

Level 4

Table 15

Means and Standard Deviations
By Skill Area
for Bilingual (B) and
Non-Bilingual (N) Students

		Level 5							
		Grade 5		Grade 6		Grade 7		Grade 8	
		B	N	B	N	B	N	B	N
Phonetic Analysis	Mn=	17.8	18.0	21.0	19.9	18.7	21.0	15.0	20.5
24 items	sd=	7.8	4.8	1.2	4.4	5.3	3.2	6.5	3.7
	n =	5	75	4	82	10	192	3	230
Vocabulary Building	Mn=	30.0	32.4	35.2	35.5	30.9	36.9	25.0	36.8
42 items	sd=	10.4	7.9	8.9	6.5	11.8	6.0	11.0	6.6
	n =	5	75	4	81	10	193	3	230
Reading Computation	Mn=	31.8	34.6	45.0	39.8	33.8	43.7	21.3	42.7
64 items	sd=	11.5	11.6	10.0	11.1	16.3	11.3	10.4	12.8
	n =	5	75	4	81	10	194	3	233
Math Computation	Mn=	18.3	16.1	25.0	19.8	25.1	29.7	9.0	32.9
54 items	sd=	8.5	7.5	11.2	8.6	10.3	13.5	4.0	13.7
	n =	3	76	5	84	12	193	2	231
Math Application	Mn=	23.7	26.9	34.4	29.3	33.0	36.3	21.5	35.6
60 items	sd=	9.7	8.3	8.4	9.9	8.5	9.5	2.5	11.6
	n =	3	76	5	81	12	193	2	234

Student Attitudes Toward AIDS

Developers felt that student reaction to the content and difficulty of the AIDS pilot test would be a good indication of general student reaction to AIDS materials. Therefore, all students were asked how they felt about the test. Students who took Levels I and II marked happy or sad faces. Students who took Levels III, IV and V responded to five questions on their answer sheets. A summary of their responses is displayed in Tables 16 and 17.

Results show that students were fairly satisfied with the content, length and directions given. There appears to be a definite correlation between student performance and how they felt about the test. Table 16 for example, shows that 63 percent of the third grade students found the reading portion "fun," while only 40 percent of the first grade students agreed.

SUMMARY

The AIDS pilot test has served to verify the appropriateness of the Skills Surveys, and confirm the validity and reliability of the items. It has also indicated a favorable response to AIDS by students.

Slight revision of specific items seems warranted, but overall, the skill surveys have proved AIDS a valid, reliable measure of students' performance on specified objectives.

	Grade:	Level One				Level Two			
		1	2	3	Total	2	3	4	Total
	n=	204	103	86		83	102	87	
1. I think the reading was:									
Fun		40%	60%	63%	50%	40%	54%	57%	51%
O.K.		31%	24%	23%	28%	35%	42%	34%	37%
Hard		12%	13%	3%	10%	24%	1%	1%	8%
No Response		17%	3%	10%	12%	1%	3%	6%	3%
2. I think the math was:									
Fun		30%	58%	62%	44%	7%	23%	23%	18%
O.K.		25%	19%	22%	23%	16%	51%	59%	42%
Hard		28%	16%	6%	20%	75%	24%	11%	36%
No Response		17%	4%	10%	12%	2%	3%	7%	4%
3. I think the test parts were:									
Just right		55%	68%	73%	63%	46%	62%	74%	61%
A little long		17%	14%	13%	15%	30%	28%	13%	24%
Much too long		9%	12%	3%	9%	23%	6%	3%	10%
No response		18%	4%	10%	13%	1%	4%	10%	5%
4. The directions the teacher read were:									
Always easy to understand		41%	57%	66%	51%	5%	55%	80%	48%
Sometimes easy to understand		32%	32%	20%	29%	67%	36%	12%	38%
Hard to understand		6%	7%	5%	6%	19%	3%	1%	7%
No response		21%	4%	9%	14%	10%	7%	6%	7%

29

35

36

Table 17
Mean Percentage Response to Attitude Questions Relating to AIDS Pilot Test
Levels Three, Four and Five

		Level Three			Level Four				Level Five				
Grade:		3*	4	Total	5	6	7	Total	5	6	7	8	Total
n=		79	73	152	100	77	55	232	30	90	208	239	577
1. Clarity of directions													
Yes		15%	82%	47%	68%	78%	76%	70%	78%	66%	79%	53%	67%
Sometimes		4%	7%	5%	18%	1%	11%	12%	11%	18%	10%	4%	9%
No		4%	3%	4%	4%	1%	5%	4%	4%	4%	1%	2%	2%
No response		76%	8%	43%	10%	19%	5%	14%	8%	11%	10%	41%	22%
2. Answer Sheets													
Yes		13%	52%	32%	35%	52%	56%	43%	51%	48%	60%	35%	47%
Sometimes		6%	22%	14%	34%	18%	27%	27%	24%	27%	20%	15%	20%
No		4%	16%	10%	19%	10%	11%	15%	18%	14%	9%	7%	10%
No response		76%	10%	44%	11%	19%	5%	15%	8%	11%	10%	42%	23%
3. Reading													
Yes		15%	36%	25%	34%	19%	42%	31%	28%	23%	10%	11%	15%
Sometimes		5%	40%	22%	35%	53%	33%	39%	53%	46%	54%	27%	42%
No		5%	15%	10%	19%	5%	20%	14%	13%	19%	25%	18%	20%
No response		75%	8%	43%	12%	19%	5%	15%	9%	11%	11%	43%	23%
4. Math													
Yes		13%	73%	42%	39%	40%	42%	39%	44%	29%	44%	33%	38%
Sometimes		0%	16%	8%	42%	35%	45%	38%	35%	46%	40%	23%	34%
No		10%	0%	5%	5%	3%	7%	6%	11%	11%	5%	1%	5%
No response		77%	10%	45%	12%	21%	5%	15%	9%	11%	11%	43%	23%
5. Right Length													
Yes		9%	73%	40%	62%	62%	65%	60%	69%	76%	45%	45%	53%
Sometimes		4%	11%	7%	14%	13%	18%	16%	11%	9%	31%	7%	16%
No		8%	5%	7%	11%	3%	9%	8%	8%	4%	11%	4%	7%
No response		76%	10%	44%	13%	22%	7%	16%	11%	12%	12%	43%	24%

The following questions were asked of students who took Levels Three, Four, and Five:

1. Did you know how to begin working on the tests after your teacher read the directions and you did the practice items?

2. After you decided on your answer, were you able to mark it on the answer sheet without getting confused about where to mark it?

3. Were the stories interesting in the Reading section?

4. Did you know the words when you read the math problems?

5. Did you finish each test before the teacher said "Stop"?

*The high level of no response for grades 3 and 8 suggests that the attitude questionnaire was not properly administered to the students or, in the case of third graders, they could not read the questions.

37

APPENDIX A

Listing of Objectives Included in AIDS Pilot Test

PHONETIC ANALYSIS

Objective		Level:	1	2	3	4	5
		Number of Items					
A	Single Initial Consonants		8		6		
B	Single Plural Consonants		6		6		
C	Single Medial Consonants		9		6		
D	Initial Consonant Digraphs		3		3		
E	Final Consonant Digraphs		3		3		
F	Initial Double Consonant Blend		8		3		
G	Final Double Consonant Blend		3	6	3		
H	Initial Triple Consonant Blend			3	3		
I	Initial Silent Consonant Blend			3		3	
J	Final Silent Consonant Blend			3		3	
K	Long Vowel Sound			3	3		
L	Short Vowel Sound			3	3		
M	Y as Vowel			3	3		
N	Dipthongs			3		3	
O	Silent Vowel			3		3	
P	Irregular Vowel			4		3	
Q	Consonant-Controlled Vowel			3		3	
R	Schwa Sounds			3		3	
S	Rhyming Words			3		3	
	Total		40	43	42	24	

STRUCTURAL ANALYSIS

Objective		Level:	1	2	3	4	5
A	Plural Noun Inflectional Endings		5			6	
B	Possessive Noun Inflectional Endings		2			3	
C	Third Person Verb Endings		3			6	
D	Past Tense Verb Endings		4			6	
E	Present Tense Verb Endings		3			3	3
F	Comparative Adverb and Adjective Inflectional Endings			3		3	
G	Superlative Adverb and Adjective Inflectional Endings			4		3	
H	Prefixes						6
I	Suffixes						6
J	Contractions			12			3
K	Compound Words						3
L	Syllabication						3
	Total		17	19	--	30	24

VOCABULARY BUILDING

Objective			1	2	3	4	5
A	Basic Sight Words		16		9		
B	Irregular Verbs					3	3
C	Irregular Plural Nouns					3	3
D	Irregular Comparison					3	3
E	Synonyms		12		3		6
F	Antonymns			12	3		6
G	Homographs			3	3		6
H	Homophones			12	3		6
I	Multiple Meaning			4	3		6
J	Capitalization					3	3
	Total		28	31	24	12	42

READING COMPREHENSION

Objective		Level: 1	2	3	4	5
-Identification of Facts						
A	Facts Stated			3	3	2
B	Facts Paraphrased			3	3	2
-Restatement of Given						
C	Sequence			3	3	2
D	List			3	3	2
E	Compare and Contrast			3	3	2
F	Cause and Effect			3	3	2
-Grammatical Clues						
G	Punctuation			3	3	2
H	Referents			3	3	2
-Interpretive						
I	Main Ideas and Subordinate Details			3	2	3
J	Conclusions and Supporting Facts			3	2	3
K	Moods			3	2	3
L	Sensory Images			3	2	3
M	Figurative Speech			3	2	3
N	Inferences and Generalizations			3	2	3
O	Graphical Clues			3	2	3
P	Organizational Patterns			3	2	3
-Evaluative						
Q	Distinguish Fact, Opinion, Fiction and Non-Fiction			2	3	3
R	Identify Propaganda Techniques			2	3	3
S	Evaluate Tone of Passage			2	3	3
T	Judge Author's Purpose			2	3	3
U	Judge Author's Credibility			2	3	3
V	Judge Validity of Conclusions			2	3	3
W	Formulate Conclusions			2	3	3
X	Generate Solutions, Predict Outcomes			2	3	3
	Total			64	64	54

MATH COMPUTATION

Objective		Level:	1	2	3	4	5
A	Add Whole Numbers Without Regrouping		20		15		
B	Add Whole Numbers With Regrouping		15		6	3	
C	Add Integers						6
D	Add Fractions					3	6
E	Add Decimals					6	3
F	Subtract Whole Numbers Without Regrouping		10	5	15		
G	Subtract Whole Numbers With Regrouping			10	6	3	
H	Subtract Integers					3	3
I	Subtract Fractions					6	3
J	Subtract Decimals					3	6
K	Multiply Whole Numbers Without Regrouping			15	6		
L	Multiply Whole Numbers With Regrouping			2	3		
M	Multiply Integers						6
N	Multiply Fractions					3	3
O	Multiply Decimals					6	
P	Divide Whole Numbers, No Remainder			15	3	3	
Q	Divide Whole Numbers					3	3
R	Divide Integers						6
S	Divide Fractions					3	6
T	Divide Decimals					6	3
		Total	45	45	53	54	54

MATH APPLICATION

Objective			1	2	3	4	5
A	Facts and Numerical Values				12	9	11
B	Math Vocabulary					7	6
C	Determine What is Asked				12	11	10
D	Identify Extra or Insufficient Information				9	6	9
E	Determine Math Relationships				9	7	8
F	Translate to Math Equation				9	8	7
G	Perform Computations				9	9	6
H	Label Answers					3	3
		Total			60	60	60

APPENDIX B

Means, Standard Deviations and Percent Correct
by Objective and Subtest

Table 8-1

Mean, Standard Deviation and Percent Correct by Objective and Subtest

LEVEL ONE

		Grade 1 n=202	Grade 2 n=99	Grade 3 n=86
PHONETIC ANALYSIS				
A. Single Initial Consonants 8 items	Mn= S.D.= %=	6.97 1.89 88%	7.24 1.87 90%	6.07 3.05 76%
B. Single Plural Consonants 6 items	Mn= S.D.= %=	5.29 1.24 88%	5.54 1.29 92%	5.53 1.29 92%
C. Single Medial Consonants 9 items	Mn= S.D.= %=	5.78 2.08 64%	6.85 1.96 76%	6.66 1.96 74%
D. Initial Consonant Digraphs 3 items	Mn= S.D.= %=	2.04 .98 68%	2.22 .91 74%	2.50 .78 83%
E. Final Consonant Digraphs 3 items	Mn= S.D.= %=	2.10 .95 70%	2.33 .98 78%	2.51 .77 84%
F. Initial Double Consonant Blend 8 items	Mn= S.D.= %=	6.08 2.64 76%	6.35 2.51 79%	6.34 2.71 79%
G. Final Double Consonant Blend 3 items	Mn= S.D.= %=	2.16 .95 72%	2.55 .83 85%	2.65 .69 88%
STRUCTURAL ANALYSIS		n=175	n=98	n=85
A. Plural Noun Inflectional Endings 5 items	Mn= S.D.= %=	1.69 1.06 34%	2.65 1.19 53%	2.76 1.35 55%
B. Possessive Noun Inflectional Endings 2 items	Mn= S.D.= %=	.29 .50 15%	.22 .46 11%	.47 .74 24%
C. Third Person Verb Endings 3 items	Mn= S.D.= %=	1.21 .99 40%	1.89 1.09 63%	1.84 1.06 61%
D. Past Tense Verb Endings 4 items	Mn= S.D.= %=	2.13 1.26 53%	2.94 1.15 74%	3.11 1.13 78%
E. Present Tense Verb Endings 3 items	Mn= S.D.= %=	1.90 1.11 63%	2.36 .98 79%	2.45 .88 87%
VOCABULARY BUILDING		n=192	n=101	n=84
A. Basic Sight Words 16 items	Mn= S.D.= %=	11.90 3.86 75%	12.26 4.69 77%	14.38 2.12 90%
E. Synonyms 12 items	Mn= S.D.= %=	6.94 3.53 58%	8.05 3.46 67%	9.11 3.54 75%

Table 8-1 (Continued)

LEVEL ONE-Continued

MATH COMPUTATION		Grade 1 n=190	Grade 2 n=101	Grade 3 n=84
A. Add Whole Numbers Without Regrouping	Mn=	11.14	15.39	17.77
20 items	S.D.=	4.82	5.34	3.02
	%=	55%	77%	90%
B. Add Whole Numbers With Regrouping	Mn=	3.76	6.88	10.06
15 items	S.D.=	3.52	4.26	4.28
	%=	25%	46%	67%
F. Subtract Whole Numbers Without	Mn=	6.61	7.65	8.37
Regrouping	S.D.=	2.43	3.16	2.60
10 items	%=	66%	77%	81%

Table B-2

Mean, Standard Deviation and Percent Correct by Objective and Subtest

LEVEL TWO

PHONETIC ANALYSIS		Grade 2 n=81	Grade 3 n=102	Grade 4 n=87
G. Final Double Consonant Blend 6 items	Mn= S.D.= %=	3.74 1.73 62%	4.95 1.16 83%	5.05 1.08 84%
H. Initial Triple Consonant Blend 3 items	Mn= S.D.= %=	1.98 1.14 66%	2.56 .70 85%	2.52 .88 84%
I. Initial Silent Consonant Blend 3 items	Mn= S.D.= %=	2.14 1.02 81%	2.61 .78 87%	2.63 .76 88%
J. Final Silent Consonant Blend 3 items	Mn= S.D.= %=	1.30 .93 43%	2.11 .96 70%	2.09 .86 70%
K. Long Vowel Sound 3 items	Mn= S.D.= %=	2.37 .93 79%	2.85 .51 95%	2.85 .41 95%
L. Short Vowel Sound 3 items	Mn= S.D.= %=	2.06 1.13 69%	2.76 .66 92%	2.80 .56 93%
M. Y as Vowel 3 items	Mn= S.D.= %=	1.94 1.02 65%	2.36 .82 79%	2.71 .62 90%
N. Dipthongs 3 items	Mn= S.D.= %=	1.81 .90 60%	2.34 .67 78%	2.56 .58 85%
O. Silent Vowel 3 items	Mn= S.D.= %=	1.79 1.23 60%	2.66 .66 89%	2.62 .68 87%
P. Irregular Vowel 4 items	Mn= S.D.= %=	2.64 1.48 66%	3.60 .77 90%	3.71 .62 93%
Q. Consonant-Controlled Vowel 3 items	Mn= S.D.= %=	1.78 1.10 60%	2.68 .68 89%	2.83 .48 94%
R. Schwa Sounds 3 items	Mn= S.D.= %=	2.31 .85 71%	2.68 .70 89%	2.80 .54 93%
S. Rhyming Words 3 items	Mn= S.D.= %=	2.06 .94 69%	2.47 .68 82%	2.55 .75 85%

LEVEL TWO-Continued

STRUCTURAL ANALYSIS		Grade 2 n=80	Grade 3 n=102	Grade 4 n=87
F. Comparative Adverb and Adjective Inflectional Endings 3 items	Mn= S.D.= %=	2.19 1.00 73%	2.60 .74 87%	2.91 .32 97%
G. Superlative Adverb and Adjective Inflectional Endings 4 items	Mn= S.D.= %=	2.90 1.32 73%	3.57 .91 89%	3.82 .65 95%
J. Contractions 12 items	Mn= S.D.= %=	8.21 2.30 68%	9.29 1.27 77%	9.48 1.01 79%

VOCABULARY BUILDING		n=80	n=102	n=86
F. Antonyms 12 items	Mn= S.D.= %=	10.56 2.54 88%	11.47 1.36 96%	11.56 .72 96%
G. Homographs 3 items	Mn= S.D.= %=	2.15 .88 72%	2.70 .62 .90	2.87 .42 97%
H. Homophones 12 items	Mn= S.D.= %=	9.80 2.33 82%	11.20 1.21 93%	11.58 .94 97%
I. Multiple Meaning 4 items	Mn= S.D.= %=	2.30 1.06 58%	2.97 1.03 74%	3.40 .94 85%

MATH COMPUTATION		n=81	n=101	n=86
F. Subtract Whole Numbers Without Regrouping 5 items	Mn= S.D.= %=	4.22 1.24 84%	4.60 .91 92%	4.65 .78 91%
G. Subtract Whole Numbers With Regrouping 10 items	Mn= S.D.= %=	2.10 2.00 21%	7.59 2.60 76%	7.76 2.47 78%
K. Multiply Whole Numbers Without Regrouping 15 items	Mn= S.D.= %=	3.20 3.20 21%	9.15 2.12 61%	12.64 2.26 84%
P. Divide Whole Numbers, No Remainder 15 items	Mn= S.D.= %=	1.38 2.05 9%	3.49 2.21 23%	10.22 3.17 68%

Table B-3

Mean, Standard Deviation and Percent Correct by Objective and Subtest

LEVEL THREE

PHONETIC ANALYSIS		Grade 3 n=79	Grade 4 n=73
A. Single Initial Consonants 6 items	Mn= S.D.= %=	5.10 1.79 85%	5.08 1.95 85%
B. Single Plural Consonants 6 items	Mn= S.D.= %=	5.49 1.11 92%	5.82 .38 97%
C. Single Medial Consonants 6 items	Mn= S.D.= %=	4.03 1.50 67%	4.52 1.36 75%
D. Initial Consonant Digraphs 3 items	Mn= S.D.= %=	2.43 .95 81%	2.56 .82 85%
E. Final Consonant Digraphs 3 items	Mn= S.D.= %=	2.71 .64 90%	2.84 .37 80%
F. Initial Double Consonant Blend 3 items	Mn= S.D.= %=	2.16 1.14 72%	2.53 1.03 84%
G. Final Double Consonant Blend 3 items	Mn= S.D.= %=	2.77 .61 92%	2.96 .19 99%
H. Initial Triple Consonant Blend 3 items	Mn= S.D.= %=	2.42 .90 81%	2.66 .79 89%
K. Long Vowel Sound 3 items	Mn= S.D.= %=	2.59 .70 83%	2.81 .42 94%
L. Short Vowel Sound 3 items	Mn= S.D.= %=	2.46 .82 82%	2.62 .77 87%
M. Y as Vowel 3 items	Mn= S.D.= %=	2.10 1.02 70%	2.36 .88 79%

LEVEL THREE-Continued

READING COMPREHENSION		Grade 3 n=79	Grade 4 n=73
A. Facts Stated 3 items	Mn= S.O.= %=	2.56 .77 85%	2.70 .56 90%
B. Facts Paraphrased 3 items	Mn= S.D.= %=	2.01 .83 67%	2.27 .68 76%
C. Sequence 3 items	Mn= S.D.= %=	1.97 1.00 66%	2.12 .81 71%
O. List 3 items	Mn= S.D.= %=	2.05 .99 68%	2.59 .77 86%
E. Compare and Contrast 3 items	Mn= S.D.= %=	2.16 .93 72%	2.41 .71 80%
F. Cause and Effect 3 items	Mn= S.D.= %=	2.23 1.04 74%	2.62 .78 87%
G. Punctuation 3 items	Mn= S.D.= %=	1.95 1.04 65%	2.40 .85 80%
H. Referents 3 items	Mn= S.D.= %=	2.01 .98 67%	2.27 .72 76%
I. Main Ideas and Subordinate Details 3 items	Mn= S.D.= %=	1.67 .91 56%	2.04 .86 68%
J. Conclusions and Supporting Facts 3 items	Mn= S.D.= %=	2.10 .95 70%	2.52 .74 84%
K. Moods 3 items	Mn= S.D.= %=	2.29 .94 76%	2.58 .77 86%
L. Sensory Images 3 items	Mn= S.D.= %=	1.68 .89 56%	1.90 .92 63%
M. Figurative Speech 3 items	Mn= S.D.= %=	1.73 1.00 58%	2.00 .86 67%
N. Inferences and Generalizations 3 items	Mn= S.D.= %=	2.00 1.00 67%	2.44 .77 81%
O. Graphical Clues 3 items	Mn= S.D.= %=	1.78 .95 59%	2.22 .78 74%

Table 8-3 (Continued)

LEVEL THREE-Continued

		Grade 3 n=79	Grade 4 n=73
READING COMPREHENSION - Continued			
P. Organizational Patterns 3 items	Mn= S.D.= %=	1.13 .78 38%	1.47 .84 49%
Q. Distinguish Fact, Opinion, Fiction and Non-Fiction 2 items	Mn= S.D.= %=	1.42 .70 71%	1.60 .59 80%
R. Identify Propaganda Techniques 2 items	Mn= S.D.= %=	.86 .68 43%	.96 .76 48%
S. Evaluate Tone of Passage 2 items	Mn= S.D.= %=	1.51 .67 76%	1.60 .56 80%
T. Judge Author's Purpose 2 items	Mn= S.D.= %=	1.28 .69 64%	1.34 .63 67%
U. Judge Author's Credibility 2 items	Mn= S.D.= %=	.90 .77 45%	1.11 .69 56%
V. Judge Validity of Conclusions 2 items	Mn= S.D.= %=	.99 .75 50%	1.22 .70 61%
W. Formulate Conclusions 2 items	Mn= S.D.= %=	.90 .75 45%	1.36 .67 68%
X. Generate Solutions, Predict Outcomes 2 items	Mn= S.D.= %=	1.24 .75 62%	1.41 .68 71%
MATH APPLICATION		n=75	n=71
A. Facts and Numerical Values 12 items	Mn= S.D.= %=	7.89 3.38 66%	8.90 2.87 74%
C. Determine What is Asked 12 items	Mn= S.D.= %=	6.67 3.70 56%	8.49 3.21 71%
D. Identify Extra or Insufficient Information 9 items	Mn= S.D.= %=	4.81 2.62 53%	5.73 2.59 64%
E. Determine Math Relationships 9 items	Mn= S.D.= %=	4.20 2.13 47%	5.51 2.22 61%
F. Translate to Math Equation 9 items	Mn= S.D.= %=	4.95 2.70 55%	6.44 2.12 72%
G. Perform Computations 9 items	Mn= S.D.= %=	6.44 2.32 72%	7.32 1.58 81%

LEVEL THREE-Continued

VOCABULARY BUILDING		Grade 3 n=79	Grade 4 n=73
A. Basic Sight Words	Mn=		
9 items	S.D.=	8.23	8.82
	%=	1.63	.53
		91%	98%
E. Synonyms	Mn=		
3 items	S.D.=	2.62	2.75
	%=	.73	.65
		87%	92%
F. Antonyms	Mn=		
3 items	S.D.=	2.63	2.60
	%=	.76	.87
		88%	87%
G. Honographs	Mn=		
3 items	S.D.=	2.51	2.75
	%=	.81	.51
		84%	92%
H. Homophones	Mn=		
3 items	S.D.=	2.82	2.95
	%=	.54	.22
		94%	98%
I. Multiple Meaning	Mn=		
3 items	S.D.=	2.51	2.78
	%=	.88	.58
		84%	93%

MATH COMPUTATION		n=77	n=72
A. Add Whole Numbers Without Regrouping	Mn=	12.08	14.04
15 items	S.D.=	3.18	1.39
	%=	81%	94%
B. Add Whole Numbers With Regrouping	Mn=	3.13	4.60
6 items	S.D.=	1.82	1.61
	%=	52%	77%
F. Subtract Whole Numbers Without	Mn=	11.38	13.74
Regrouping	S.D.=	3.92	1.75
15 items	%=	76%	92%
G. Subtract Whole Numbers With	Mn=	2.68	4.32
Regrouping	S.D.=	1.93	1.86
6 items	%=	45%	72%
K. Multiply Whole Numbers Without	Mn=	2.90	4.35
Regrouping	S.D.=	1.32	1.60
6 items	%=	48%	73%
L. Multiply Whole Numbers With	Mn=	.40	1.18
Regrouping	S.D.=	.60	.78
2 items	%=	20%	59%
P. Divide Whole Numbers, No Remainder	Mn=	.55	1.72
3 items	S.D.=	.67	1.07
	%=	17%	57%

Table B-4

Mean, Standard Deviation and Percent Correct by Objective and Subtest

LEVEL FOUR

PHONETIC ANALYSIS		Grade 4 n=57	Grade 5 n=97	Grade 6 n=77	Grade 7 n=54
I. Initial Silent Consonant Blend 3 items	Mn= S.D.= %=	1.56 1.21 52%	2.48 .92 83%	2.71 .66 90%	2.15 1.06 72%
J. Final Silent Consonant Blend 3 items	Mn= S.D.= %=	1.22 .85 41%	2.32 .98 77%	2.45 .78 82%	1.87 1.03 62%
N. Dipthongs 3 items	Mn= S.D.= %=	1.06 1.02 35%	2.12 .61 71%	2.31 .91 77%	1.85 1.00 62%
O. Silent Vowel 3 items	Mn= S.D.= %=	1.83 1.06 61%	2.58 .78 86%	2.74 .67 91%	2.17 1.01 72%
P. Irregular Vowels 3 items	Mn= S.D.= %=	1.61 .95 54%	2.54 .78 85%	2.56 .83 85%	2.24 .88 75%
Q. Consonant-Controlled Vowel 3 items	Mn= S.D.= %=	1.83 1.01 61%	2.66 .65 89%	2.53 .80 84%	1.94 1.17 65%
R. Schwa Sounds 3 items	Mn= S.D.= %=	.94 .91 31%	2.20 .96 73%	2.29 .86 76%	1.46 1.03 49%
S. Rhyming Words 3 items	Mn= S.D.= %=	1.78 .78 59%	2.66 .73 89%	2.61 .77 87%	2.15 1.20 72%

VOCABULARY BUILDING		n=18	n=96	n=76	n=54
B. Irregular Verbs 3 items	Mn= S.D.= %=		2.75 .50 92%	2.80 .43 93%	2.39 .91 80%
C. Irregular Plural Nouns 3 items	Mn= S.D.= %=		2.49 .81 83%	2.55 .76 85%	2.07 1.03 69%
D. Irregular Comparison 3 items	Mn= S.D.= %=		2.58 .65 86%	2.57 .61 86%	2.24 .90 75%
J. Capitalization 3 items	Mn= S.D.= %=		1.86 1.00 62%	2.05 .99 68%	1.39 .91 46%

52

LEVEL FOUR-Continued

STRUCTURAL ANALYSIS		Grade 4 n=18	Grade 5 n=97	Grade 6 n=76	Grade 7 n=54
A. Plural Noun Inflectional Endings 6 items	Mn= S.D.= %=	3.28 1.09 55%	4.94 1.22 82%	5.17 1.03 86%	4.07 1.45 68%
B. Possessive Noun Inflectional Endings 3 items	Mn= S.D.= %=	.61 .59 20%	1.47 1.04 49%	1.78 .95 59%	1.28 .95 43%
C. Third Person Verb Endings 6 items	Mn= S.D.= %=	3.17 2.03 53%	4.98 1.49 83%	5.01 1.58 84%	4.28 1.73 71%
D. Past Tense Verb Endings 6 items	Mn= S.D.= %=	3.72 1.40 62%	4.81 1.55 80%	5.33 1.16 89%	4.39 1.67 73%
E. Present Tense Verb Endings 3 items	Mn= S.D.= %=	1.89 .99 63%	2.33 .83 78%	2.51 .80 84%	2.28 .95 76%
F. Comparative Adverb and Adjective Inflectional Endings 3 items	Mn= S.D.= %=	1.72 1.04 57%	2.44 .93 81%	2.84 .46 95%	2.59 .59 86%
G. Superlative Adverb and Adjective Inflectional Endings 3 items	Mn= S.D.= %=	1.83 .89 61%	2.42 .94 81%	2.66 .73 89%	2.28 .93 76%

READING COMPREHENSION		n=18	n=98	n=77	n=55
A. Facts Stated 3 items	Mn= S.D.= %=		2.60 .69 87%	2.70 .64 90%	2.35 .95 78%
B. Facts Paraphrased 3 items	Mn= S.D.= %=		2.29 .88 76%	2.65 .71 88%	2.07 1.09 69%
C. Sequence 3 items	Mn= S.D.= %=		2.29 .84 76%	2.40 .76 80%	2.02 1.07 67%
D. List 3 items	Mn= S.D.= %=		2.46 .74 82%	2.57 .71 86%	2.07 .97 69%
E. Compare and Contrast 3 items	Mn= S.D.= %=		2.27 .82 76%	2.25 .77 76%	1.87 .87 62%
F. Cause and Effect 3 items	Mn= S.D.= %=		2.39 .75 80%	2.69 .65 90%	2.11 1.05 70%
G. Punctuation 3 items	Mn= S.D.= %=		2.46 .83 82%	2.62 .68 87%	2.02 1.13 67%
H. Referents 3 items	Mn= S.D.= %=		1.95 .90 65%	2.16 .91 72%	1.78 1.02 59%

LEVEL FOUR-Continued

READING COMPREHENSION - Continued		Grade 4 n=18	Grade 5 n=98	Grade 6 n=77	Grade 7 n=55
I. Main Ideas and Subordinate Details 2 items	Mn= S.D.= %=		1.44 .75 72%	1.49 .57 74%	1.07 .82 53%
J. Conclusions and Supporting Facts 2 items	Mn= S.D.= %=		1.36 .70 68%	1.42 .74 71%	1.15 .79 57%
K. Moods 2 items	Mn= S.D.= %=		1.34 .68 67%	1.51 .65 75%	1.13 .71 56%
L. Sensory Images 2 items	Mn= S.D.= %=		1.72 .51 86%	1.83 .43 91%	1.49 .76 74%
M. Figurative Speech 2 items	Mn= S.D.= %=		1.38 .73 69%	1.58 .61 79%	1.33 .81 66%
N. Inferences and Generalizations 2 items	Mn= S.D.= %=		1.20 .71 60%	1.40 .58 70%	1.20 .69 60%
O. Graphical Clues 2 items	Mn= S.D.= %=		1.20 .63 60%	1.27 .61 63%	1.18 .63 59%
P. Organizational Patterns 2 items	Mn= S.D.= %=		1.15 .61 57%	1.17 .69 58%	.93 .68 46%
Q. Distinguish Fact, Opinion, Fiction and Non-Fiction 3 items	Mn= S.D.= %=		1.64 .88 55%	1.94 .97 65%	1.56 1.07 52%
R. Identify Propaganda Techniques 3 items	Mn= S.D.= %=		1.43 1.06 48%	1.74 .93 58%	1.40 .92 47%
S. Evaluate Tone of Passage 3 items	Mn= S.D.= %=		1.68 .84 56%	2.05 .93 68%	1.62 .96 54%
T. Judge Author's Purpose 3 items	Mn= S.D.= %=		1.67 1.02 56%	1.81 1.02 60%	1.51 1.00 50%
U. Judge Author's Credibility 3 items	Mn= S.D.= %=		1.44 1.03 48%	1.82 1.11 61%	1.56 .94 52%
V. Judge Validity of Conclusions 3 items	Mn= S.D.= %=		1.38 .98 46%	1.68 1.05 56%	1.40 .90 47%
W. Formulate Conclusions 3 items	Mn= S.D.= %=		1.72 1.02 57%	1.75 .84 58%	1.51 .97 50%
X. Generate Solutions, Predict Outcomes 3 items	Mn= S.D.= %=		2.04 .39 60%	2.09 .92 70%	1.64 1.03 55%

LEVEL FOUR - Continued

MATH COMPUTATION		Grade 4 n=18	Grade 5 n=95	Grade 6 n=75	Grade 7 n=54
B. Add Whole Numbers With Regrouping 3 items	Mn= S.D.= %=		2.32 .92 77%	2.57 .75 86%	2.22 1.15 74%
D. Add Fractions 3 items	Mn= S.D.= %=		1.62 1.12 55%	1.67 1.17 56%	1.63 1.09 54%
E. Add Decimals 6 items	Mn= S.D.= %=		3.12 1.35 52%	4.32 1.62 72%	3.37 1.85 56%
G. Subtract Whole Numbers With Regrouping 3 items	Mn= S.D.= %=		2.21 .98 74%	2.52 .73 84%	2.11 1.03 70%
H. Subtract Integers 3 items	Mn= S.D.= %=		.58 .69 19%	.63 .60 21%	.54 .78 18%
I. Subtract Fractions 6 items	Mn= S.D.= %=		3.24 1.70 54%	4.19 1.90 70%	3.06 1.61 51%
J. Subtract Decimals 3 items	Mn= S.D.= %=		2.53 .91 84%	2.72 .62 91%	2.33 1.05 78%
L. Multiply Whole Numbers With Regrouping 3 items	Mn= S.D.= %=		1.21 .94 40%	1.71 1.12 57%	1.17 1.06 39%
N. Multiply Fractions 3 items	Mn= S.D.= %=		.81 .77 .27	1.84 1.16 61%	1.31 1.03 44%
O. Multiply Decimals 6 items	Mn= S.D.= %=		1.41 1.28 23%	3.00 2.20 50%	1.65 1.46 27%
P. Divide Whole Numbers, No Remainder 3 items	Mn= S.D.= %=		1.53 1.07 51%	2.15 1.08 72%	1.57 1.16 52%
Q. Divide Whole Numbers 3 items	Mn= S.D.= %=		2.04 .96 68%	2.56 .83 85%	1.89 1.19 63%
S. Divide Fractions 3 items	Mn= S.D.= %=		.73 .73 24%	1.25 1.16 42%	.70 .87 23%
T. Divide Decimals 6 items	Mn= S.D.= %=		1.13 .92 19%	2.64 1.94 44%	1.48 1.31 25%

LEVEL FOUR - Continued

MATH APPLICATION		Grade 4 n=18	Grade 5 n=95	Grade 6 n=69	Grade 7 n=54
A. Fact and Numerical Values 9 items	Mn= S.D.= %=		5.79 2.41 64%	7.01 2.24 78%	5.35 2.65 59%
B. Math Vocabulary 7 items	Mn= S.D.= %=		3.52 1.76 50%	4.22 1.91 60%	2.93 1.85 42%
C. Determine What is Asked 11 items	Mn= S.D.= %=		6.80 2.70 62%	8.33 2.64 76%	6.13 3.19 56%
D. Identify Extra or Insufficient Information 6 items	Mn= S.D.= %=		2.67 1.63 44%	3.64 1.66 61%	2.69 1.64 45%
E. Determine Math Relationships 7 items	Mn= S.D.= %=		3.37 1.62 48%	3.97 1.64 57%	3.24 1.65 46%
F. Translate to Math Equation 8 items	Mn= S.D.= %=		2.94 1.67 37%	4.09 1.76 51%	2.74 1.84 34%
G. Perform Computations 9 items	Mn= S.D.= %=		3.52 1.65 39%	5.04 1.95 56%	3.26 2.11 36%
H. Label Answers 3 items	Mn= S.D.= %=		1.09 .93 36%	1.28 .76 43%	1.02 .80 34%

Mean, Standard Deviation and Percent Correct by Objective and Subtest

LEVEL FIVE

VOCABULARY BUILDING		Grade 5 n=80	Grade 6 n=85	Grade 7 n=203	Grade 8 n=233
B. Irregular Verbs 3 items	Mn= S.D.= %=	2.66 .56 89%	2.72 .58 91%	2.75 .59 92%	2.80 .53 93%
C. Irregular Plural Nouns 3 items	Mn= S.D.= %=	2.39 .87 80%	2.58 .67 86%	2.55 .78 85%	2.62 .74 87%
D. Irregular Comparison 3 items	Mn= S.D.= %=	2.34 .82 78%	2.60 .73 87%	2.68 .57 89%	2.65 .63 88%
E. Synonyms 6 items	Mn= S.D.= %=	4.49 1.55 75%	4.98 1.18 83%	5.14 1.32 86%	5.18 1.19 86%
F. Antonyms 6 items	Mn= S.D.= %=	4.61 1.68 77%	5.06 1.52 84%	5.34 1.35 89%	5.24 1.53 87%
G. Honographs 6 items	Mn= S.D.= %=	4.59 1.45 76%	5.20 1.23 87%	5.43 1.16 90%	5.40 1.14 90%
H. Homophones 6 items	Mn= S.D.= %=	4.56 1.56 76%	5.20 1.26 87%	5.28 1.15 88%	5.35 1.17 89%
I. Multiple Meaning 6 items	Mn= S.D.= %=	4.88 1.45 81%	5.32 1.13 89%	5.44 1.09 91%	5.34 1.24 89%
J. Capitalization 3 items	Mn= S.D.= %=	1.73 1.04 58%	1.86 1.04 62%	2.01 1.01 67%	2.10 1.00 70%

STRUCTURAL ANALYSIS		n=80	n=86	n=202	n=233
E. Present Tense Verb Endings 3 items	Mn= S.D.= %=	2.45 .77 82%	2.59 .75 86%	2.74 .52 91%	2.63 .68 88%
H. Prefixes 6 items	Mn= S.D.= %=	4.50 1.80 75%	5.19 1.42 86%	5.42 1.12 90%	5.43 1.16 90%
I. Suffixes 6 items	Mn= S.D.= %=	4.48 1.54 75%	4.88 1.49 81%	5.33 1.14 89%	5.15 1.33 86%
J. Contractions 3 items	Mn= S.D.= %=	2.60 .78 87%	2.81 .51 94%	2.79 .57 93%	2.82 .52 94%
K. Compounds 3 items	Mn= S.D.= %=	2.33 1.02 78%	2.66 .69 87%	2.68 .62 89%	2.64 .66 88%
L. Syllabication 3 items	Mn= S.D.= %=	1.69 .87 56%	1.81 .80 60%	1.92 .87 64%	1.77 .89 59%

LEVEL FIVE - Continued

READING COMPREHENSION		Grade 5 n=80	Grade 6 n=85	Grade 7 n=204	Grade 8 n=236
A. Facts Stated 2 items	Mn= S.D.= %=	1.16 .64 58%	1.28 .68 64%	1.35 .68 67%	1.33 .64 66%
B. Facts Paraphrased 2 items	Mn= S.D.= %=	1.25 .73 62%	1.36 .68 68%	1.58 .60 79%	1.44 .65 72%
C. Sequence 2 items	Mn= S.D.= %=	1.19 .69 59%	1.42 .67 71%	1.54 .66 77%	1.50 .66 75%
D. List 2 items	Mn= S.D.= %=	1.43 .70 71%	1.51 .64 75%	1.64 .55 82%	1.53 .64 76%
E. Compare and Contrast 2 items	Mn= S.D.= %=	1.11 .77 55%	1.22 .62 61%	1.28 .69 64%	1.25 .67 62%
F. Cause and Effect 2 items	Mn= S.D.= %=	1.49 .65 74%	1.62 .61 81%	1.72 .56 86%	1.70 .56 85%
G. Punctuation 2 items	Mn= S.D.= %=	.79 .70 39%	1.08 .72 54%	1.10 .67 55%	.99 .73 49%
H. Referents 2 items	Mn= S.D.= %=	1.31 .75 65%	1.62 .63 81%	1.71 .54 85%	1.73 .52 86%
I. Main Ideas and Subordinate Details 3 items	Mn= S.D.= %=	1.50 .86 50%	1.88 .84 63%	1.99 .85 66%	1.96 .95 65%
J. Conclusions and Supporting Facts 3 items	Mn= S.D.= %=	1.24 1.02 41%	1.78 .99 59%	1.83 .94 61%	1.76 1.04 59%
K. Moods 3 items	Mn= S.D.= %=	1.76 .88 59%	2.01 .80 67%	2.08 .92 69%	1.98 .93 66%
L. Sensory Images 3 items	Mn= S.D.= %=	2.06 .98 69%	2.42 .77 81%	2.50 .79 83%	2.42 .82 81%
M. Figurative Speech 3 items	Mn= S.D.= %=	1.70 .91 57%	1.74 .72 58%	1.76 .72 59%	1.77 .71 59%
N. Inferences and Generalizations 3 items	Mn= S.D.= %=	1.60 .97 53%	1.78 .91 59%	2.06 .89 69%	1.94 .96 65%
O. Graphical Clues 3 items	Mn= S.D.= %=	1.95 .99 65%	2.13 .89 71%	2.22 .91 74%	2.26 .86 75%

LEVEL FIVE - Continued

READING COMPREHENSION - Continued		Grade 5 n=80	Grade 6 n=85	Grade 7 n=204	Grade 8 n=236
P. Organizational Patterns 3 items	Mn= S.D.= %=	1.10 .78 37%	1.26 .80 42%	1.38 .73 46%	1.34 .69 45%
Q. Distinguish Fact, Opinion, Fiction and Non-Fiction 3 items	Mn= S.D.= %=	1.59 1.03 53%	2.05 1.08 68%	2.22 1.74 74%	2.21 1.01 74%
R. Identify Propaganda Techniques 3 items	Mn= S.D.= %=	1.40 .95 47%	1.68 .85 56%	1.95 .99 65%	1.92 .88 64%
S. Evaluate Tone of Passage 3 items	Mn= S.D.= %=	1.79 .90 60%	2.04 .84 68%	2.22 .85 74%	2.17 .89 72%
T. Judge Author's Purpose 3 items	Mn= S.D.= %=	1.81 1.08 60%	2.08 .91 69%	2.25 .87 75%	2.27 .86 76%
U. Judge Author's Credibility 3 items	Mn= S.D.= %=	1.15 .97 38%	1.54 1.11 51%	1.74 1.06 58%	1.76 1.02 59%
V. Judge Validity of Conclusions 3 items	Mn= S.D.= %=	1.60 .91 53%	1.67 .90 56%	1.84 .86 61%	1.91 .96 64%
W. Formulate Conclusions 3 items	Mn= S.D.= %=	1.06 .94 35%	1.34 1.00 45%	1.50 .98 50%	1.62 1.11 54%
X. Generate Solutions, Predict Outcomes 3 items	Mn= S.D.= %=	1.36 .85 45%	1.47 .90 49%	1.75 .89 58%	1.69 .93 56%

MATH COMPUTATION		n=79	n=89	n=205	n=233
C. Add Integers 6 items	Mn= S.D.= %=	1.89 1.46 31%	1.97 1.61 33%	3.33 2.04 55%	3.29 2.26 55%
D. Add Fractions 6 items	Mn= S.D.= %=	1.91 1.58 32%	2.90 1.81 48%	3.92 2.01 65%	4.21 2.06 70%
E. Add Decimals 3 items	Mn= S.D.= %=	1.33 1.14 44%	1.26 1.16 42%	1.77 1.27 59%	2.20 1.14 73%
H. Subtract Integers 3 items	Mn= S.D.= %=	.39 .53 13%	.36 .60 12%	1.07 1.15 36%	1.10 1.21 37%
I. Subtract Fractions 3 items	Mn= S.D.= %=	.62 .81 21%	1.11 1.02 37%	1.60 1.14 53%	1.79 1.10 60%

LEVEL FIVE - Continued

MATH COMPUTATION - Continued		Grade 5 n=79	Grade 6 n=89	Grade 7 n=205	Grade 8 n=233
J. Subtract Decimals 6 items	Mn= S.D = %=	2.66 1.98 44%	3.09 1.91 51%	4.20 1.97 70%	4.59 1.74 76%
M. Multiply Integers 6 items	Mn= S.D.= %=	1.81 1.78 30%	1.79 1.58 30%	2.73 2.21 45%	3.49 2.23 58%
N. Multiply Fractions 3 items	Mn= S.D.= %=	.47 .70 16%	1.12 .91 37%	1.57 1.11 52%	1.77 1.07 59%
Q. Divide Whole Numbers 3 items	Mn= S.D.= %=	1.14 1.07 38%	1.40 1.08 47%	2.02 1.05 67%	1.76 1.08 59%
R. Divide Integers 6 items	Mn= S.D.= %=	1.76 1.36 29%	1.65 1.34 27%	2.39 1.91 40%	3.01 2.21 50%
S. Divide Fractions 6 items	Mn= S.D.= %=	1.42 .89 24%	2.40 1.62 40%	3.43 1.97 57%	3.90 2.04 65%
T. Divide Decimals 3 items	Mn= S.D.= %=	.76 .78 25%	1.07 .89 36%	1.37 1.10 46%	1.60 1.04 53%

MATH APPLICATION		n=79	n=86	n=205	n=236
A. Facts and Numerical Values 11 items	Mn= S.D.= %=	7.05 2.86 64%	7.43 2.55 67%	8.87 1.97 81%	8.56 2.33 78%
B. Math Vocabulary 6 items	Mn= S.D.= %=	2.52 1.55 42%	3.03 1.63 50%	3.97 1.76 66%	3.81 1.88 63%
C. Determine What is Asked 10 items	Mn= S.D.= %=	6.46 2.51 65%	6.66 2.72 67%	8.05 2.17 80%	7.61 2.71 76%
D. Identify Extra or Insufficient Information 9 items	Mn= S.D.= %=	4.06 2.07 45%	4.59 2.48 51%	5.94 2.13 66%	5.55 2.38 62%
E. Determine Math Relationships 8 items	Mn= S.D.= %=	2.57 1.58 32%	3.06 1.53 38%	3.82 1.86 48%	4.06 1.93 51%
F. Translate to Math Equation 7 items	Mn= S.D.= %=	1.59 .89 23%	2.19 1.09 31%	2.48 1.22 35%	2.72 1.61 39%
G. Perform Computations 6 items	Mn= S.D.= %=	1.53 .99 25%	1.67 1.13 28%	1.72 1.14 29%	1.93 1.30 32%
H. Label Answers 3 items	Mn= S.D.= %=	.97 .96 32%	.94 .84 31%	1.08 .97 36%	1.22 1.03 41%

TEST WIDE RESPONSE ANALYSIS
—PHONETIC ANALYSIS

NUMBER OF STUDENTS = 202   AIDS LEVEL 1

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	90	90	2	4	2	0	1	.27
2	91	1	1	4	91	0	2	.18
3	84	84	0	10	3	0	3	.33
4	87	9	87	1	0	0	3	.22
5	86	1	3	6	86	0	3	.36
6	89	89	1	5	1	0	2	.27
7	84	4	5	4	84	0	1	.38
8	86	3	86	6	3	0	0	.36
9	89	0	8	2	89	0	0	.25
10	84	5	84	1	8	0	1	.40
11	92	1	3	2	92	0	1	.24
12	93	1	1	93	2	0	2	.16
13	88	2	5	2	88	0	2	.31
14	84	2	10	84	3	0	1	.27
15	72	72	6	14	5	0	1	.51
16	71	4	15	71	8	0	2	.51
17	78	2	78	10	7	0	2	.38
18	31	31	10	51	4	0	3	.15
19	58	23	5	10	58	0	3	.49
20	61	20	13	61	2	0	3	.45
21	59	9	8	59	20	0	4	.35
22	83	3	6	83	5	0	2	.11
23	66	66	23	7	1	0	8	.38
24	64	16	64	2	10	0	6	.65
25	86	4	2	86	1	0	7	.40
26	54	0	32	6	54	0	6	.47
27	83	83	7	2	2	0	6	.45
28	79	3	2	10	79	0	10	.49
29	49	2	32	49	7	0	7	.65
30	79	79	5	4	5	0	6	.56
31	72	0	17	4	72	0	7	.55
32	71	8	7	6	71	0	7	.60
33	75	75	5	4	8	0	6	.40
34	77	4	6	77	2	0	7	.62
35	80	6	80	2	9	0	6	.55
36	77	77	5	2	6	0	7	.55
37	76	6	4	76	1	0	6	.64
38	88	88	1	3	1	0	6	.36
39	66	0	21	66	5	0	6	.51
40	62	2	3	62	25	0	7	.58

KR20 =   .90

61

TEST W1 OF RESPONSE ANALYSIS

NUMBER OF STUDENTS = 175   AIDS LEVEL 1   -STRUCTURAL ANALYSIS

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
41	26	17	25	26	32	0	0	.28
42	17	21	17	47	13	0	2	.02
43	37	28	37	21	9	0	5	.45
44	24	13	24	25	34	0	4	.23
45	64	16	10	64	7	0	3	.68
46	10	13	42	33	10	0	2	.13
47	19	29	36	19	10	0	6	.02
48	38	7	25	24	38	0	6	.45
49	45	26	11	10	45	0	7	.64
50	38	7	28	38	20	0	7	.49
51	41	11	41	31	9	0	7	.49
52	39	39	14	8	27	0	11	.36
53	62	62	7	6	19	0	6	.72
54	71	71	7	6	9	0	6	.79
55	67	67	10	7	10	0	6	.79
56	57	57	21	3	12	0	6	.55
57	65	18	65	8	2	0	7	.72

KR20 = .71

TFST WIOG RESPONSE ANALYSIS

NUMBER OF STUDENTS = 192   AIOS LEVEL I   -VOCABULARY BUILDING

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
58	79	0	5	79	6	0	2	.46
59	65	11	65	9	10	0	4	.69
60	82	4	3	82	8	0	3	.50
61	86	2	5	86	6	0	2	.39
62	87	5	87	4	2	0	2	.33
63	76	3	8	7	76	0	6	.56
64	69	69	7	9	13	0	3	.73
65	79	2	5	79	11	0	3	.48
66	72	15	3	9	72	0	2	.67
67	29	44	16	29	3	0	8	.09
68	68	3	7	20	60	0	3	.56
69	01	4	81	10	4	0	2	.54
70	74	15	5	5	74	0	2	.37
71	77	77	10	2	10	0	2	.56
72	82	5	4	6	82	0	4	.40
73	85	85	5	4	3	0	3	.27
74	62	11	21	62	4	0	2	.77
75	56	14	19	56	8	0	3	.87
76	60	14	60	21	3	0	3	.85
77	49	6	49	23	16	0	5	.62
70	66	3	66	19	8	0	4	.77
79	23	15	35	23	19	0	8	.19
80	77	77	7	7	5	0	4	.40
81	79	2	0	79	10	0	1	.56
82	43	13	43	34	4	0	6	.01
03	41	18	41	31	3	0	7	.67
84	60	14	17	8	60	0	2	.85
85	79	12	79	5	2	0	3	.56

KR20 =   .91

63

TEST WIDE RESPONSE ANALYSIS
-MATH COMPUTATION

AIDS LEVEL 1

NUMBER OF STUDENTS = 190

ITEM NUMBER	PERCENT CORRECT	ANSWERING RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
86	93		93	5	1	1	0	1	.12
87	86		2	6	86	6	0	0	.12
88	92		1	3	92	4	0	0	.18
89	96		1	1	96	2	0	1	.06
90	95		95	2	3	1	0	0	.16
91	50		21	50	8	17	0	3	.59
92	39		16	19	15	39	0	10	.49
93	45		9	45	16	21	0	8	.69
94	69		7	8	7	69	0	8	.59
95	48		6	8	28	48	0	11	.73
96	56		56	4	8	22	0	10	.75
97	49		49	15	7	17	0	12	.65
98	36		17	19	36	15	0	14	.71
99	43		14	43	12	15	0	17	.73
100	35		15	11	35	23	0	16	.82
101	48		9	48	8	13	0	22	.76
102	35		13	16	11	35	0	26	.51
103	37		14	8	13	37	0	27	.55
104	29		14	29	16	14	0	26	.73
105	33		10	16	33	15	0	26	.84
106	53		9	5	8	53	0	25	.49
107	47		7	5	13	47	0	27	.59
108	31		8	19	13	31	0	29	.49
109	24		19	19	24	12	0	26	.37
110	23		23	4	23	21	0	29	.43
111	23		14	20	42	21	0	31	.41
112	25		17	8	25	23	0	30	.24
113	20		12	24	13	20	0	32	.25
114	17		14	20	17	16	0	32	.43
115	21		14	18	12	21	0	35	.16
116	26		26	12	8	16	0	38	.41
117	22		15	13	12	22	0	39	.27
118	14		18	14	14	13	0	41	.20
119	14		22	14	11	14	0	40	.24
120	18		14	14	11	18	0	43	.24
121	93		0	1	93	3	0	4	.18
122	90		1	3	90	3	0	4	.20
123	93		1	93	1	3	0	3	.20
124	92		1	92	2	2	0	4	.22
125	96		96	0	2	1	0	3	.12
126	43		21	7	43	14	0	15	.73
127	41		41	14	10	18	0	17	.67
128	35		17	35	18	12	0	18	.75
129	37		16	8	37	69	0	18	.69
130	43		14	43	6	19	0	18	.71

KR20 = .92

TEST WIDE RESPONSE ANALYSIS
-PHONETIC ANALYSIS

AIDS LEVEL 1

NUMBER OF STUDENTS = 99

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	92	92	1	5	2	0	0	.19
2	90	2		7	90	0	0	.26
3	94	96	0	1	5		0	.07
4	88	11	88	1	0		0	.15
5	93	1		6	93	0	0	.11
6	91	91	0	8	1		0	.26
7	90	1	9	0	90	0	0	.30
8	87	1	87	8	4		0	.33
9	95	0	5	0	95		1	.11
10	90	6	90	3	3	0	0	.22
11	94	0	2	3	94		0	.15
12	95	0	1	95	4		0	.11
13	90	1	3	6	90	0	0	.30
14	90	3	5	90	2		0	.26
15	89	89	4	7	0		0	.22
16	85	4	6	85	5		0	.37
17	87	4	87	6	3	3	0	.26
18	35	35	6	55	4		0	.30
19	65	18	2	11	65		0	.41
20	83	5	6	03	6		0	.30
21	81	4	3	81	12		0	.22
22	86	5	7	86	2		0	.37
23	75	75	10	12	3		0	.44
24	76	10	76	6	7		0	.56
25	90	1	35	90	4		1	.26
26	57	4	9	4	57		0	.33
27	81	81	4	3	7		0	.44
28	86	3	4	7	86		0	.30
29	67	6	20	67	7		0	.70
30	84	84	2	1	12		0	.44
31	79	3	7	10	79		1	.41
32	72	17	8	3	72		0	.52
33	79	79	5	8	8		0	.56
34	80	3	9	80	8		0	.37
35	85	9	85	5	1		0	.41
36	80	60	7	7	6		0	.48
37	70	10	10	78	2		0	.52
38	88	88	1	7	1		3	.22
39	79	4	11	79	3		3	.33
40	88	1	2	88	6		3	.19

KP20 = .92

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 98   AIOS LEVEL 1   ~STRUCTURAL ANALYSIS

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRI FACTOR
41	5T	21	12	5T	9	0	0	.46
42	28	13	28	46	12	0	1	.23
43	59	18	59	15	7	0	0	.69
44	36	7	36	11	46	0	0	.58
45	86	3	6	86	4	0	1	.23
46	9	7	28	56	9	0	0	.08
47	13	21	61	13	3	0	1	.15
48	5T	7	23	12	57	0	0	.54
49	72	T	15	5	72	0	0	.TT
50	59	8	16	59	16	0	0	.T3
51	59	5	59	28	8	0	0	.5B
52	61	61	7	6	23	0	2	.69
53	90	90	6	1	1	0	2	.31
54	84	84	9	2	4	0	1	.46
55	8B	88	6	3	2	0	1	.35
56	69	69	11	12	6	0	1	.5B
57	T9	T	79	9	4	0	1	.58

KR20 =   .7T

66

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 101   AIDS LEVEL 1   -VOCABULARY BUILDING

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
58	88	5	5	88	1	0	1	.33
59	75	6	75	13	5	0	1	.63
60	84	2	6	84	6	0	2	.52
61	90	1	4	90	5	0	0	.26
62	84	1	84	8	6	0	1	.48
63	76	4	8	6	76	0	6	.56
64	75	75	7	7	10	0	1	.74
65	75	8	6	75	10	0	1	.63
66	83	1	5	11	83	0	0	.52
67	31	35	22	31	10	0	3	.52
68	75	7	6	11	75	0	1	.56
69	77	3	77	5	14	0	1	.74
70	74	11	9	3	74	0	3	.59
71	78	78	3	5	14	0	0	.59
72	81	10	4	4	81	0	1	.63
73	77	77	4	12	5	0	2	.59
74	71	14	9	71	3	0	3	.59
75	70	12	11	70	5	0	2	.56
76	67	15	67	14	3	0	1	.70
77	61	12	61	18	6	0	3	.56
78	75	7	75	14	4	0	0	.63
79	34	16	35	34	11	0	5	.48
80	77	77	7	11	3	0	2	.44
81	80	6	5	80	7	0	2	.59
82	67	4	67	24	3	0	2	.74
83	63	20	63	12	3	0	2	.59
84	60	18	11	9	60	0	2	.89
85	77	12	77	4	6	0	1	.48

KR20 = .94

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 101   AIOS LEVEL 1   —MATH COMPUTATION

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
86	84	84	7	5	3	0	1	.37
87	87	4	7	87	2	0	0	.33
88	88	3	5	88	4	0	0	.26
89	90	4	4	90	2	0	0	.26
90	87	87	4	6	3	0	0	.37
91	75	14	75	3	6	0	2	.59
92	67	6	16	8	67	0	3	.67
93	79	3	79	4	13	0	1	.44
94	84	4	5	5	84	0	2	.48
95	73	8	3	11	73	0	5	.63
96	82	82	6	4	6	0	2	.44
97	79	79	5	4	9	0	3	.48
98	72	11	11	72	6	0	0	.67
99	79	9	79	8	2	0	2	.44
100	66	7	14	66	11	0	2	.70
101	80	6	80	6	7	0	1	.59
102	58	7	24	4	58	0	7	.74
103	67	4	9	9	67	0	11	.63
104	65	5	65	8	11	0	11	.81
105	72	5	8	72	8	0	7	.74
106	65	7	6	18	65	0	4	.70
107	67	8	12	6	67	0	7	.59
108	63	3	16	10	63	0	8	.70
109	45	11	22	45	16	0	7	.70
110	52	19	6	52	14	0	9	.56
111	49	12	19	10	49	0	11	.74
112	51	15	14	51	7	0	13	.56
113	39	4	13	28	39	0	17	.44
114	41	10	26	41	9	0	15	.52
115	25	18	35	8	25	0	15	.37
116	54	54	15	7	11	0	13	.70
117	33	25	13	15	33	0	15	.70
118	32	15	21	32	14	1	18	.63
119	38	14	24	7	38	1	17	.70
120	35	15	6	20	35	1	24	.41
121	85	4	6	85	2	0	3	.37
122	80	4	7	80	5	0	4	.52
123	85	3	85	5	3	0	4	.41
124	80	8	80	7	1	0	4	.44
125	81	81	7	8	0	0	4	.41
126	78	9	4	78	2	0	7	.41
127	69	69	8	9	3	0	11	.56
128	75	4	75	8	3	0	10	.44
129	65	9	11	65	4	0	11	.74
130	65	9	65	4	8	0	14	.63

KR 20 =   .95

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 86   AIDS LEVEL 1   —PHONETIC ANALYSIS

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PEPCENT OMITTED	DISCPIM FACTOR
1	80	80	1	17	0	0	1	.61
2	72	2	0	24	72	0	1	.83
3	76	76	0	1	21	0	2	.65
4	76	22	76	1	0	0	1	.74
5	74	0	2	22	74	0	1	.70
6	80	80	0	19	0	0	1	.61
7	74	0	23	0	74	0	2	.70
8	74	1	74	21	2	0	1	.74
9	90	1	3	2	90	0	3	.26
10	91	1	91	1	2	0	5	.13
11	95	0	0	1	95	0	3	.09
12	94	2	0	94	0	0	3	.09
13	92	1	3	0	92	0	3	.09
14	92	0	2	92	1	0	5	.17
15	86	86	5	5	3	0	1	.35
16	87	0	5	87	7	0	1	.22
17	90	1	90	2	5	0	2	.22
18	30	30	6	60	1	0	2	.61
19	63	27	5	5	63	0	1	.48
20	79	9	6	79	5	0	1	.26
21	67	5	5	67	21	0	2	.39
22	86	7	6	86	0	0	1	.22
23	78	78	12	9	0	0	1	.30
24	81	13	81	2	1	0	2	.43
25	98	0	0	98	0	0	2	.04
26	71	0	15	12	71	0	2	.17
27	93	93	3	1	1	0	1	.04
28	83	2	3	10	83	0	1	.35
29	76	0	19	76	5	0	1	.39
30	84	84	3	1	10	0	1	.30
31	67	0	13	19	67	0	1	.70
32	80	13	2	5	80	0	0	.48
33	78	78	13	5	5	0	0	.52
34	80	1	7	80	12	0	0	.48
35	85	14	85	0	1	0	0	.43
36	79	79	2	5	14	8	0	.43
37	80	2	10	80	7	0	0	.48
38	92	92	0	5	3	0	0	.13
39	90	0	7	90	3	0	0	.17
40	84	0	3	84	13	0	0	.26

KR20 = .93

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 85   AIUS LEVEL 1   -STRUCTURAL ANALYSIS

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
41	52	16	8	52	24	0	0	.65
42	28	24	20	38	11	0	0	.43
43	56	29	56	11	4	0	0	.83
44	52	2	52	7	36	0	2	.48
45	88	5	5	88	2	0	0	.17
46	22	4	34	40	22	0	0	.35
47	75	21	48	25	5	0	1	.17
48	64	8	20	8	64	0	0	.65
49	68	12	11	6	68	0	4	.70
50	52	9	24	52	13	0	2	.48
51	66	4	66	26	2	0	2	.57
52	67	67	5	2	22	0	4	.61
53	87	87	6	1	2	0	4	.35
54	91	91	2	1	2	0	4	.17
55	88	88	4	5	1	0	2	.35
56	68	68	27	0	2	0	2	.61
57	88	4	88	2	4	0	2	.30

KR20 =   .80

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 84   AIDS LEVEL 1   —VOCABULARY BUILDING

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
58	96	1	0	96	2	0	0	.00
59	90	1	90	4	4	0	1	.13
60	95	0	2	95	2	0	0	.04
61	99	0	0	99	0	0	1	.04
62	96	2	96	0	0	0	1	.04
63	87	4	5	4	87	0	1	.22
64	95	95	0	4	1	0	0	.09
65	89	6	1	89	4	0	0	.09
66	90	7	1	1	90	0	0	.22
67	39	37	19	39	2	0	2	.43
68	90	2	0	7	90	0	0	.17
69	98	0	98	1	1	0	0	.00
70	85	14	1	0	85	0	0	.22
71	94	94	4	1	1	0	0	.13
72	98	0	1	0	98	0	1	.00
73	95	95	1	4	0	0	0	.04
74	76	14	8	76	0	0	1	.74
75	74	17	7	74	1	0	1	.03
76	77	14	77	6	0	0	2	.61
77	69	15	69	11	2	0	2	.74
78	83	5	83	8	4	0	0	.43
79	55	18	19	55	6	0	2	.87
80	90	90	2	4	2	0	1	.17
81	92	0	7	92	0	0	1	.22
82	69	4	69	25	1	0	1	.74
83	58	26	58	13	1	0	1	.74
04	77	12	4	6	77	0	1	.65
85	89	5	89	4	1	0	1	.13

KR20 =   .91

71

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 84   AIOS LEVEL-I   —MATH COMPUTATION

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
86	98	98	1	0	0	0	1	.04
87	95	0	1	95	2	0	1	.04
88	99	0	0	99	0	0	1	.09
89	99	0	0	99	0	0	1	.09
90	99	99	0	0	0	0	1	.09
91	83	8	83	4	1	0	4	.26
92	82	5	6	4	82	0	4	.35
93	87	2	87	1	6	0	4	.26
94	93	2	1	0	93	0	4	.13
95	87	1	1	7	87	0	4	.35
96	92	92	1	2	1	0	4	.13
97	90	90	2	1	4	0	2	.13
98	83	5	6	83	2	0	4	.30
99	87	5	87	2	4	0	2	.30
100	81	4	5	81	7	0	4	.35
101	96	1	96	0	2	0	0	.04
102	80	1	15	4	80	0	0	.13
103	77	2	10	10	77	0	1	.26
104	83	5	83	4	6	0	2	.35
105	86	4	2	86	7	0	1	.22
106	85	4	4	7	85	0	1	.43
107	82	4	11	2	82	0	1	.48
108	80	1	4	12	80	0	4	.48
109	77	1	15	77	2	0	4	.48
110	63	21	2	63	10	0	4	.61
111	69	1	14	10	69	0	6	.57
112	71	12	8	71	4	0	5	.57
113	64	5	7	19	64	0	5	.48
114	60	6	24	60	5	0	6	.70
115	52	7	24	4	52	1	12	.74
116	74	74	6	8	5	0	7	.65
117	57	6	13	14	57	0	10	.74
118	52	15	17	52	7	0	8	.74
119	64	11	10	5	64	0	11	.57
120	55	13	8	14	55	0	10	.61
121	87	0	4	87	1	0	8	.39
122	90	0	0	90	1	0	8	.26
123	90	0	90	0	1	0	8	.26
124	88	4	88	0	0	0	8	.35
125	89	89	1	0	1	0	8	.30
126	77	13	2	77	2	0	5	.52
127	77	77	0	5	4	0	6	.52
128	81	2	81	8	2	0	6	.52
129	74	6	7	74	7	0	6	.61
130	82	7	82	1	4	0	6	.35

KR20 = .93

TEST WIDE RESPONSE ANALYSIS
-PHONETIC ANALYSIS

NUMBER OF STUDENTS = 81   ABOS LEVEL 2

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	77	7	2	77	2	0	12	.45
2	35	2	44	5	35	0	14	.64
3	89	0	1	2	89	0	7	.18
4	60	12	5	60	16	0	6	.36
5	42	2	38	42	10	0	7	.64
6	72	22	0	0	72	0	6	.55
7	65	9	65	10	9	0	7	.64
8	77	11	77	4	1	0	7	.41
9	56	21	14	2	56	0	7	.55
10	70	70	6	11	6	0	6	.45
11	65	7	6	17	65	0	4	.50
12	78	78	4	10	6	0	2	.55
13	25	10	28	25	26	0	11	.27
14	63	19	63	9	4	0	6	.73
15	42	6	31	42	12	0	9	.64
16	83	2	83	0	15	0	0	.18
17	78	78	2	10	10	0	0	.45
18	77	16	77	0	2	0	5	.36
19	60	60	12	4	21	0	2	.82
20	78	1	7	12	78	0	1	.45
21	68	1	1	68	30	0	0	.68
22	75	1	11	7	75	0	5	.45
23	62	16	7	62	12	0	2	.27
24	57	27	57	5	6	0	5	.41
25	78	19	78	2	1	0	0	.55
26	77	5	7	77	6	0	5	.41
27	27	5	27	0	65	0	2	.45
28	67	30	2	67	1	0	0	.73
29	63	21	1	11	63	0	4	.77
30	49	4	6	40	49	0	1	.68
31	59	59	11	23	0	0	6	.86
32	78	11	78	0	2	0	9	.34
33	70	1	11	70	14	0	4	.68
34	57	2	37	57	1	0	2	.86
35	56	15	23	4	56	0	2	.73
36	68	25	68	6	1	0	0	.64
37	54	2	54	10	28	0	5	.59
38	89	89	0	9	2	0	0	.18
39	64	19	15	64	1	0	1	.73
40	78	15	2	78	5	0	0	.27
41	51	27	11	51	7	0	9	.45
42	78	11	78	2	9	0	0	.41
43	78	9	5	78	6	0	2	.36

KR20 = .94

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 80   AIOS LEVEL 2   -STRUCTURAL ANALYSIS

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
44	T1	1	T1	23	4	0	1	.50
45	81	81	5	0	13	0	1	.36
46	66	6	20	66	5	0	3	.59
4T	64	64	21	4	0	0	4	.60
48	T1	T1	15	8	4	0	3	.59
49	80	5	5	80	6	0	4	.45
50	T5	T5	10	1	10	0	4	.68
51	91	6	0	91	3	0	0	.23
52	84	9	5	3	04	0	0	.41
53	84	5	8	3	84	0	1	.36
54	T8	1	T8	11	10	0	0	.41
55	T3	5	8	11	T3	0	4	.55
56	T5	8	5	T5	10	0	3	.41
5T	88	6	5	88	0	0	1	.23
5A	85	3	85	6	5	0	1	.23
59	T9	8	T9	4	5	0	5	.50
60	86	4	3	86	5	0	3	.32
6T	T9	T9	9	5	6	0	1	.45
62	83	6	6	3	83	0	3	.50

KR20 =   .91

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 80   AIDS LEVEL 2   —VOCABULARY BUTLOING

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
63	78	78	3	4	14	0	3	.55
64	90	90	3	5	0	0	3	.27
65	89	1	89	6	1	0	3	.27
66	83	13	0	83	3	0	3	.23
67	96	96	1	0	1	0	1	.05
68	94	0	3	3	94	0	1	.14
69	89	6	89	3	3	0	0	.23
70	84	1	13	84	1	0	1	.32
71	94	1	0	94	4	0	1	.14
72	88	5	88	4	1	0	3	.32
73	95	3	0	1	95	0	1	.09
74	79	14	79	3	4	0	1	.45
75	80	4	9	80	5	0	3	.23
76	51	10	5	51	31	0	3	.64
77	84	3	5	84	5	0	4	.36
78	78	78	5	10	6	0	1	.64
79	73	4	10	9	73	0	5	.45
80	71	8	3	15	71	0	4	.68
81	59	59	13	5	21	0	3	.59
82	96	3	96	0	1	0	0	.05
83	90	90	9	0	1	0	0	.14
84	70	30	70	0	0	0	0	.27
85	91	91	9	0	0	0	0	.23
86	89	10	89	0	0	0	1	.23
87	75	75	25	0	0	0	0	.59
88	93	93	6	0	0	0	1	.18
89	96	96	3	0	0	0	1	.00
90	51	48	51	0	0	0	1	.41
91	31	68	31	0	0	0	1	.41
92	90	9	90	0	0	0	1	.18
93	58	58	40	0	0	0	3	.68

KP20 =   .98

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 81   AIOS LEVEL 2   —MATH COMPUTATION

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
94	75	12	75	2	4	0	6	.18
95	84	84	6	4	0	0	6	.23
96	84	84	5	1	1	0	9	.18
97	89	5	89	1	0	0	5	.05
98	90	1	4	4	90	0	1	.18
99	35	6	35	16	27	0	16	.18
100	31	2	31	10	28	0	28	.32
101	22	4	22	12	38	0	23	.41
102	52	1	4	7	52	0	36	.73
103	35	35	6	12	15	0	32	.45
104	4	4	1	57	9	0	30	.00
105	6	2	5	6	43	8	43	.09
106	6	5	6	5	40	0	44	.00
107	14	11	4	14	19	0	53	.27
108	6	9	6	6	19	0	60	.18
109	57	4	0	7	57	0	32	.68
110	41	2	1	41	22	0	33	.73
111	28	1	12	28	16	0	42	.55
112	22	4	9	22	21	0	44	.27
113	40	1	2	15	40	0	42	.77
114	31	4	6	11	31	0	48	.64
115	11	19	4	11	10	0	57	.36
116	16	11	7	16	7	0	58	.50
117	9	16	4	10	9	0	62	.23
118	21	1	15	21	9	0	54	.55
119	9	10	12	9	7	0	62	.27
120	10	12	9	9	10	0	60	.18
121	5	10	16	6	5	0	63	.14
122	6	19	6	6	5	0	64	.18
123	15	15	9	5	7	0	64	.27
124	14	2	15	14	12	0	57	.32
125	11	7	11	9	15	0	58	.32
126	7	4	7	7	23	0	58	.05
127	4	11	4	2	23	0	59	.05
128	6	4	2	6	28	0	59	.14
129	6	14	6	4	10	0	67	.09
130	7	12	6	7	6	0	68	.27
131	7	7	7	6	7	0	72	.18
132	6	2	6	6	14	0	72	.14
133	6	9	6	7	9	0	69	.18
134	32	4	0	1	32	0	63	.68
135	10	2	2	10	21	0	64	.14
136	4	5	4	6	21	0	64	.05
137	7	7	6	7	15	0	64	.18
138	10	4	6	10	15	0	65	.18

KR20 = .85

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 102   AIDS LEVEL 2   -PHONETIC ANALYSIS

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	90	5	0	90	5	0	0	.11
2	66	1	30	2	66	0	1	.75
3	98	0	2	0	98	0	0	.04
4	83	3	2	83	10	0	2	.25
5	69	0	27	69	4	0	0	.43
6	89	10	1	0	89	0	0	.14
7	02	8	82	5	5	0	0	.39
8	96	1	96	3	0	0	0	.04
9	77	14	6	3	77	0	0	.50
10	91	91	3	4	1	0	1	.21
11	80	5	6	7	80	0	2	.54
12	89	89	2	5	2	0	2	.29
13	52	8	9	52	28	0	4	.64
14	82	8	82	8	1	0	1	.36
15	76	4	14	76	5	0	1	.57
16	93	0	93	0	7	0	0	.18
17	96	96	0	3	1	0	0	.07
18	96	4	96	0	0	0	0	.07
19	92	92	4	1	3	0	0	.18
20	94	1	2	3	94	0	0	.14
21	90	0	1	90	8	0	1	.25
22	86	0	8	6	86	0	0	.29
23	69	8	7	69	17	0	0	.32
24	01	9	81	3	4	0	3	.32
25	95	4	95	0	0	0	1	.11
26	94	0	3	94	2	0	1	.14
27	45	0	45	0	55	0	0	.64
28	95	5	0	95	0	0	0	.11
29	96	1	1	2	96	0	0	.07
30	75	1	12	13	75	0	0	.50
31	85	85	1	12	1	0	1	.36
32	97	2	97	0	0	0	1	.00
33	90	2	5	90	3	0	0	.21
34	87	0	11	87	2	0	0	.29
35	86	5	6	2	86	0	1	.21
36	92	2	92	3	2	0	1	.21
37	89	0	89	1	9	0	1	.21
38	93	93	1	6	0	0	0	.04
39	87	6	6	87	1	0	0	.25
40	87	8	1	87	4	0	0	.29
41	71	12	14	71	3	0	1	.21
42	89	2	89	1	7	0	1	.04
43	87	6	5	87	2	0	0	.04

KR20 =   .89

TEST WIDE RESPONSE ANALYSIS
—STRUCTURAL ANALYSIS

NUMBER OF STUDENTS = 102   AIOS LEVEL 2

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
44	77	2	77	18	3	0	0	.54
45	93	93	5	0	2	0	0	.18
46	89	1	5	89	2	0	0	.29
47	80	80	16	2	2	0	0	.57
48	88	08	7	3	1	0	0	.32
49	94	2	3	94	1	0	0	.14
50	94	94	2	2	2	0	0	.14
51	98	0	1	98	1	0	0	.04
52	94	3	2	1	94	0	0	.14
53	95	2	2	1	95	0	1	.04
54	92	1	92	2	4	0	0	.14
55	86	5	T	2	86	0	3	.32
56	8T	7	2	8T	1	0	0	.18
57	93	4	2	93	1	0	1	.14
58	94	3	94	2	0	0	1	.11
59	96	2	96	1	0	0	1	.0T
60	93	5	2	93	0	0	0	.14
61	93	93	4	0	3	0	0	.11
62	94	2	2	2	94	0	0	.11

KR20 = .8T

TEST WIDE RESPONSE ANALYSIS
-VOCAOULARY BUILOING

NUMBER OF STUDENTS = 102   AIDS LEVEL 2

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
63	95	95	1	1	3	0	0	.11
64	97	97	2	1	0	0	0	.04
65	9R	0	98	2	0	0	0	.00
66	94	6	0	94	0	0	0	.11
67	99	99	0	0	1	0	0	.04
6R	9R	0	1	1	99	0	0	.00
69	92	6	92	2	0	0	0	.21
70	RR	1	8	08	2	0	1	.21
71	99	0	1	99	0	0	0	.04
72	97	1	97	1	1	0	0	.04
73	93	6	1	0	93	0	0	.11
74	96	3	96	1	0	0	0	.04
75	90	1	6	90	2	0	1	.18
76	R3	0	0	R3	16	0	1	.39
77	96	1	1	96	2	0	0	.07
78	95	95	1	2	2	0	0	.11
79	R7	0	2	11	87	0	0	.18
RO	90	2	0	7	90	0	1	.21
81	89	09	3	0	5	0	3	.27
82	97	3	97	0	0	0	0	.00
83	100	100	0	0	0	0	0	.07
R4	75	24	75	0	0	0	1	.43
85	96	96	4	0	0	0	0	.07
86	9R	2	98	0	0	0	0	.00
R7	95	95	4	0	0	0	1	.04
8R	97	97	3	0	0	0	0	.00
89	99	99	1	0	0	0	0	.04
90	73	26	73	1	0	0	0	.54
91	54	44	54	1	0	0	1	.75
92	94	5	94	1	0	0	0	.07
93	76	76	23	1	0	0	0	.50

KR 20 =   .R5

TEST WIDE RESPONSE ANALYSIS
—MATH COMPUTATION

NUMBER OF STUDENTS =   101   AIOS LEVEL 2

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
94	90	6	90	4	0	0	0	.11
95	97	97	0	2	1	0	0	.04
96	92	92	4	4	0	0	0	.15
97	88	7	88	1	3	0	1	.22
98	93	2	4	1	93	0	0	.15
99	90	1	90	5	3	0	1	.15
100	88	2	88	3	6	0	1	.30
101	74	2	74	5	19	0	0	.41
102	96	2	0	1	96	0	1	.07
103	80	00	6	8	5	0	1	.19
104	63	63	9	20	3	0	5	.63
105	55	3	6	55	23	0	13	.70
106	70	3	70	3	13	0	11	.67
107	77	5	5	77	7	0	6	.37
108	64	6	64	8	12	0	10	.70
109	94	1	0	5	94	0	0	.04
110	99	0	0	99	1	0	0	.04
111	82	0	5	82	9	0	4	.33
112	92	1	1	92	4	0	2	.19
113	94	1	0	4	94	0	1	.04
114	86	5	3	4	86	0	2	.33
115	82	8	2	82	4	0	4	.44
116	88	4	3	80	3	0	2	.26
117	75	8	3	8	75	0	6	.63
118	84	3	10	84	2	0	1	.33
119	8	11	6	8	6	0	69	.19
120	9	12	5	4	9	0	70	.26
121	3	12	8	5	3	0	72	.11
122	7	4	6	7	5	0	78	.04
123	11	11	5	0	2	0	74	.15
124	69	13	1	69	3	0	14	.52
125	49	9	49	9	8	0	26	.81
126	66	1	66	1	13	0	19	.74
127	46	3	46	4	19	0	29	.70
128	63	8	0	63	10	0	19	.89
129	6	8	6	2	9	0	75	.00
130	6	4	4	6	7	0	79	.04
131	5	5	5	6	4	0	00	.00
132	8	5	8	3	8	0	76	.22
133	0	8	0	9	6	0	77	.00
134	9	1	4	9	9	0	77	.19
135	4	2	1	4	10	0	83	.00
136	4	4	4	6	4	0	02	.04
137	10	2	3	10	2	0	03	.11
138	4	3	6	4	4	0	83	.11

KR.20 =   .88

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 87   AIDS LEVEL 2   -PHONETIC ANALYSIS

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	91	6	2	91	1	0	0	.22
2	63	2	30	5	63	0	0	.83
3	98	0	1	1	98	0	0	.04
4	89	2	5	89	5	0	0	.04
5	71	1	23	71	5	0	0	.35
6	93	7	0	0	93	0	0	.09
7	70	9	78	9	3	0	0	.39
8	87	3	87	9	0	0	0	.17
9	86	8	6	0	86	0	0	.13
10	92	92	2	3	1	0	1	.17
11	78	0	8	13	78	0	1	.43
12	93	93	1	2	2	0	1	.17
13	48	8	13	48	29	0	2	.70
14	87	8	87	3	0	0	1	.22
15	74	7	16	74	2	0	1	.57
16	93	0	93	1	6	0	0	.17
17	95	95	0	2	2	0	0	.04
18	97	3	97	0	0	0	0	.00
19	92	92	3	2	2	0	0	.22
20	98	0	1	1	98	0	0	.00
21	91	0	1	91	8	0	0	.26
22	95	0	3	1	95	0	0	.09
23	85	3	3	85	7	0	1	.00
24	91	6	91	1	2	0	0	.22
25	98	2	98	0	0	0	0	.00
26	98	0	0	98	2	0	0	.00
27	61	1	61	1	37	0	0	.04
28	94	5	0	94	1	0	0	.13
29	95	2	1	1	95	0	0	.09
30	72	0	11	16	72	0	0	.61
31	87	87	2	10	0	0	0	.35
32	95	3	95	0	1	0	0	.09
33	95	0	1	95	3	0	0	.09
34	93	0	7	93	0	0	0	.13
35	90	5	6	0	90	0	0	.26
36	97	2	97	1	0	0	0	.04
37	97	0	97	0	3	0	0	.04
38	97	97	1	2	0	0	0	.00
39	90	7	3	90	0	0	0	.30
40	94	3	0	94	2	0	0	.04
41	78	5	10	78	7	0	0	.30
42	87	11	87	0	1	0	0	.13
43	90	1	2	90	7	0	0	.17

KR20 =   .89

TEST W/OF RESPONSE ANALYSIS

NUMBER OF STUDENTS = 8T   AIDS LEVEL 2   —STRUCTURAL ANALYSIS

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
44	95	0	95	5	0	0	0	.00
45	99	99	0	0	1	0	0	.04
46	9T	0	0	9T	2	0	1	.00
4T	92	92	8	0	0	0	0	.22
4R	95	95	5	0	0	0	0	.09
49	9T	0	2	9T	1	0	0	.04
50	9R	9R	2	0	0	0	0	.00
5t	94	3	0	94	1	0	1	.13
52	94	2	0	1	94	0	2	.09
53	95	0	1	1	95	0	2	.09
54	95	0	95	1	2	0	T	.09
55	92	1	6	0	92	0	1	.1J
56	R5	10	1	85	2	0	1	.30
5T	99	1	0	99	0	0	0	.09
5R	99	0	99	1	0	0	0	.04
59	9R	1	98	0	1	0	0	.D0
60	9T	2	0	9T	0	0	1	.04
61	9R	90	1	1	0	0	0	.00
62	9T	0	2	1	9T	0	0	.00

KR20 = .Tl

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 86 / AIDS LEVEL 2 — VOCABULARY BUILDING

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
63	93	93	0	0	7	0	0	.09
64	99	99	0	0	1	0	0	.04
65	98	0	98	1	1	0	0	.00
66	94	5	0	94	1	0	0	.13
67	100	100	0	0	0	0	0	.09
68	100	0	0	0	100	0	0	.09
69	86	14	86	0	0	0	0	.26
70	98	0	1	98	1	0	0	.09
71	100	0	0	100	0	0	0	.09
72	98	2	98	0	0	0	0	.04
73	94	6	0	0	94	0	0	.00
74	97	2	97	0	1	0	0	.04
75	92	0	5	92	3	0	0	.13
76	95	1	0	95	3	0	0	.09
77	100	0	0	100	0	0	0	.09
78	100	100	0	0	0	0	0	.09
79	95	0	1	2	95	0	1	.00
80	94	2	0	3	94	0	0	.09
81	95	95	2	0	2	0	0	.09
82	99	1	99	0	0	0	0	.04
83	99	99	0	0	0	0	1	.04
84	86	14	86	0	0	0	0	.30
85	100	100	0	0	0	0	0	.09
86	99	1	99	0	0	0	0	.04
87	94	94	6	0	0	0	0	.09
88	99	99	0	0	0	0	1	.04
89	98	98	1	0	0	0	1	.04
90	74	24	74	0	0	0	1	.65
91	80	19	80	0	0	0	1	.57
92	98	0	98	0	0	0	2	.00
93	87	87	10	0	0	0	2	.26

KR20 = .73

TEST WIDE RESPONSE ANALYSIS
—MATH COMPUTATION

NUMBER OF STUDENTS = 86   AIDS LEVEL 2

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
94	98	0	98	1	0	0	0	.00
95	91	91	3	5	1	0	2	.04
96	92	92	1	5	0	0	2	.04
97	95	2	95	0	0	0	0	.09
98	90	2	2	6	90	0	0	.26
99	87	3	87	5	5	0	0	.39
100	87	0	87	3	9	0	0	.39
101	84	1	84	6	10	0	0	.00
102	93	1	1	5	93	0	0	.76
103	79	79	5	14	2	0	1	.61
104	70	70	15	14	0	0	0	.70
105	67	1	7	67	19	0	1	.48
106	69	1	69	15	14	0	1	.39
107	77	2	6	77	14	0	3	.52
108	63	3	63	20	10	0	0	.04
109	98	0	1	1	98	0	0	.09
110	100	0	0	100	0	0	0	.04
111	99	0	0	99	1	0	0	.04
112	99	0	0	99	1	0	0	.09
113	97	1	0	1	99	0	0	.07
114	95	3	2	92	95	0	0	.09
115	92	3	3	97	1	0	0	.08
116	97	3	0	8	0	0	0	.22
117	87	3	0	97	87	0	1	.04
118	97	2	12	65	0	0	1	.70
119	65	9	12	7	12	0	2	.74
120	56	22	12	8	56	0	3	.70
121	57	21	8	56	57	0	2	.61
122	56	13	0	17	19	0	5	.57
123	69	69	85	90	0	0	3	.04
124	90	9	93	6	5	0	1	.35
125	85	6	1	2	2	0	1	.17
126	93	1	70	10	2	0	1	.48
127	70	8	1	95	10	0	2	.00
128	95	0	60	12	1	0	5	.65
129	60	12	20	48	12	0	3	.52
130	48	23	9	15	6	0	3	.65
131	62	62	77	3	10	0	3	.52
132	77	7	63	12	9	0	6	.00
133	63	6	3	13	14	0	1	.26
134	74	8	7	56	74	0	1	.39
135	56	10	58	27	26	0	1	.48
136	58	7	27	45	12	0	3	.26
137	45	2	17	45	22	0	1	.39
138	47	14	17	47	20	0	2	.65

KR20 = .89

TEST WIDE RESPONSE ANALYSIS
-PHONETIC ANALYSIS

NUMBER OF STUDENTS = 79   AIDS LEVEL 3

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	82	82	6	0	10	1	0	.52
2	85	3	85	0	11	1	0	.43
3	84	84	3	0	14	0	0	.48
4	82	15	1	82	1	0	0	.57
5	87	13	0	87	0	0	0	.38
6	90	8	0	90	3	0	0	.24
7	82	82	15	1	1	0	0	.57
8	77	0	5	18	77	0	0	.62
9	84	6	9	84	0	1	0	.29
10	65	16	16	3	65	0	0	.57
11	70	15	14	70	1	0	0	.48
12	82	5	10	82	3	0	0	.43
13	68	16	15	0	68	0	0	.52
14	86	0	86	3	11	0	0	.33
15	87	3	9	87	1	0	0	.33
16	96	96	1	3	0	0	0	.05
17	92	92	5	1	0	1	0	.14
18	91	1	91	1	5	1	0	.10
19	94	1	94	5	0	0	0	.05
20	90	90	1	4	4	1	0	.19
21	86	86	1	4	9	0	0	.29
22	87	0	8	5	87	0	0	.33
23	90	0	3	90	8	0	0	.19
24	94	4	94	0	3	0	0	.05
25	92	1	92	4	3	0	0	.14
26	89	4	8	89	0	0	0	.24
27	96	0	3	96	1	0	0	.05
28	44	49	44	6	0	0	0	.33
29	91	1	91	5	3	0	0	.10
30	62	9	6	22	62	0	1	.33
31	89	5	1	5	89	0	0	.29
32	51	8	22	51	19	1	0	.38
33	66	1	24	66	9	0	0	.62
34	89	8	0	4	89	0	0	.24
35	80	3	80	9	9	0	0	.19
36	91	3	6	91	0	0	0	.14
37	89	89	8	3	0	0	1	.14
38	77	77	9	4	10	0	0	.43
39	80	80	5	11	4	0	0	.38
40	78	78	6	4	11	0	0	.38
41	62	0	62	9	28	1	0	.38
42	70	4	9	18	70	0	0	.67

KR20 = .91

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 79   AIDS LEVEL 3   -VOCABULARY BUILDING

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
43	95	95	5	0	0	0	0	.10
44	92	1	1	92	4	1	0	.10
45	90	3	90	8	0	0	0	.14
46	92	92	4	0	4	0	0	.19
47	92	1	5	92	1	0	0	.14
48	91	91	5	0	4	0	0	.24
49	92	0	92	4	1	0	3	.14
50	91	91	4	1	3	0	1	.14
51	91	1	5	91	3	0	0	.19
52	91	3	91	4	3	0	0	.19
53	86	5	5	86	4	0	0	.24
54	85	3	0	85	13	0	0	.38
55	94	94	4	3	0	0	0	.14
56	94	5	94	1	0	0	0	.10
57	95	3	95	1	1	0	0	.10
58	84	6	5	84	4	0	1	.43
59	92	5	1	92	1	0	0	.19
60	87	5	3	87	5	0	0	.29
61	81	9	4	81	5	0	1	.52
62	80	1	10	80	6	0	3	.38
63	90	4	3	90	1	0	3	.24
64	77	1	77	6	13	0	3	.52
65	91	3	1	91	3	0	3	.24
66	82	5	4	3	82	1	5	.43

KR20 = .91

TEST WIDE RESPONSE ANALYSIS
—READING COMPREHENSION

NUMBER OF STUDENTS = 79   AIOS LEVEL 3

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
81	95	95	1	4	0	0	0	.10
82	84	4	3	10	84	0	0	.24
83	76	9	9	76	6	0	0	.62
84	85	8	4	85	4	0	0	.33
85	78	6	5	9	78	0	1	.57
86	85	6	85	6	0	0	3	.38
87	81	6	11	81	1	0	0	.33
88	72	4	6	72	18	0	0	.43
89	33	8	9	51	33	0	0	.19
90	70	10	70	13	6	0	1	.38
91	57	14	14	57	15	0	8	.67
92	81	81	8	6	5	0	0	.48
93	75	16	0	8	75	1	0	.29
94	78	13	78	3	3	0	4	.24
95	80	0	5	80	13	0	3	.48
96	84	6	84	5	4	0	1	.38
97	65	25	65	4	4	0	3	.52
98	35	10	11	35	41	0	3	.14
99	63	5	23	63	8	0	1	.29
100	77	3	8	77	11	0	1	.48
101	84	84	6	8	1	0	1	.38
102	81	3	81	10	5	0	1	.48
103	39	18	39	6	35	0	1	.24
104	73	73	6	13	6	0	1	.57
105	80	8	5	5	80	1	1	.43
106	85	4	85	5	5	0	1	.33
107	76	13	8	76	1	0	3	.62
108	73	9	11	73	4	0	3	.57
109	62	62	14	10	11	0	3	.67
110	63	63	11	9	14	1	1	.57
111	43	37	10	6	43	1	3	.38
112	63	63	16	6	10	1	3	.62
113	71	9	71	10	8	0	3	.67
114	58	13	16	58	10	0	3	.43
115	67	10	67	15	5	0	3	.62
116	57	10	10	57	18	3	3	.71
117	68	5	14	10	68	0	3	.71
118	77	6	8	77	6	0	3	.62
119	58	58	16	13	10	0	3	.62
120	68	15	68	5	5	3	4	.57
121	57	57	10	6	22	1	4	.52
122	39	14	39	38	4	0	5	.14
123	70	9	70	6	11	0	4	.57
124	60	6	15	6	60	0	4	.33
125	54	20	54	10	10	1	4	.52
126	58	23	58	9	6	0	4	.71
127	62	3	15	15	62	0	5	.67
128	49	8	25	49	14	0	4	.62
129	35	27	11	35	22	0	5	.33
130	76	4	5	6	76	1	8	.52
131	66	5	14	66	9	0	6	.71
132	59	16	11	59	6	0	6	.71
133	58	58	11	15	8	0	8	.62
134	22	42	22	9	20	0	8	.19
135	41	41	18	11	24	0	6	.62
136	19	19	33	10	29	0	9	.19
137	32	16	16	29	32	0	6	.52
138	35	35	10	27	11	1	9	.52
	61	11	61	11	9	1	6	.71
	67	1	13	13	67	0	6	.52
	77	3	19	14	19	1	8	.48

87

142	47	47	14	22	9	0	9	.52
143	54	8	8	54	23	0	8	.38
144	75	1	9	75	8	0	8	.52

KR20 = .95

NUMBER OF STUDENTS =   77   AIOS LEVEL 3   -MATH COMPUTATION

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	95	0	4	95	1	0	0	.00
2	88	88	0	3	0	0	1	.24
3	83	1	9	83	4	1	1	.33
4	92	3	92	1	3	0	1	.19
5	94	3	94	3	0	1	0	.05
6	88	3	3	88	3	3	1	.19
7	81	4	81	9	4	1	1	.33
8	77	6	8	77	5	0	4	.33
9	84	1	5	84	6	1	1	.19
10	90	4	90	5	0	0	1	.14
11	88	88	8	0	3	0	1	.24
12	92	92	4	1	0	1	1	.14
13	82	6	82	4	3	1	4	.48
14	87	4	87	1	4	0	4	.29
15	79	6	1	9	79	0	4	.57
16	84	9	84	0	4	0	3	.33
17	84	0	6	84	4	1	4	.43
18	75	8	6	6	75	0	4	.62
19	73	6	5	12	73	0	4	.48
20	69	8	8	69	10	1	4	.52
21	75	4	9	75	6	1	4	.43
22	61	5	29	61	3	0	3	.48
23	55	0	19	55	14	1	3	.71
24	65	4	4	21	65	1	5	.48
25	75	5	1	13	75	1	4	.30
26	86	86	3	3	5	0	4	.29
27	52	23	12	52	8	1	4	.62
28	60	4	60	19	10	3	4	.62
29	65	6	65	18	6	0	4	.67
30	44	8	44	23	19	0	5	.57
31	74	4	8	9	74	0	5	.57
32	66	6	13	9	66	1	4	.86
33	74	4	74	16	1	0	5	.57
34	73	3	73	6	13	0	5	.67
35	73	8	12	73	3	1	4	.62
36	64	14	64	12	5	0	5	.67
37	47	6	27	47	9	3	8	.29
38	48	48	16	17	10	3	6	.57
39	38	18	38	18	17	1	8	.48
40	31	0	23	22	31	3	13	.19
41	27	18	21	17	22	1	21	.19
42	23	12	26	18	23	1	19	.14
43	27	22	19	12	36	1	9	.38
44	36	5	36	27	19	1	10	.76
45	40	17	12	40	19	0	12	.62
46	48	9	23	9	48	0	10	.67
47	53	53	16	16	3	0	13	.71
48	60	6	60	8	12	0	14	.67
49	27	27	18	22	16	3	14	.29
50	13	8	13	26	26	1	26	.10
51	14	23	14	18	18	3	23	.14
52	23	26	23	17	13	1	19	.00
53	17	17	13	25	17	1	27	.14

KR20 =   .93

NUMBER OF STUDENTS = 75   AIDS LEVEL 3   ~MATH APPLICATION

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
81	88	3	88	5	4	0	0	.25
82	89	3	5	89	3	0	0	.25
83	81	81	7	5	7	0	0	.30
84	80	11	4	80	5	0	0	.45
85	84	84	8	3	5	0	0	.40
86	77	8	77	3	12	0	0	.50
87	61	61	15	8	13	1	1	.50
88	52	16	52	9	21	0	1	.60
89	57	21	57	8	12	0	1	.45
90	60	4	25	11	60	0	0	.70
91	56	27	7	56	11	0	0	.45
92	79	5	5	79	9	1	0	.50
93	68	7	16	8	68	0	1	.70
94	64	64	12	9	12	0	3	.55
95	64	15	64	11	8	0	3	.70
96	55	12	16	55	13	0	4	.60
97	60	19	60	16	3	0	3	.45
98	71	4	12	71	11	0	3	.35
99	63	4	13	17	63	0	3	.75
100	63	11	11	63	13	0	3	.75
101	65	8	16	8	65	0	3	.60
102	79	3	8	79	9	0	1	.55
103	72	5	13	72	7	0	3	.50
104	77	77	4	7	8	0	4	.60
105	63	9	9	15	63	0	4	.75
106	63	9	63	11	13	0	4	.70
107	71	4	11	71	9	0	5	.60
108	60	13	60	15	7	0	5	.80
109	72	72	5	8	9	0	5	.55
110	67	67	7	13	8	0	5	.70
111	56	7	12	20	56	0	5	.70
112	48	28	48	13	5	0	5	.60
113	57	20	57	11	7	0	5	.70
114	52	32	7	52	4	0	5	.70
115	71	71	4	16	4	0	5	.65
116	28	20	19	28	28	0	5	.45
117	29	23	24	15	29	1	8	.60
118	63	13	3	63	15	0	7	.65
119	47	17	47	13	15	1	7	.65
120	15	43	16	17	15	0	9	.10
121	67	12	67	5	8	0	8	.60
122	41	15	41	13	23	0	8	.75
123	61	7	61	13	9	0	9	.50
124	57	4	57	24	7	0	8	.70
125	48	21	11	11	48	0	9	.60
126	65	65	7	12	8	0	8	.65
127	59	4	8	59	20	0	9	.60
128	71	71	8	9	4	0	8	.60
129	41	25	16	41	9	0	8	.70
130	28	36	15	28	12	0	9	.45
131	33	31	17	33	8	0	11	.70
132	51	8	51	11	20	0	11	.40
133	61	5	61	17	7	0	9	.55
134	27	16	9	36	27	0	12	.35
135	40	5	25	19	40	0	11	.55
136	51	4	15	19	51	1	11	.80
137	36	19	36	17	16	0	12	.35
138	59	7	11	15	59	0	9	.65
139	41	21	12	15	41	0	11	.80
140	33	27	43	16	11	0	13	.60

KR20 =   .96

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 73   AIDS LEVEL 3   -PHONETIC ANALYSIS

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	89	89	0	0	11	0	0	.30
2	85	0	85	0	15	0	0	.40
3	82	82	1	0	16	0	0	.50
4	86	14	0	86	0	0	0	.35
5	82	18	0	82	0	0	0	.45
6	84	14	3	84	0	0	0	.40
7	84	84	16	0	0	0	0	.45
8	75	0	8	16	75	0	0	.65
9	97	0	1	97	1	0	0	.00
10	82	12	5	0	82	0	0	.45
11	85	3	12	85	0	0	0	.45
12	86	1	12	86	0	0	0	.40
13	84	7	10	0	84	0	0	.30
14	92	0	92	3	5	0	0	.20
15	90	1	7	90	1	0	0	.20
16	97	97	0	3	0	0	0	.00
17	100	100	0	0	0	0	0	.10
18	100	0	100	0	0	0	0	.10
19	92	8	92	0	0	0	0	.05
20	97	97	0	1	1	0	0	.10
21	96	96	1	0	3	0	0	.10
22	95	1	4	0	95	0	0	.05
23	92	0	0	92	8	0	0	.00
24	97	0	97	1	1	0	0	.10
25	100	0	100	0	0	0	0	.10
26	94	0	3	96	1	0	0	.00
27	100	0	0	100	0	0	0	.10
28	67	32	67	0	1	0	0	.30
29	97	3	97	0	0	0	0	.00
30	67	16	10	7	67	0	0	.30
31	96	3	1	0	96	0	0	.05
32	48	7	26	48	19	0	0	.70
33	77	3	21	77	0	0	0	.20
34	92	7	0	1	92	0	0	.10
35	93	0	93	4	3	0	C	.05
36	96	0	4	96	0	0	0	.05
37	90	90	10	0	0	0	0	.15
38	82	82	10	5	3	0	0	.45
39	89	89	3	5	3	0	0	.15
40	90	90	0	5	4	0	0	.10
41	75	3	75	0	22	0	0	.45
42	70	1	7	22	70	0	0	.40

KR20 = .87

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 73   AIDS LEVEL 3   -VOCABULARY BUILDING

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
43	100	100	0	0	0	0	0	.10
44	97	1	1	97	0	0	0	.00
45	93	0	93	7	0	0	0	.05
46	100	100	0	0	0	0	0	.10
47	99	0	1	99	0	0	0	.05
48	99	99	0	1	0	0	0	.05
49	100	0	100	0	0	0	0	.10
50	100	100	0	0	0	0	0	.10
51	95	4	1	95	0	0	0	.10
52	95	0	95	3	3	0	0	.05
53	92	7	1	92	0	0	0	.20
54	89	3	0	89	8	0	0	.15
55	99	99	1	0	0	0	0	.05
56	97	0	97	0	0	0	3	.05
57	99	0	99	0	1	0	0	.10
58	85	14	1	85	0	0	0	.40
59	92	5	3	92	0	0	0	.20
60	84	11	4	84	1	0	0	.40
61	93	4	1	93	0	0	1	.10
62	86	3	8	86	3	0	0	.20
63	96	0	1	96	3	0	0	.05
64	90	0	90	1	8	0	0	.20
65	93	3	4	93	0	0	0	.15
66	95	1	0	3	95	0	1	.10

KR20 = .75

93

TEST ITEM RESPONSE ANALYSIS
READING COMPREHENSION

A105 LEVEL 3

NUMBER OF STUDENTS = 73

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
81	96	96	3	1	0	0	0	.09
82	81	4	3	12	81	0	0	.35
83	79	5	0	79	15	0	0	.40
84	92	5	3	92	0	0	0	.15
85	79	21	90	0	79	0	0	.10
86	90	0	7	5	4	0	0	.20
87	88	4	4	89	1	0	0	.30
88	88	0	7	88	8	0	0	.25
89	49	1	7	42	49	0	0	.25
90	89	3	89	7	1	0	0	.25
91	79	5	5	79	8	0	0	.40
92	88	80	3	5	4	0	0	.10
93	79	10	1	10	79	0	0	.25
94	77	19	77	1	3	0	0	.40
95	92	1	1	92	5	0	0	.15
96	85	11	85	3	1	0	0	.25
97	78	21	78	0	1	0	0	.35
98	42	5	16	42	34	0	1	.05
99	67	7	21	67	5	0	0	.40
100	85	3	8	85	4	0	0	.40
101	88	88	7	3	3	0	0	.20
102	82	5	82	12	0	0	0	.20
103	48	12	48	7	33	0	0	.50
104	84	84	10	1	5	0	0	.10
105	86	4	4	5	86	0	0	.25
106	97	0	97	1	1	0	0	.00
107	88	5	3	88	3	0	0	.30
108	90	5	3	90	1	0	0	.15
109	84	84	7	5	4	0	0	.40
110	77	77	8	8	7	0	0	.30
111	53	25	15	5	53	0	0	.40
112	82	82	10	5	3	0	0	.25
113	90	0	90	4	1	0	0	.20
114	59	16	4	59	21	0	0	.30
115	70	16	70	8	4	0	0	.50
116	63	18	1	63	18	0	0	.65
117	88	7	3	3	88	0	0	.25
118	96	1	3	96	0	0	0	.05
119	62	62	19	10	10	0	0	.65
120	75	75	75	11	7	0	0	.15
121	75	11	3	11	11	0	0	.35
122	53	11	53	29	7	0	0	.35
123	82	11	82	0	7	0	0	.40
124	70	18	22	5	70	0	0	.35
125	74	47	74	3	4	0	0	.45
126	77	42	77	4	7	0	0	.35
127	74	19	14	7	74	0	0	.60
128	66	12	10	66	12	0	0	.45
129	49	33	14	49	4	0	0	.45
130	90	0	0	8	90	1	0	.20
131	84	5	7	84	4	0	0	.35
132	77	12	7	77	4	0	0	.55
133	77	77	8	11	4	0	0	.40
134	44	18	44	15	23	0	0	.60
135	47	47	18	14	22	0	0	.65
136	42	42	25	11	22	0	0	.05
137	34	18	15	32	34	0	0	.40
138	67	62	11	10	10	0	0	.40
139	70	8	70	10	5	0	1	.25
140	73	0	0	10	73	0	0	.25

NUMBER OF STUDENTS = 72   AIDS LEVEL 3

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	99	0	1	99	0	0	0	.05
2	94	94	6	0	0	0	0	.05
3	93	0	3	93	4	0	0	.16
4	97	1	9T	0	1	0	0	.11
5	93	3	93	4	0	0	0	.11
6	97	0	3	97	0	0	0	.05
7	96	0	96	1	3	0	0	.05
8	94	1	0	94	3	0	1	.00
9	97	0	1	97	1	0	0	.11
10	99	0	99	1	0	0	0	.11
11	96	96	3	0	1	0	0	.05
12	100	100	0	0	0	0	0	.11
13	90	7	90	1	1	0	0	.05
14	93	3	93	0	4	0	0	.05
15	93	1	1	4	93	0	0	.00
16	94	0	94	3	3	0	0	.05
17	89	0	7	89	4	0	0	.00
18	94	0	0	6	94	0	0	.05
19	89	4	1	4	89	0	1	.16
20	89	3	4	89	4	0	0	.16
21	94	3	0	94	1	1	0	.05
22	78	1	17	78	4	0	0	.37
23	76	15	6	76	3	0	0	.42
24	89	0	4	7	89	0	0	.26
25	93	1	1	4	93	0	0	.16
26	88	88	0	13	0	0	0	.37
27	79	7	10	79	4	0	0	.11
28	75	3	75	11	11	0	0	.47
29	82	4	82	7	6	0	1	.37
30	76	4	76	6	14	0	0	.53
31	89	1	4	6	89	0	0	.21
32	92	0	1	T	92	0	0	.21
33	92	0	92	3	6	0	0	.16
34	94	1	94	4	0	0	0	.11
35	90	1	6	90	3	0	0	.11
36	86	4	86	8	1	0	0	.32
37	71	6	18	71	6	0	0	.74
38	76	76	10	13	1	0	0	.63
39	69	11	69	8	8	1	1	.53
40	71	3	11	15	71	0	0	.68
41	54	14	21	10	54	0	1	.84
42	50	13	11	24	50	1	1	.58
43	67	67	11	8	13	0	1	.68
44	65	8	65	11	14	0	1	.84
45	67	3	11	67	18	0	1	.68
46	88	1	4	7	88	0	0	.26
47	82	82	10	6	3	0	0	.32
48	83	4	83	4	8	0	0	.47
49	65	65	8	17	8	0	1	.74
50	60	14	60	10	15	0	1	.63
51	47	11	47	11	24	1	6	.47
52	61	15	61	14	8	0	1	.74
53	57	15	10	13	57	0	6	.68

KR20 =   .95

NUMBER OF STUDENTS = 71   AIDS LEVEL 3   MAIN APPLICATION

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
81	99	0	99	1	0	0	0	.05
82	99	0	0	99	1	0	0	.05
83	07	07	7	3	1	0	1	.05
84	92	1	3	92	4	0	0	.21
85	96	96	1	0	3	0	0	.05
86	70	4	70	0	23	0	3	.47
87	76	76	10	4	8	0	1	.58
88	55	11	55	8	25	0	0	.68
89	58	30	50	0	4	0	0	.58
90	72	6	13	10	72	0	0	.74
91	68	10	10	68	4	0	0	.63
92	86	6	4	86	4	0	0	.21
93	79	7	7	6	79	0	1	.53
94	75	75	10	8	7	0	0	.21
95	68	20	60	8	4	0	0	.21
96	63	18	10	63	8	0	0	.74
97	79	11	79	6	4	0	0	.47
98	85	1	8	85	6	0	0	.26
99	80	3	10	7	80	0	0	.47
100	87	1	6	87	6	0	0	.16
101	68	3	18	11	68	0	0	.11
102	89	0	7	89	4	0	0	.32
103	77	6	13	77	4	0	0	.16
104	86	86	3	3	6	0	3	.74
105	73	10	6	11	73	0	0	.53
106	76	3	76	11	10	0	0	.26
107	89	3	3	89	6	0	0	.37
108	80	14	80	3	3	0	0	.37
109	83	83	1	11	4	0	0	.37
110	82	82	6	8	4	0	0	.63
111	72	0	6	14	72	0	0	.58
112	65	20	65	8	7	0	0	.37
113	80	11	80	6	3	0	0	.53
114	66	28	3	66	3	0	0	.37
115	77	77	7	7	8	0	0	.53
116	46	11	25	46	17	0	0	.68
117	58	17	10	15	58	0	3	.42
118	76	7	6	76	7	1	0	.58
119	73	8	73	10	8	0	1	.42
120	25	37	11	25	25	0	1	.47
121	79	6	79	4	10	0	1	.53
122	54	11	54	18	15	0	1	.32
123	82	6	82	10	1	0	1	.53
124	73	1	73	20	4	0	1	.68
125	55	18	14	11	55	0	1	.32
126	86	86	1	6	6	0	1	.42
127	56	0	7	56	34	0	3	.42
128	02	02	11	3	3	0	1	.53
129	63	18	13	63	4	0	1	.74
130	45	31	13	45	10	0	3	.32
131	48	30	6	40	14	0	1	.42
132	51	0	51	7	32	0	3	.50
133	73	10	73	6	8	0	3	.68
134	41	8	17	31	41	1	3	.72
135	51	7	25	13	51	0	3	.68
136	68	4	7	18	68	0	3	.53
137	51	27	51	17	3	0	3	.89
138	66	13	10	7	66	1	3	.37
139	51	14	10	21	51	0	4	.37
140	52	18	52	15	11	0	3	.68

KH20 =   .96

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 97   AIOS LEVEL 4   --PHONETIC ANALYSIS

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	96	0	0	3	96	1	0	.08
2	32	1	1	66	32	0	0	.00
3	85	7	6	85	0	1	1	.42
4	86	4	5	86	4	1	0	.42
5	89	0	89	5	5	1	0	.27
6	84	1	8	3	84	4	0	.42
7	90	1	2	90	3	3	1	.27
8	82	6	2	82	4	5	0	.30
9	81	5	81	2	4	7	0	.42
10	79	1	7	7	79	5	0	.31
11	95	95	2	3	0	0	0	.12
12	92	0	92	4	2	2	0	.15
13	85	0	85	2	11	1	1	.23
14	90	1	4	90	1	4	0	.31
15	92	92	3	1	4	8	0	.19
16	68	68	4	18	9	1	0	.54
17	78	12	78	5	1	3	0	.31
18	73	2	21	1	73	3	0	.42
19	85	4	3	85	7	0	1	.42
20	84	4	7	84	4	1	0	.50
21	80	3	80	11	5	0	0	.50
22	65	6	65	11	13	4	0	.58
23	84	84	7	5	2	2	0	.46
24	84	6	3	3	84	4	0	.35

KR20 = .87

TEST WIDE RESPONSE ANALYSIS
-STRUCTURAL ANALYSIS

NUMBER OF STUDENTS = 97   ATOS LEVEL 4

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
37	88	5	88	2	3	0	2	.31
38	87	87	4	5	2	0	2	.23
39	88	5	88	3	3	0	1	.27
40	63	3	63	22	11	0	1	.42
41	93	2	3	93	2	0	0	.15
42	76	2	76	5	16	0	0	.35
43	55	9	55	9	27	0	0	.54
44	55	16	7	21	55	1	0	.58
45	38	4	30	38	28	0	0	.50
46	85	85	4	7	3	1	0	.27
47	81	7	7	81	3	1	0	.38
48	85	4	8	3	85	0	0	.27
49	89	89	4	4	2	1	0	.27
50	87	4	2	6	87	0	1	.38
51	79	15	3	79	2	0	0	.42
52	85	2	7	5	85	1	0	.46
53	72	18	5	72	3	1	1	.46
54	70	70	19	4	4	2	1	.62
55	86	86	5	0	6	2	1	.35
56	86	4	86	3	3	3	1	.35
57	73	16	5	73	2	2	1	.58
58	85	3	85	7	3	0	2	.23
59	81	4	5	4	81	4	1	.46
60	81	81	6	5	4	2	1	.50
61	78	9	6	78	2	3	1	.46
62	75	5	11	6	75	1	1	.63
63	89	89	0	4	5	0	2	.35
64	89	4	5	89	0	0	2	.27
65	80	12	80	1	2	0	4	.27
66	64	29	2	64	1	0	4	.58

KR20 =   .90

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 96   AIDS LEVEL 4   —VOCABULARY BUILDING

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
25	94	5	1	94	0	0	0	.12
26	99	0	0	99	1	0	0	.04
27	82	7	82	10	0	0	0	.38
28	89	89	1	2	8	0	0	.27
29	70	11	4	70	14	1	0	.69
30	91	2	5	91	2	0	0	.23
31	73	73	2	18	5	1	1	.54
32	95	1	95	1	2	1	0	.12
33	91	6	91	1	2	0	0	.19
34	54	26	54	3	17	0	0	.58
35	67	10	7	67	16	0	0	.69
36	66	66	10	14	10	0	0	.69

KR20 =   .74

100

NUMBER OF STUDENTS = 98   AIDS LEVEL 4   —READING COMPREHENSION

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
81	92	4	1	1	92	1	1	.04
82	92	0	92	1	6	1	0	.12
83	92	92	4	3	1	0	0	.12
84	85	4	0	85	3	0	0	.11
85	77	12	77	6	5	0	0	.30
86	47	34	11	6	47	2	0	.46
87	87	6	87	1	5	1	0	.27
88	81	11	3	2	81	1	0	.31
89	89	2	4	89	5	0	0	.15
90	74	2	4	15	74	4	0	.42
91	89	5	2	89	2	2	0	.27
92	68	13	68	12	4	2	0	.50
93	80	6	9	5	80	0	0	.46
94	65	8	10	65	15	1	0	.54
95	57	22	57	6	14	0	0	.50
96	85	4	85	4	7	0	0	.38
97	83	3	6	83	8	0	0	.42
98	60	11	60	6	19	3	0	.46
99	82	82	5	8	5	0	0	.35
100	74	0	9	74	5	1	1	.54
101	78	7	78	12	2	1	0	.38
102	71	71	6	9	11	2	0	.65
103	74	74	3	9	13	0	0	.42
104	85	0	85	7	7	1	0	.31
105	51	35	7	51	5	2	0	.50
106	78	78	7	3	10	2	0	.23
107	77	12	6	5	77	0	0	.38
108	86	86	3	5	4	2	0	.15
109	69	10	9	8	69	3	0	.54
110	46	15	7	32	46	0	0	.38
111	63	13	63	10	12	1	0	.54
112	54	7	18	18	54	1	1	.46
113	85	7	85	5	3	0	0	.46
114	69	69	15	6	5	3	1	.73
115	78	10	7	78	4	0	1	.69
116	72	22	72	4	1	0	0	.31
117	82	3	5	82	8	1	1	.50
118	81	81	10	3	3	2	1	.27
119	86	7	86	2	5	0	0	.30
120	59	13	18	59	9	0	0	.50
121	66	7	15	9	66	1	1	.73
122	76	76	10	6	8	0	0	.46
123	51	13	16	14	51	4	1	.73
124	66	10	66	8	14	1	0	.46
125	91	2	3	3	91	1	0	.19
126	46	29	46	17	7	1	0	.39
127	41	27	14	16	41	2	0	.31
128	36	30	13	18	36	3	0	.23
129	45	16	45	18	19	1	0	.58
130	48	48	10	9	32	1	0	.73
131	65	65	11	13	9	1	0	.62
132	53	9	12	23	53	2	0	.42
133	61	5	61	16	14	3	0	.46
134	37	16	37	16	29	2	0	.31
135	34	34	23	19	20	3	0	.67
136	63	43	9	12	13	2	0	.69
137	41	43	12	10	30	4	1	.42
138	56	7	20	15	56	0	1	.81
139	32	13	22	30	32	1	2	.23
140	29	21	28	29	19	0	3	.54
141	42	19	16	42	26	1	.	.36

101

142	26	46	29	16	3	3	3	.62
143	63	4	10	63	17	1	4	.50
144	61	13	61	12	9	0	4	.31

KR20 =   .93

TEST WIDE RESPONSE ANALYSIS

| NUMBER OF STUDENTS = 95 | AIDS LEVEL 4 | —MATH COMPUTATIONAL SKILLS |

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	82	4	6	82	6	0	1	.31
2	60	5	60	11	21	2	1	.54
3	62	12	7	62	13	2	4	.42
4	36	36	23	5	33	2	1	.54
5	75	9	5	75	9	0	1	.35
6	49	21	49	16	11	2	1	.69
7	76	13	9	76	2	0	0	.46
8	87	0	8	4	87	0	0	.31
9	60	15	60	6	9	1	0	.54
10	85	85	6	2	6	0	0	.34
11	85	2	85	4	8	0	0	.35
12	82	4	4	82	9	0	0	.31
13	79	11	3	79	7	0	0	.42
14	73	6	73	9	12	0	0	.42
15	69	69	11	15	5	0	0	.58
16	51	7	18	51	24	0	0	.58
17	78	9	7	5	78	0	0	.46
18	92	0	5	92	3	0	0	.15
19	53	53	17	13	17	0	1	.65
20	55	9	55	18	18	0	0	.38
21	45	15	22	45	17	0	1	.40
22	43	8	35	43	14	0	0	.54
23	71	5	19	5	71	0	0	.42
24	48	13	26	48	9	3	0	.54
25	34	23	34	21	19	1	2	.46
26	76	5	8	76	9	0	1	.42
27	55	4	12	55	26	1	2	.69
28	32	14	39	32	13	1	2	.08
29	27	27	24	24	19	1	4	.46
30	22	16	22	41	14	1	6	.12
31	15	17	63	15	3	0	2	.00
32	35	4	35	38	19	1	3	.31
33	22	22	42	20	12	1	3	.35
34	37	26	24	32	13	1	4	.12
35	21	36	19	21	13	0	12	.15
36	4	31	29	26	4	0	9	.04
37	23	12	21	35	23	0	9	.04
38	28	20	31	17	14	1	9	.15
39	21	21	23	24	19	1	12	.04
40	53	16	11	53	13	1	7	.31
41	32	32	20	21	15	0	13	.11
42	37	16	26	37	9	0	12	.19
43	23	21	29	23	9	0	17	.15
44	12	19	22	28	12	1	18	.00
45	23	17	23	21	21	0	18	.08
46	29	29	17	22	13	1	19	.50
47	27	17	20	27	16	1	19	.23
48	13	13	24	27	15	0	21	.04
49	15	15	28	21	16	1	19	.08
50	19	13	19	25	19	0	24	.08
51	22	14	16	22	23	0	25	.15
52	32	12	19	32	15	0	23	.23
53	36	36	15	20	5	0	24	.08
54	24	15	24	13	24	1	23	.12

KR20 = .82

NUMBER OF STUDENTS = 95   AIDS LEVEL 4

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
81	72	6	14	8	72	0	0	.54
82	76	4	9	11	76	0	0	.54
83	44	22	18	44	14	1	1	.46
84	41	41	20	19	19	0	1	.69
85	61	12	9	15	61	1	2	.56
86	67	67	8	15	7	0	2	.50
87	75	9	8	6	75	0	1	.54
88	59	6	7	59	26	0	1	.77
89	67	14	11	67	6	1	1	.46
90	77	6	9	77	6	1	0	.30
91	31	12	31	21	36	0	1	.35
92	80	4	80	9	5	0	1	.46
93	71	12	71	11	4	2	1	.65
94	73	73	5	14	5	0	3	.65
95	37	37	36	16	8	1	2	.46
96	67	5	11	67	12	1	4	.62
97	74	74	8	13	2	1	2	.65
98	72	5	9	72	11	1	2	.46
99	61	5	20	61	11	1	2	.69
100	59	18	9	11	59	1	2	.62
101	56	22	56	17	3	0	2	.27
102	59	22	14	59	4	0	1	.50
103	29	29	20	24	24	0	2	.31
104	28	12	27	29	28	0	3	.12
105	19	22	31	20	19	0	8	.00
106	35	7	40	16	35	0	2	.62
107	69	4	12	69	13	0	2	.35
108	27	13	18	40	27	0	2	.15
109	22	24	34	22	17	0	3	.19
110	62	4	8	22	62	0	3	.46
111	79	7	4	79	6	1	2	.50
112	43	12	13	31	43	0	2	.54
113	39	20	26	39	12	0	3	.15
114	53	53	20	11	8	1	7	.46
115	56	56	13	19	5	1	6	.62
116	66	12	66	17	3	0	2	.54
117	45	13	18	20	45	0	4	.65
118	43	27	15	43	12	0	3	.35
119	23	42	23	12	18	1	4	.04
120	24	19	34	18	24	0	5	.35
121	38	26	12	19	38	0	5	.18
122	55	20	11	55	9	0	5	.42
123	31	21	20	31	15	0	7	.46
124	62	62	9	9	15	0	4	.62
125	53	16	53	18	9	0	4	.45
126	35	22	18	35	19	0	6	.35
127	59	19	59	11	6	0	5	.50
128	47	47	16	17	16	0	4	.62
129	24	19	24	24	19	0	8	.42
130	15	15	18	17	41	1	8	.12
131	34	13	22	27	34	0	4	.38
132	29	29	29	16	15	0	11	.00
133	23	33	14	23	23	0	7	.23
134	49	16	19	9	49	1	5	.54
135	46	8	23	46	17	0	5	.19
136	18	39	20	18	17	0	6	.54
137	51	17	17	51	11	0	5	.54
138	23	17	23	32	17	0	12	.27
139	64	14	12	64	6	0	4	.50
140	63	63	8	14	7	0	7	.31

104

KP 20 ⅜   .90

105

TEST WIDE RESPONSE ANALYSIS
-PHONETIC ANALYSIS

NUMBER OF STUDENTS = 77   AIDS LEVEL 4

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	86	3	4	0	86	0	0	.38
2	56	4	3	38	56	0	0	.38
3	90	10	0	90	0	0	0	.29
4	96	0	1	96	3	0	0	.05
5	92	0	92	4	3	1	0	.14
6	86	0	13	1	86	0	0	.29
7	92	3	0	92	4	0	1	.14
8	79	17	1	79	3	0	0	.62
9	84	6	84	3	6	0	0	.38
10	74	0	12	14	74	0	0	.62
11	88	88	5	1	5	0	0	.29
12	91	1	91	5	3	0	0	.14
13	82	6	82	3	9	0	0	.38
14	91	3	1	91	5	0	0	.14
15	88	88	1	4	6	0	0	.29
16	79	79	3	13	5	0	0	.43
17	82	9	82	3	6	0	0	.38
18	68	5	25	3	68	0	0	.38
19	95	0	3	95	3	0	0	.10
20	92	4	3	92	1	0	0	.19
21	84	3	84	4	8	1	0	.29
22	62	5	62	4	27	1	0	.57
23	92	92	1	6	0	0	0	.19
24	91	4	5	0	91	0	0	.19

KR20 = .91

TEST WIDE RESPONSE ANALYSIS
—STRUCTURAL ANALYSIS

NUMBER OF STUDENTS = 76   AIDS LEVEL 4

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
37	84	4	84	0	12	0	0	.24
38	95	95	1	3	0	1	0	.10
39	92	7	92	1	0	0	0	.10
40	63	12	63	12	13	0	0	.57
41	95	3	3	95	0	0	0	.00
42	88	3	88	3	7	0	0	.24
43	72	8	72	3	17	0	0	.57
44	74	9	7	11	74	0	0	.43
45	32	1	21	32	46	0	0	.62
46	83	83	4	5	8	0	0	.29
47	84	8	3	84	5	0	0	.38
48	84	7	4	4	84	0	1	.38
49	96	96	1	0	3	0	0	.05
50	92	7	0	1	92	0	0	.19
51	87	11	0	87	3	0	0	.24
52	95	1	3	1	95	0	0	.05
53	82	16	1	82	1	0	0	.43
54	82	82	8	5	5	0	0	.43
55	91	91	3	3	4	0	0	.10
56	99	0	99	0	1	0	0	.05
57	95	0	3	95	3	0	0	.10
58	78	8	78	9	5	0	0	.48
59	83	8	4	5	83	0	0	.43
60	89	89	4	4	3	0	3	.19
61	89	1	4	89	4	1	0	.14
62	83	1	0	14	83	0	1	.33
63	93	93	0	4	1	1	0	.10
64	86	4	9	86	1	0	0	.43
65	86	11	86	3	0	1	0	.33
66	80	10	0	80	1	0	0	.43

KR20 =   .91

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 76   ATOS LEVEL 4   --VOCABULARY BUTLDING

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
25	96	3	1	96	0	0	0	.05
26	100	0	0	100	0	0	0	.10
27	84	8	84	8	0	0	0	.19
28	89	89	1	1	8	0	0	.19
29	76	4	3	76	17	0	0	.38
30	89	5	4	89	1	0	0	.19
31	66	66	4	26	4	0	0	.67
32	97	0	97	1	1	0	0	.05
33	93	4	93	3	0	0	0	.10
34	63	25	63	9	3	8	0	.57
35	76	9	7	76	8	0	0	.40
36	66	66	13	13	8	0	0	.67

KP20 =   .58

NUMBER OF STUDENTS = 77   AIOS LEVEL 4   READING COMPREHENSION

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
81	92	1	1	5	92	0	0	.19
82	94	0	94	1	5	0	0	.10
83	97	97	0	1	1	0	0	.00
04	96	1	1	96	1	0	0	.05
85	87	0	87	9	4	0	0	.24
86	64	25	0	4	64	0	0	.71
87	92	4	92	3	1	0	0	.14
88	86	8	3	4	86	0	0	.29
89	95	0	1	95	4	0	0	.05
90	82	0	1	17	02	0	0	.24
91	94	4	3	94	0	0	0	.10
92	78	9	78	4	9	0	0	.48
93	82	9	6	3	82	0	0	.29
94	82	5	3	82	10	0	0	.43
95	52	25	52	8	16	0	0	.43
96	88	4	80	1	6	0	0	.19
97	84	4	3	84	9	0	0	.24
98	50	18	58	4	19	0	0	.57
99	91	91	3	4	3	0	0	.14
100	94	0	5	94	1	0	0	.05
101	74	12	74	8	6	0	0	.24
102	84	84	4	0	4	0	0	.29
103	74	74	13	1	12	0	0	.33
104	88	3	88	5	4	0	0	.14
105	48	44	5	48	3	0	0	.57
106	86	86	1	1	12	0	0	.19
107	83	6	6	3	83	1	0	.24
108	91	91	3	3	4	0	0	.24
109	82	9	0	9	82	0	0	.33
110	49	16	5	30	49	0	0	.62
111	70	8	70	0	22	0	0	.62
112	65	8	21	6	65	0	0	.52
113	83	8	83	4	5	0	0	.41
114	87	07	8	4	1	0	0	.33
115	79	8	8	79	5	0	0	.43
116	71	25	71	3	1	0	0	.24
117	90	0	6	90	1	0	3	.29
118	88	88	1	5	3	0	3	.19
119	87	4	87	5	3	0	1	.29
120	58	19	16	58	4	1	1	.81
121	75	9	5	9	75	0	1	.38
122	83	03	1	9	5	0	1	.48
123	66	4	22	5	66	0	3	.62
124	74	9	74	9	6	0	1	.57
125	92	3	3	0	92	0	3	.19
126	47	31	47	8	10	0	4	.29
127	43	35	8	12	43	0	3	.05
128	39	23	12	25	39	0	1	.33
129	56	16	56	19	17	0	1	.71
130	62	62	3	8	26	0	1	.71
131	61	61	13	9	12	0	5	.43
132	53	16	6	18	53	0	4	.48
133	64	9	64	12	9	1	5	.67
134	55	9	55	8	23	0	5	.57
135	48	48	10	10	25	1	5	.48
136	64	64	4	16	10	0	6	.48
137	55	55	4	9	22	0	5	.42
138	69	5	16	4	69	1	5	.62
139	42	12	13	29	42	0	5	.24
140	55	9	12	55	17	0	8	.71
141	70	17	12	16	15	1	4	.29

142	60	60	21	9	5	0	5	.81
143	79	3	6	19	6	0	5	.33
144	62	8	62	5	16	1	8	.67

KR20 =   .94

NUMBER OF STUDENTS = 75   AIDS LEVEL 4   —MATH COMPUTATIONAL SKILLS

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	89	4	3	89	4	0	0	.20
2	85	5	85	1	7	0	1	.45
3	81	5	4	81	8	0	1	.50
4	56	56	16	3	23	0	3	.90
5	83	4	7	83	3	0	4	.25
6	71	13	71	7	4	0	5	.00
7	92	3	1	92	4	0	0	.20
8	91	1	3	5	91	0	0	.15
9	75	11	75	8	7	0	0	.30
10	92	92	4	0	4	0	0	.10
11	91	4	91	1	3	0	1	.20
12	89	3	4	89	3	0	1	.15
13	89	4	3	89	4	0	0	.05
14	83	1	83	7	9	0	0	.20
15	80	80	7	5	8	0	0	.35
16	64	3	15	64	19	0	0	.40
17	92	1	5	1	92	0	0	.20
18	96	0	0	96	4	0	0	.05
19	73	73	7	5	12	0	3	.65
20	68	9	68	8	9	1	4	.60
21	73	7	5	73	9	0	5	.60
22	47	5	36	47	8	1	3	.75
23	64	5	24	4	64	0	3	.70
24	56	11	20	56	8	0	5	.75
25	49	11	49	16	17	0	7	.85
26	85	4	3	85	4	0	4	.30
27	75	0	5	75	15	1	4	.70
28	59	12	13	59	9	1	5	.60
29	59	59	15	12	5	0	9	.65
30	67	9	67	11	9	0	4	.70
31	48	7	33	48	4	0	8	.80
32	51	5	51	23	9	0	12	.95
33	47	47	23	11	7	0	13	.80
34	48	20	15	48	4	1	12	.65
35	33	27	17	33	4	1	17	.60
36	31	32	11	12	31	1	13	.65
37	37	23	7	17	37	0	16	.70
38	41	41	12	11	16	0	20	.45
39	47	47	8	8	20	0	17	.40
40	72	5	4	72	7	0	12	.45
41	53	53	17	8	8	0	13	.15
42	45	9	12	45	19	0	15	.55
43	17	19	41	17	1	0	21	.20
44	7	11	20	27	7	0	28	.05
45	39	15	39	13	8	0	25	.25
46	57	57	11	11	7	0	15	.85
47	51	15	9	51	12	0	13	.65
48	47	47	15	16	8	0	15	.80
49	51	51	15	11	7	3	15	.60
50	49	4	-17	13	49	1	15	.70
51	52	8	7	52	17	0	16	.70
52	64	3	12	64	7	0	15	.65
53	57	57	4	0	13	0	17	.60
54	59	9	59	4	12	0	16	.60

KR20 = .95

NUMBER OF STUDENTS = 69   AIDS LEVEL 4   —MATH APPLICATION

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
81	77	13	10	0	77	0	0	.42
82	91	0	0	9	91	0	0	.16
83	65	19	4	65	7	1	3	.47
84	64	64	10	13	13	0	0	.68
85	75	6	9	10	75	0	0	.47
86	84	84	6	1	6	0	3	.26
87	84	9	1	4	84	0	1	.32
88	71	3	9	71	16	0	1	.42
89	75	12	10	75	1	0	1	.47
90	80	3	4	80	3	0	1	.21
91	42	1	42	20	35	0	1	.21
92	88	3	88	3	4	0	1	.32
93	77	1	77	10	7	0	4	.47
94	80	80	4	3	9	0	4	.26
95	46	46	30	12	7	0	4	.37
96	83	4	3	83	7	0	3	.42
97	78	78	3	12	6	0	1	.47
98	83	0	12	83	4	0	1	.32
99	72	3	7	72	14	0	3	.58
100	70	16	6	6	70	0	3	.47
101	67	17	67	9	6	0	1	.47
102	74	20	4	74	0	0	1	.37
103	41	41	13	16	30	0	1	.37
104	32	16	19	29	32	0	4	.16
105	46	13	22	10	46	1	7	.32
106	64	3	23	6	64	0	4	.47
107	77	4	12	77	6	0	1	.42
108	42	6	6	43	42	0	3	.53
109	17	33	35	17	12	1	1	.26
110	70	4	1	22	70	0	3	.58
111	80	0	4	88	1	0	4	.21
112	68	4	9	16	68	0	3	.68
113	51	9	33	51	1	0	6	.37
114	72	72	7	9	6	0	4	.47
115	64	64	20	12	3	0	1	.05
116	86	4	86	7	1	0	1	.21
117	71	3	13	10	71	0	3	.63
118	67	23	3	67	1	0	6	.53
119	35	41	35	3	19	0	3	.47
120	48	17	48	9	20	0	6	.21
121	61	13	10	10	61	0	4	.58
122	62	29	3	62	3	1	6	.42
123	29	20	29	29	17	0	4	.37
124	84	84	6	6	3	0	1	.32
125	75	7	75	9	4	0	4	.53
126	43	14	10	43	29	0	3	.63
127	54	29	54	10	4	0	3	.60
128	74	74	13	3	4	0	5	.58
129	59	12	10	59	13	0	6	.53
130	28	28	7	6	57	0	1	.00
131	61	9	9	16	61	0	4	.53
132	41	41	20	22	9	0	9	.47
133	28	45	14	9	28	0	4	.37
134	68	7	17	3	68	0	4	.74
135	58	7	20	58	9	0	6	.11
136	19	43	22	19	9	0	7	.42
137	75	4	4	75	9	0	7	.32
138	28	14	28	29	14	0	14	.48
139	72	9	1	72	7	0	10	.42
140	67	67	3	17	9	0	10	.42

112

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 75   AIDS LEVEL 4   —MATH COMPUTIONAL SKILLS

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	89	4	3	89	4	0	0	.20
2	85	6	85	1	7	0	1	.45
3	81	5	4	81	8	0	1	.50
4	56	56	16	3	23	0	3	.90
5	83	4	7	83	3	0	4	.25
6	71	13	71	7	4	0	5	.80
7	92	3	1	92	4	0	0	.20
8	91	1	3	5	91	0	0	.15
9	75	11	75	8	7	0	0	.30
10	92	92	4	0	4	0	0	.10
11	91	4	91	1	3	0	1	.20
12	89	3	4	89	3	0	1	.15
13	89	4	3	89	4	0	0	.05
14	83	1	83	7	9	0	0	.20
15	80	80	7	5	8	0	0	.35
16	64	3	15	64	19	0	0	.40
17	92	1	5	1	92	0	0	.20
18	96	0	0	96	4	0	0	.05
19	73	73	7	5	12	0	3	.65
20	68	9	68	8	9	1	4	.60
21	73	7	5	73	9	0	5	.60
22	47	5	36	47	8	1	3	.75
23	64	5	24	4	64	0	3	.70
24	56	11	20	56	8	0	5	.75
25	49	11	49	16	17	0	7	.85
26	85	4	3	85	4	0	4	.30
27	75	0	5	75	15	1	4	.70
28	59	12	13	59	9	1	5	.60
29	59	59	15	12	5	0	9	.65
30	67	9	67	11	9	0	4	.70
31	48	7	33	48	4	0	8	.80
32	51	5	51	23	9	0	12	.95
33	47	47	23	11	7	0	13	.80
34	48	20	15	48	4	1	12	.65
35	33	27	17	33	4	1	17	.60
36	31	32	11	12	31	1	13	.65
37	37	23	7	17	37	0	16	.70
38	41	41	12	11	16	0	20	.45
39	47	47	8	8	20	0	17	.40
40	72	5	4	72	7	0	12	.45
41	53	53	17	8	8	0	13	.35
42	45	9	12	45	19	0	15	.55
43	17	19	41	17	1	0	21	.20
44	7	11	20	27	7	0	28	.05
45	39	15	39	13	8	0	25	.25
46	57	57	11	11	7	0	15	.85
47	51	15	9	51	12	0	13	.65
48	47	47	15	16	8	0	15	.80
49	51	51	15	11	7	3	15	.60
50	49	4	17	13	49	1	15	.70
51	52	8	7	52	17	0	16	.70
52	64	3	12	64	7	0	15	.65
53	57	57	4	0	13	0	17	.60
54	59	9	59	4	12	0	16	.60

KR20 =   .94

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
NUMBER OF STUDENTS = 69	ATOS LEVEL 4				-MATH APPLICATION			
B1	77	13	10	0	77	0	0	.42
R2	91	0	0	9	91	0	0	.16
B3	65	19	4	65	T	1	3	.47
B4	64	64	10	13	13	0	0	.48
B5	75	6	9	10	75	0	0	.41
B6	84	84	6	1	6	0	3	.26
B7	84	9	1	4	84	0	1	.32
B8	71	3	9	71	16	0	1	.42
B9	75	12	10	75	1	0	1	.47
90	RR	3	4	88	1	0	1	.21
91	42	1	42	20	35	0	1	.21
92	88	3	88	3	4	0	1	.32
93	77	1	77	10	7	0	4	.41
94	80	80	4	3	9	0	4	.26
95	46	46	30	12	7	0	4	.32
96	83	4	3	83	7	0	3	.42
97	78	78	3	12	6	0	1	.41
98	R3	0	12	83	4	0	1	.32
99	72	3	7	72	14	0	3	.58
100	TO	16	6	6	TO	0	3	.47
101	67	17	67	9	6	0	1	.47
102	74	20	4	74	0	0	1	.37
103	41	41	13	14	30	0	1	.37
104	32	16	19	29	32	0	4	.16
105	46	13	22	10	46	1	7	.32
106	64	3	23	6	64	0	4	.4T
107	77	4	12	TT	6	0	1	.42
108	42	6	6	43	42	0	3	.53
109	17	33	35	17	12	1	1	.26
110	TO	4	1	22	70	0	3	.58
111	88	0	4	8R	1	0	6	.21
112	68	4	9	16	68	0	3	.68
113	51	9	33	51	1	0	6	.37
T14	72	72	7	9	6	0	4	.47
115	64	64	20	12	3	0	1	.05
116	86	4	86	7	1	0	1	.21
117	71	3	13	10	71	0	3	.63
118	67	23	3	67	1	0	6	.53
119	15	41	15	3	19	0	3	.47
120	48	17	48	9	20	0	4	.21
121	61	13	10	10	61	0	4	.50
122	62	25	3	62	3	1	6	.42
123	29	20	29	29	17	0	4	.37
124	84	84	6	6	3	0	1	.32
125	75	7	75	9	4	0	4	.53
126	43	14	10	43	29	0	3	.63
127	54	29	54	10	4	0	3	.68
128	74	74	13	3	4	0	5	.58
129	59	12	10	59	13	0	6	.55
130	28	28	7	6	57	0	3	.00
131	61	9	9	16	61	0	4	.53
132	41	41	20	22	9	0	9	.47
133	28	45	14	9	28	0	4	.32
134	68	7	17	3	68	0	4	.37
135	58	1	20	58	9	0	6	.74
136	19	43	22	19	9	0	7	.11
137	75	4	4	75	9	0	7	.42
138	28	14	28	29	14	0	14	.32
139	72	9	1	72	7	0	10	.68
140	67	67	3	17	3	0	10	.42

114

KR.20 ＝ .93

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 54   AIUS LEVEL 4   —PHONETIC ANALYSIS

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	70	2	7	20	70	0	0	.80
2	37	22	0	41	37	0	0	.27
3	78	9	9	78	4	0	0	.40
4	72	19	9	72	0	0	0	.73
5	85	6	85	9	0	0	0	.27
6	59	0	37	4	59	0	0	.73
7	85	0	2	85	13	0	0	.13
8	57	37	2	57	2	0	2	.87
9	81	6	81	2	11	0	0	.27
10	48	0	15	35	48	0	2	.73
11	76	76	2	20	2	0	0	.73
12	70	6	70	22	2	0	0	.80
13	74	6	74	17	4	0	0	.67
14	74	22	4	74	0	0	0	.73
15	67	67	2	4	28	0	0	.73
16	39	39	19	31	11	0	0	.87
17	54	19	54	4	24	0	0	.67
18	54	7	37	2	54	0	0	.07
19	67	2	26	67	4	0	2	.67
20	70	13	11	70	4	0	2	.80
21	78	4	78	7	11	0	0	.27
22	52	13	52	11	22	2	0	.00
23	63	63	20	11	6	0	0	.80
24	72	13	6	9	72	0	0	.60

KR20 =   .92

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 54   ATOS LEVEL 4   -STRUCTURAL ANALYSIS

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
37	65	7	65	6	22	0	0	.47
38	67	67	24	7	2	0	0	.67
39	85	13	85	2	0	0	0	.07
40	46	11	46	31	9	0	2	.20
41	85	6	6	85	4	0	0	.27
42	59	9	59	4	28	0	0	.73
43	37	13	37	22	28	0	0	.47
44	46	11	20	22	46	0	0	.53
45	44	2	30	44	24	0	0	.07
46	63	63	6	7	24	0	0	.67
47	72	11	4	72	13	0	0	.53
48	65	4	30	2	65	0	0	.67
49	76	76	20	0	4	0	0	.60
50	76	17	0	7	76	0	0	.67
51	63	35	2	63	0	0	0	.60
52	91	2	6	2	91	0	0	.07
53	80	17	2	80	2	0	0	.00
54	54	54	41	0	6	0	0	.73
55	69	69	4	6	22	0	0	.73
56	96	0	96	2	2	0	0	.00
57	94	4	0	94	2	0	0	.07
58	70	2	70	24	4	0	0	.40
59	74	11	4	11	74	0	0	.53
60	83	83	17	0	0	0	0	.00
61	72	19	2	72	7	0	0	.60
62	76	6	6	13	76	0	0	.20
63	80	80	4	6	11	0	0	.47
64	81	13	6	81	0	0	0	.47
65	74	11	74	13	2	0	0	.47
66	72	22	2	72	4	0	0	.40

KR20 = .89

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 54   AIOS LEVEL 4   -VOCABULARY BUILDING

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
25	89	6	0	89	6	0	0	.13
26	83	7	9	83	0	0	0	.47
27	67	15	67	17	0	0	2	.73
28	78	78	4	2	17	0	0	.60
29	54	20	6	54	20	0	0	.60
30	76	4	7	76	13	0	0	.67
31	54	54	4	31	11	0	0	.93
32	78	0	78	22	0	0	0	.53
33	93	6	93	2	0	0	0	.07
34	46	37	46	6	11	0	0	.73
35	50	15	9	50	26	0	0	.53
36	43	43	24	28	4	2	0	.33

KR20 =   .84

NUMBER OF STUDENTS =   55   AIDS LEVEL 4   ··READING COMPREHENSION

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
81	71	15	4	11	71	0	0	.53
82	69	0	69	18	13	0	0	.53
83	76	76	20	0	4	0	0	.60
84	73	7	16	13	4	0	0	.67
85	71	7	71	9	13	0	0	.47
86	58	22	16	4	58	0	0	.27
87	73	7	13	9	11	0	0	.67
88	67	15	2	16	67	0	0	.47
89	78	0	7	78	15	0	0	.60
90	67	9	4	20	67	0	0	.40
91	73	9	15	73	4	0	0	.67
92	65	11	65	15	9	0	0	.27
93	65	9	5	20	65	0	0	.80
94	62	11	7	62	20	0	0	.47
95	45	38	45	7	9	0	0	.47
96	65	7	65	9	18	0	0	.80
97	67	2	22	67	9	0	0	.73
98	49	7	49	5	38	0	0	.80
99	73	73	18	2	7	0	0	.67
100	76	9	9	76	5	0	0	.27
101	60	11	60	20	9	0	0	.60
102	71	71	18	7	4	0	0	.73
103	62	62	13	9	16	0	0	.40
104	80	4	80	7	9	0	0	.47
105	44	31	15	44	11	0	0	.53
106	67	67	4	16	13	0	0	.60
107	62	29	7	2	62	0	0	.53
108	82	82	11	4	4	0	0	.40
109	75	11	11	4	75	0	0	.53
110	51	16	7	24	51	2	0	.13
111	65	11	65	15	9	0	0	.53
112	51	13	16	20	51	0	0	.47
113	84	9	84	4	4	0	0	.73
114	67	67	9	11	13	0	0	.67
115	73	7	11	73	9	0	0	.20
116	65	29	65	4	2	0	0	.40
117	73	5	20	73	2	0	0	.60
118	69	69	24	5	2	0	0	.87
119	71	5	71	5	18	0	0	.67
120	47	15	16	47	22	0	0	.67
121	47	13	27	13	47	0	0	.07
122	65	65	5	5	24	0	0	.80
123	45	15	29	9	45	0	2	.40
124	62	22	62	13	4	0	0	.67
125	76	5	9	7	76	0	2	.60
126	44	20	44	18	15	0	4	.33
127	31	29	5	33	31	0	2	.60
128	38	35	5	20	38	0	2	.27
129	53	11	53	22	11	0	2	.80
130	47	47	11	9	29	0	4	.53
131	42	42	16	11	27	0	4	.07
132	42	18	13	24	42	0	4	.53
133	53	5	53	22	16	0	4	.33
134	35	16	35	9	35	0	4	.73
135	49	49	24	15	9	0	4	.47
136	44	44	5	25	18	0	7	.53
137	42	42	18	16	19	0	5	.47
138	56	7	15	15	56	0	7	.27
139	27	29	15	22	27	0	7	.27
140	45	24	16	45	7	0	7	.33
141	24	22	18	24	27	11	1	.40

119

142	45	45	18	18	5	0	13	.67
143	65	7	13	65	2	0	13	.47
144	55	7	55	9	15	0	15	.67

KR20 = .96

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 54   ATDS LEVEL 4   -MATH COMPUTATIONAL SKILLS

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	70	9	6	70	13	0	7	.53
2	61	13	61	22	4	0	0	.67
3	57	7	19	57	13	0	7	.87
4	37	37	22	7	30	2	2	.13
5	61	13	11	61	13	0	2	.53
6	35	30	35	26	7	0	2	.60
7	76	0	15	76	7	0	2	.47
8	78	11	7	2	78	0	2	.53
9	69	7	69	4	19	0	2	.53
10	83	83	4	6	4	0	4	.33
11	72	11	72	13	2	0	2	.67
12	78	15	2	78	4	0	2	.60
13	81	6	9	81	4	0	0	.33
14	63	6	63	13	17	0	2	.20
15	67	67	17	7	9	0	0	.73
16	59	19	6	59	17	0	0	.47
17	81	7	7	2	81	0	2	.53
18	80	2	0	80	17	0	2	.47
19	56	56	24	7	13	0	0	.67
20	46	9	46	35	9	0	0	.67
21	56	17	6	56	20	0	2	.47
22	44	9	31	44	13	0	2	.47
23	65	2	28	2	65	0	4	.27
24	54	6	22	54	15	0	4	.40
25	43	17	43	15	22	0	4	.13
26	70	15	4	70	7	0	4	.67
27	59	7	2	59	28	0	4	.33
28	43	11	28	43	17	0	2	.47
29	46	46	19	20	9	0	6	.27
30	43	19	43	26	7	0	6	.80
31	30	6	61	30	0	0	4	.00
32	17	19	17	33	22	2	7	.20
33	24	24	46	17	7	0	6	.53
34	13	28	20	33	9	0	9	.20
35	15	26	31	15	11	0	17	.13
36	22	33	19	13	22	0	13	.00
37	28	22	7	28	28	0	15	.27
38	22	22	28	7	22	0	20	.27
39	20	20	13	22	22	0	22	.33
40	46	13	9	46	15	0	17	.73
41	35	35	7	24	11	2	20	.40
42	35	2	26	35	15	2	20	.27
43	13	20	28	13	17	0	22	.20
44	17	17	15	24	17	0	28	.13
45	24	20	24	17	9	2	28	.47
46	44	44	13	13	6	2	22	.67
47	24	15	13	24	22	0	26	.53
48	26	26	15	20	7	4	28	.47
49	20	20	28	19	7	0	26	.27
50	30	13	15	15	30	0	28	.53
51	28	6	17	28	19	2	30	.07
52	41	9	9	41	11	2	29	.67
53	37	37	11	19	6	0	20	.67
54	39	7	39	17	6	0	31	.53

KR20 = .97

NUMBER OF STUDENTS = 54   AIDS LEVEL 4   -MATH APPLICATION

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
81	37	22	19	20	37	0	0	.73
82	69	13	7	7	69	0	2	.60
83	35	20	20	35	20	0	2	.40
84	30	30	19	11	37	0	2	.67
85	52	13	13	19	52	0	2	.53
86	57	57	17	9	15	0	0	.93
87	70	7	11	9	70	0	0	.93
88	61	11	11	61	15	0	0	.60
89	50	33	7	50	7	0	0	.80
90	63	6	7	63	22	0	0	.67
91	28	13	28	19	37	2	0	.20
92	76	9	76	11	2	0	0	.47
93	41	17	41	26	13	0	2	.67
94	46	46	15	15	20	0	2	.60
95	31	31	24	20	17	0	6	.33
96	52	9	15	52	19	0	4	.67
97	63	63	7	22	2	0	4	.53
98	54	9	24	54	11	0	0	.73
99	57	17	11	57	13	0	0	.60
100	50	13	9	26	50	0	0	.73
101	59	20	59	13	6	0	0	.40
102	46	17	19	46	13	0	4	.67
103	31	31	22	19	22	0	4	.53
104	30	20	28	17	30	0	4	.20
105	22	20	37	13	22	0	5	.20
106	31	9	41	15	31	0	2	.60
107	61	2	15	61	19	0	2	.33
108	28	13	28	28	28	0	2	.67
109	30	33	13	30	19	0	4	.33
110	48	9	7	33	48	0	0	.40
111	74	2	13	74	9	0	0	.60
112	41	11	19	28	41	0	0	.53
113	30	28	26	30	15	0	0	.07
114	39	39	20	22	13	0	4	.47
115	41	41	28	17	13	0	0	.60
116	72	9	72	7	7	0	2	.33
117	44	6	24	24	44	0	0	.73
118	44	31	15	44	6	0	2	.27
119	26	26	26	24	22	0	0	.13
120	37	9	37	13	35	0	4	.13
121	44	13	24	15	44	0	2	.40
122	44	19	9	44	24	0	2	.67
123	30	22	20	30	24	0	2	.40
124	57	57	24	13	4	0	0	.67
125	48	22	48	22	6	0	0	.47
126	43	19	11	43	26	0	0	.20
127	46	26	46	9	15	0	2	.53
128	43	43	19	19	17	0	2	.73
129	31	28	20	31	15	2	2	.40
130	22	22	17	20	39	0	0	.13
131	33	17	19	24	33	0	6	.20
132	30	30	33	24	6	0	6	.40
133	30	33	15	17	30	0	4	.40
134	39	6	26	24	39	0	4	.53
135	44	9	13	44	28	0	4	.33
136	24	37	15	24	19	0	4	.27
137	39	19	20	39	15	0	6	.47
138	19	19	19	35	20	0	6	.07
139	56	7	17	56	15	0	4	.67
140	40	46	9	24	15	0	4	.50

122

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 80   AIOS LEVEL 5   STRUCTURAL ANALYSIS

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
43	93	3	5	93	0	0	0	.14
44	81	16	81	0	3	0	0	.41
45	71	25	3	71	1	0	0	.41
46	81	4	9	5	81	0	1	.41
47	58	16	14	13	58	0	0	.86
48	88	6	88	1	5	0	0	.23
49	93	6	93	0	1	0	0	.14
50	84	84	4	10	3	0	0	.36
51	83	83	5	6	5	0	1	.36
52	90	6	3	1	90	0	0	.18
53	83	5	6	83	4	0	3	.36
54	88	4	88	5	4	0	0	.27
55	76	10	5	8	76	0	1	.55
56	78	15	78	4	3	0	1	.45
57	79	1	5	79	14	0	1	.50
58	54	5	20	54	18	0	4	.05
59	39	15	20	39	23	0	4	.50
60	76	76	5	5	10	0	4	.27
61	64	64	13	15	6	0	3	.77
62	80	8	4	6	80	0	3	.50
63	80	6	1	9	80	0	4	.59
64	73	73	13	6	6	0	3	.36
65	64	6	25	64	3	0	3	.64
66	53	13	9	53	23	0	4	.68

KR20 = .88

124

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 80   AIOS LEVEL 5   -VOCABULARY BUILDING

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	88	8	3	88	3	0	0	.27
2	86	86	6	6	1	0	0	.27
3	83	4	9	83	5	0	0	.41
4	74	74	23	0	4	0	0	.36
5	83	14	83	3	1	0	0	.27
6	81	15	81	1	3	0	0	.27
7	85	5	4	85	6	0	0	.41
8	89	89	8	1	3	0	0	.27
9	85	0	85	13	3	0	0	.41
10	89	4	1	89	6	0	0	.09
11	81	4	1	81	11	0	3	.45
12	91	0	1	91	6	0	1	.23
13	83	11	5	83	1	0	0	.50
14	93	93	4	4	0	0	0	.18
15	84	6	5	4	84	1	0	.36
16	63	10	21	63	5	0	1	.73
17	90	5	1	4	90	0	0	.27
18	40	1	40	8	51	0	0	.32
19	64	31	64	3	3	0	0	.36
20	70	70	25	4	1	0	0	.41
21	85	13	85	1	1	0	0	.32
22	59	59	21	8	11	0	1	.36
23	74	6	74	15	5	0	0	.55
24	70	70	14	6	9	0	1	.55
25	63	19	5	63	11	0	3	.50
26	54	33	54	11	3	0	0	.60
27	81	81	5	10	4	0	0	.50
28	58	3	58	10	30	0	0	.27
29	85	85	6	6	3	0	0	.36
30	86	10	3	1	86	0	0	.27
31	94	3	0	94	4	0	0	.09
32	96	1	1	96	1	0	0	.05
33	76	5	76	16	3	0	0	.36
34	76	76	4	4	16	0	0	.36
35	73	3	4	73	21	0	0	.50
36	90	1	6	90	3	0	0	.14
37	66	66	6	20	8	0	0	.50
38	86	6	86	1	5	0	1	.14
39	81	14	81	3	3	0	0	.27
40	51	25	51	10	14	0	0	.23
41	55	11	18	55	16	0	0	.55
42	66	66	9	16	9	0	0	.45

KR 20 =   .92

TEST-WIDE RESPONSE ANALYSIS
—READING COMPREHENSION

NUMBER OF STUDENTS = 80   AIDS LEVEL 5

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
81	78	70	11	5	3	0	4	.55
82	48	9	33	48	11	0	0	.32
83	64	19	64	5	11	0	1	.32
84	73	15	73	5	8	0	0	.50
85	76	3	6	15	76	0	1	.18
86	43	13	43	4	40	0	0	.36
87	40	14	34	13	40	0	0	.23
88	48	21	19	48	13	0	0	.36
89	71	71	8	19	11	0	1	.59
90	46	23	6	46	24	0	0	.36
91	88	3	88	8	3	0	1	.32
92	60	60	13	10	16	0	1	.77
93	41	43	8	41	8	0	0	.41
94	35	25	16	21	35	0	3	.77
95	28	28	51	13	9	0	0	.10
96	28	9	24	28	40	0	0	.10
97	76	6	76	0	9	0	0	.21
98	71	8	15	6	71	0	1	.27
99	65	19	65	5	11	0	0	.36
100	53	8	35	53	5	0	0	.32
101	54	15	21	54	10	0	0	.23
102	80	5	80	5	10	0	0	.45
103	76	9	76	11	8	0	0	.45
104	31	36	31	11	20	0	1	.18
105	65	6	65	6	23	0	0	.36
106	40	9	20	60	11	0	0	.68
107	66	66	13	9	11	0	0	.50
108	53	53	18	15	15	0	0	.60
109	58	58	11	16	13	0	3	.55
110	76	6	8	9	76	0	1	.36
111	36	31	36	9	23	0	1	.50
112	51	26	13	51	10	0	0	.59
113	63	9	63	10	18	0	0	.68
114	36	9	36	33	23	0	0	.32
115	63	19	10	63	9	0	0	.59
116	73	73	10	9	9	0	0	.64
117	63	13	63	13	13	0	3	.64
118	68	68	68	16	6	0	1	.50
119	70	9	15	5	70	0	0	.59
120	48	18	28	13	48	0	0	.36
121	73	6	73	13	13	0	0	.60
122	64	4	5	20	64	0	3	.55
123	68	13	19	13	68	0	4	.55
124	36	36	18	43	3	0	0	.32
125	29	30	23	29	21	0	4	.41
126	30	20	16	15	30	0	0	.05
127	55	55	15	9	20	0	4	.36
128	50	9	9	50	26	0	0	.77
129	69	10	6	69	14	0	4	.45
130	53	53	1	11	35	0	0	.45
131	66	10	9	14	66	0	0	.68
132	59	16	11	59	14	0	0	.50
133	50	11	50	26	13	0	0	.50
134	43	16	15	43	24	0	0	.45
135	38	10	38	19	24	0	3	.23
136	40	15	24	40	19	0	3	.00
137	33	15	33	16	33	0	4	.46
138	31	10	11	11	35	0	5	.14
139	36	18	36	39	6	0	1	.09
140	33	14	33	28	24	0	3	.41
141	38	21	16	38	24	0	1	.50

126

142	30	19	26	23	30	0	3	.27
143	46	20	18	46	14	0	3	.36
144	58	58	19	8	11	0	5	.41

KR20 = .91

NUMBER OF STUDENTS = 79   AIOS LEVEL 5   —MATH COMPUTATION

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	61	14	16	6	61	0	3	.29
2	18	18	15	39	43	1	14	.05
3	10	10	19	25	25	1	19	.05
4	49	49	18	15	13	0	5	.52
5	32	16	32	16	27	0	9	.33
6	44	44	27	14	9	0	6	.38
7	32	6	39	16	32	0	6	.52
8	49	49	28	8	10	0	5	.62
9	34	8	10	42	34	0	6	.29
10	43	43	16	15	13	0	13	.38
11	32	16	23	32	16	0	13	.43
12	39	39	15	20	13	0	13	.33
13	13	13	18	38	24	0	8	.14
14	14	16	35	27	14	0	8	.24
15	13	13	22	41	16	0	9	.00
16	19	29	28	19	16	0	8	.24
17	23	11	23	28	24	0	14	.24
18	20	15	15	20	35	0	14	.10
19	48	10	48	14	20	0	8	.33
20	57	14	10	57	9	0	10	.57
21	48	18	14	10	48	0	10	.62
22	18	9	15	18	47	1	10	.10
23	14	9	51	18	14	0	9	.00
24	15	16	14	39	15	1	14	.00
25	33	6	53	33	3	1	4	.52
26	23	38	19	15	23	0	5	.38
27	38	38	14	18	24	1	5	.33
28	19	15	19	19	42	0	5	.24
29	13	24	13	24	34	0	5	.14
30	32	19	16	32	28	0	5	.33
31	24	15	24	48	6	0	6	.57
32	18	27	34	11	18	0	10	.24
33	34	19	27	34	13	1	6	.43
34	32	16	28	32	11	0	13	.24
35	25	13	32	25	13	1	16	.29
36	34	34	13	16	24	0	13	.00
37	44	15	44	19	13	1	8	.57
38	24	14	24	16	39	0	6	.33
39	44	44	27	5	18	0	6	.67
40	32	22	32	19	11	1	15	.29
41	20	16	20	20	23	1	19	.00
42	24	11	29	24	15	0	20	.24
43	43	18	15	43	11	0	13	.24
44	44	13	44	19	13	0	11	.57
45	46	22	46	15	9	0	9	.43
46	32	16	34	32	10	0	8	.43
47	23	23	19	23	27	0	9	.38
48	33	14	33	33	13	0	8	.29
49	24	10	22	28	24	1	15	.10
50	16	10	28	16	25	0	20	.05
51	13	13	28	20	15	0	24	.19
52	32	16	32	24	14	0	14	.33
53	25	19	25	25	11	0	19	.29
54	28	13	28	25	16	0	18	.19

KP20 = .83

NUMBER OF STUDENTS = 79   AIDS LEVEL 5

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
81	77	6	9	77	8	0	0	.24
82	72	72	5	19	4	0	0	.19
83	11	23	11	11	51	1	3	.14
84	62	4	62	10	24	0	0	.52
85	61	14	10	61	14	0	1	.67
86	56	56	10	5	29	0	0	.48
87	32	32	5	15	46	0	3	.29
88	35	35	34	14	15	0	1	.05
89	78	78	5	11	5	0	0	.57
90	58	9	16	16	58	0	0	.67
91	42	14	42	16	24	0	4	.10
92	33	33	13	25	3	0	6	.14
93	20	41	20	25	5	0	9	.10
94	37	37	14	23	11	0	15	.10
95	46	16	15	46	15	0	8	.57
96	9	28	42	9	11	0	10	.10
97	39	28	39	13	11	1	8	.19
98	67	11	67	10	10	0	1	.67
99	73	73	11	9	6	0	0	.24
100	52	28	13	52	5	0	3	.48
101	37	32	37	22	6	1	3	.19
102	57	11	19	57	10	0	3	.38
103	20	16	47	11	20	0	5	.24
104	22	42	20	22	14	0	3	.29
105	80	11	80	8	1	0	0	.24
106	18	34	27	18	19	0	3	.05
107	53	4	15	25	53	0	3	.67
108	75	8	75	5	11	0	1	.43
109	75	11	10	75	4	0	0	.52
110	47	47	15	16	20	0	1	.67
111	37	25	19	16	37	0	3	.76
112	59	9	10	22	59	0	0	.57
113	57	15	23	5	57	0	0	.43
114	56	10	19	56	13	0	3	.48
115	67	8	67	13	13	0	0	.67
116	34	34	24	8	33	0	1	.05
117	19	14	38	19	27	1	1	.00
118	28	27	28	28	16	0	1	.19
119	22	22	25	33	13	0	8	.24
120	14	29	29	14	14	0	14	.05
121	51	13	25	9	51	0	3	.24
122	75	4	9	11	75	0	1	.33
123	18	18	38	27	13	1	4	.05
124	53	8	53	14	22	0	4	.71
125	37	22	22	37	15	0	5	.43
126	11	25	28	27	11	0	9	.24
127	41	41	24	9	22	0	5	.52
128	49	11	15	49	19	0	5	.29
129	4	49	20	19	4	0	8	.14
130	54	16	16	54	9	0	4	.52
131	56	13	10	56	16	0	5	.62
132	49	25	11	49	8	0	6	.38
133	46	46	15	10	27	0	3	.57
134	62	13	9	62	15	0	1	.38
135	38	38	14	18	28	0	3	.29
136	57	16	11	14	57	0	1	.71
137	54	15	14	15	54	0	1	.62
138	13	22	25	34	13	0	6	.05
139	33	18	24	20	33	0	5	.29
140	41	30	5	41	10	0	6	.24

GRADE 5

KR20 = .84

130

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 86   AIDS LEVEL 5   -STRUCTURAL ANALYSTS

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
43	97	0	2	97	0	0	1	.04
44	84	13	84	1	1	0	1	.30
45	79	16	0	79	3	0	1	.35
46	90	0	7	2	90	0	1	.26
47	78	3	3	14	78	0	1	.48
48	93	2	93	1	2	0	1	.13
49	87	3	87	5	3	0	1	.22
50	88	88	3	3	3	0	1	.30
51	91	91	3	3	1	0	1	.22
52	94	0	2	1	94	1	1	.09
53	92	1	1	92	2	2	1	.04
54	95	1	95	0	2	0	1	.04
55	86	6	3	3	86	1	0	.39
56	88	6	88	1	3	0	1	.13
57	92	0	2	92	3	1	1	.22
58	58	3	19	58	17	1	1	.17
59	50	17	20	50	12	0	1	.52
60	73	73	8	12	6	0	1	.26
61	83	83	9	5	1	0	2	.48
62	90	3	2	2	90	0	2	.26
63	86	2	3	5	86	0	3	.39
64	71	71	13	12	1	1	2	.22
65	74	2	19	74	2	0	2	.48
66	77	7	6	77	8	0	2	.57

KR20 =   .87

TEST WIDE RESPONSE ANALYSIS
-VOCABULARY BUILDING

NUMBER OF STUDENTS = 85   AIDS LEVEL 5

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	91	2	2	91	4	1	0	.09
2	96	96	0	4	0	0	0	.00
3	88	1	1	88	2	0	1	.30
4	88	88	11	1	0	0	0	.35
5	91	8	91	0	1	0	0	.22
6	87	9	87	1	2	0	0	.30
7	87	5	5	87	2	1	0	.26
8	88	88	7	4	0	1	0	.26
9	87	2	87	11	0	0	0	.30
10	92	2	4	92	2	0	0	.22
11	89	1	1	89	7	1	0	.22
12	94	1	2	94	2	0	0	.13
13	95	2	2	95	0	0	0	.09
14	98	98	0	1	1	0	0	.00
15	91	2	4	2	91	1	0	.13
16	76	1	8	76	8	5	1	.39
17	93	5	2	0	93	0	0	.17
18	53	1	53	2	40	4	0	.57
19	78	20	78	1	1	0	0	.39
20	78	78	21	1	0	0	0	.48
21	99	0	99	0	0	1	0	.13
22	72	72	16	2	8	0	1	.48
23	86	4	86	6	4	1	0	.22
24	86	86	6	2	5	0	1	.30
25	80	9	1	80	0	1	0	.30
26	72	18	72	8	1	0	1	.57
27	93	93	6	1	0	0	0	.17
28	67	4	67	2	25	2	0	.24
29	93	93	2	5	0	0	0	.17
30	88	7	1	4	88	0	0	.30
31	93	2	4	93	1	0	0	.09
32	94	0	5	94	1	0	0	.13
33	85	6	85	9	0	0	0	.17
34	89	89	4	0	7	0	0	.22
35	79	5	2	79	13	0	1	.26
36	89	6	4	89	1	0	0	.30
37	81	81	5	8	6	0	0	.43
38	91	4	91	5	1	0	0	.26
39	88	9	88	1	1	0	0	.26
40	53	27	53	8	11	0	1	.48
41	72	8	13	72	5	0	2	.43
42	61	61	14	12	0	2	2	.52

KR20 = .91

NUMBER OF STUDENTS = 85   AIDS LEVEL 5

—READING COMPREHENSION

ITEM NUMBER	PERCENT CORRECT	PERCENT ANSWERING RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
81	84		84	7	2	7	0	0	.39
82	53		8	36	53	2	0	0	.13
83	81		9	81	5	1	2	1	.30
84	75		15	75	6	4	0	0	.30
85	82		0	5	9	82	4	0	.30
86	54		0	54	1	44	0	1	.35
87	55		7	31	7	55	0	0	.17
88	71		11	9	71	9	0	8	.48
89	79		1	7	13	79	0	0	.39
90	54		25	2	54	19	0	0	.40
91	89		2	89	2	6	0	0	.17
92	66		66	15	4	15	0	0	.61
93	56		32	7	56	5	0	0	.13
94	56		14	12	18	56	0	0	.61
95	18		10	72	1	9	1	0	.22
96	28		8	25	28	38	0	0	.26
97	73		2	73	16	6	2	0	.30
98	72		7	11	11	72	4	0	.30
99	67		15	67	7	7	2	0	.30
100	61		1	31	61	5	0	0	.30
101	71		4	20	71	6	0	0	.43
102	87		4	87	1	8	0	0	.17
103	75		14	75	9	1	1	0	.30
104	40		35	40	13	12	0	0	.30
105	75		9	75	6	7	2	0	.39
106	74		11	4	74	11	1	0	.13
107	87		87	5	4	5	1	1	.26
108	72		72	11	9	7	0	1	.61
109	67		67	5	11	15	2	2	.65
110	87		2	6	5	87	0	2	.22
111	52		19	52	7	19	4	4	.57
112	71		9	13	71	6	1	1	.30
113	64		15	64	7	14	0	0	.57
114	39		22	39	31	26	2	2	.39
115	80		12	2	80	2	0	0	.35
116	84		84	6	7	4	2	2	.43
117	69		5	69	15	9	1	1	.35
118	69		12	69	16	5	1	1	.65
119	76		12	7	5	76	0	0	.48
120	33		19	31	18	33	1	1	.26
121	80		13	80	4	2	0	0	.48
122	69		4	6	20	69	0	0	.57
123	81		11	2	5	81	0	0	.39
124	54		54	7	33	4	1	1	.26
125	47		9	6	47	33	5	5	.13
126	26		25	16	26	26	0	0	.30
127	61		61	7	9	21	2	1	.13
128	60		7	9	60	20	2	2	.57
129	72		6	11	72	7	2	2	.30
130	66		66	6	6	20	0	0	.43
131	81		1	6	9	81	0	0	.22
132	59		20	13	59	6	1	1	.57
133	67		7	67	15	1	2	2	.65
134	58		14	9	50	14	1	1	.39
135	41		14	41	21	20	5	5	.43
136	36		11	27	36	16	5	5	.52
137	36		14	34	13	36	0	0	.35
138	36		16	36	15	7	4	4	.35
139	44		19	44	26	9	2	2	.57
140	48		7	48	33	7	0	0	.52
141	59		14	9	59	14	0	0	

133

142	55	12	10	11	55	1	4	.43
143	54	13	15	54	12	2	4	.48
144	61	61	14	6	12	1	6	.48

KR 20 = .91

TEST WIDE RESPONSE ANALYSIS

| NUMBER OF STUDENTS = 89 | | AIOS LEVEL 5 | | ─MAIN COMPUTATION | | | | |

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	79	10	3	6	79	2	0	.33
2	36	36	19	29	13	0	2	.42
3	38	38	10	17	29	0	6	.38
4	48	48	12	10	27	0	2	.04
5	31	31	31	9	25	1	2	.21
6	52	52	18	6	21	0	3	.08
7	44	9	18	27	44	1	1	.67
8	60	60	24	10	7	0	0	.46
9	51	12	9	25	51	2	1	.42
10	54	54	21	8	11	1	4	.67
11	40	20	15	40	20	0	4	.54
12	46	46	27	15	7	0	6	.54
13	16	16	33	35	15	0	2	.00
14	8	13	53	24	8	0	2	.04
15	12	12	39	30	16	0	2	.08
16	52	16	18	52	13	1	0	.46
17	27	20	27	36	15	0	2	.33
18	33	10	16	33	38	0	3	.29
19	53	9	53	18	19	1	0	.63
20	67	8	8	67	15	1	1	.50
21	55	16	11	18	55	0	0	.67
22	54	12	12	54	19	1	1	.46
23	31	4	45	18	31	0	1	.33
24	27	12	25	33	27	1	2	.25
25	28	8	51	28	8	1	4	.21
26	26	31	22	16	26	0	4	.29
27	37	37	11	17	29	0	6	.25
28	27	29	9	27	30	0	4	.21
29	19	36	19	11	30	0	3	.25
30	19	26	18	19	33	0	4	.13
31	49	16	49	21	9	1	3	.54
32	39	15	27	13	39	2	3	.54
33	47	21	18	47	8	0	6	.58
34	25	11	38	25	19	1	6	.13
35	22	21	36	22	9	1	10	.17
36	34	34	16	20	22	0	8	.38
37	52	8	52	22	10	0	8	.63
38	42	9	42	21	20	1	7	.50
39	40	40	31	9	12	0	7	.50
40	40	25	40	18	8	1	8	.29
41	30	27	20	30	15	1	7	.29
42	36	13	30	36	12	0	8	.33
43	38	12	25	38	17	0	8	.46
44	46	17	46	20	8	0	9	.67
45	42	16	42	17	15	1	10	.54
46	29	19	33	29	8	0	11	.54
47	29	29	22	16	20	0	12	.42
48	29	18	29	34	9	0	10	.25
49	31	12	15	29	31	1	11	.50
50	35	12	21	35	18	1	12	.67
51	21	21	35	21	6	3	13	.21
52	28	17	28	29	11	0	15	.21
53	36	18	36	17	15	0	15	.29
54	20	17	20	28	18	0	17	.17

KR20 = .07

TEST WIDE RESPONSE ANALYSIS
-MATH APPLICATION

NUMBER OF STUDENTS = 86   AIOS LEVEL 5

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
81	80	3	7	80	8	0	1	.13
82	78	78	5	13	5	0	0	.22
83	26	15	26	15	42	2	0	.04
84	63	5	63	7	22	1	2	.52
85	67	7	8	67	16	1	0	.48
86	59	59	7	10	23	0	0	.61
87	47	47	9	9	34	0	1	.35
88	45	45	34	9	12	0	0	.00
89	86	86	3	7	3	0	0	.26
90	67	8	15	9	67	0	0	.48
91	45	10	45	20	23	1	0	.09
92	40	24	40	23	9	2	1	.09
93	24	34	24	30	9	0	2	.30
94	24	24	30	35	7	0	3	.04
95	53	16	19	53	8	0	3	.22
96	22	20	31	22	23	0	3	.13
97	36	30	36	26	5	0	3	.43
98	62	5	62	13	19	0	2	.43
99	62	62	16	9	10	0	2	.70
100	53	29	6	53	8	1	2	.35
101	27	43	27	20	7	0	3	.17
102	57	9	21	57	10	0	2	.39
103	8	22	41	21	8	3	5	.17
104	31	26	27	31	10	1	5	.09
105	78	8	78	6	6	0	2	.39
106	50	7	31	50	12	0	0	.39
107	55	9	19	16	55	0	1	.70
108	83	3	83	8	3	1	1	.30
109	79	3	9	79	6	1	1	.48
110	58	58	12	9	20	0	1	.70
111	29	14	16	40	29	0	1	.09
112	63	7	10	19	63	0	1	.65
113	59	7	23	9	59	0	1	.57
114	67	8	17	67	5	1	1	.39
115	72	5	72	7	15	0	1	.57
116	47	47	16	9	27	0	1	.39
117	34	9	23	34	33	0	1	.13
118	35	27	35	19	19	0	1	.39
119	14	14	33	36	15	0	2	.09
120	30	23	30	30	13	1	2	.04
121	43	6	37	12	43	0	2	.26
122	73	6	10	8	73	0	2	.57
123	36	36	27	19	16	0	2	.39
124	56	5	56	20	16	0	3	.57
125	45	16	17	45	16	0	5	.65
126	23	12	24	37	23	1	2	.22
127	45	45	17	16	16	0	5	.39
128	53	10	17	53	14	0	5	.70
129	16	38	24	15	16	0	6	.09
130	52	12	16	52	15	0	5	.43
131	58	15	9	58	13	0	5	.61
132	47	24	15	47	9	0	5	.43
133	56	56	22	6	14	0	2	.61
134	64	16	9	64	8	0	2	.65
135	41	41	8	19	28	2	2	.74
136	74	9	5	8	74	1	2	.57
137	50	15	14	10	50	0	2	.65
	26	20	17	35	26	0	2	.22
	28	12	35	22	20	0	3	.43
	47	23	8		16	0	6	.52

KR 20 = .88

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 202   AIDS LEVEL 5   —STRUCTURAL ANALYSIS

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
43	93	2	3	93	2	0	0	.15
44	94	4	94	0	1	0	0	.13
45	87	12	1	87	0	0	0	.18
46	91	2	3	4	91	0	0	.16
47	85	1	5	8	85	0	0	.44
48	95	1	95	1	2	0	0	.07
49	93	3	93	1	3	0	0	.16
50	92	92	2	3	3	0	0	.24
51	93	93	1	3	2	0	0	.10
52	93	1	2	4	93	0	0	.16
53	93	1	4	93	1	0	0	.18
54	94	3	94	1	2	0	0	.20
55	87	8	2	2	87	0	0	.35
56	87	11	87	1	0	0	0	.15
57	94	1	2	94	3	0	0	.16
58	65	2	18	65	15	0	0	.31
59	49	13	19	49	20	0	0	.60
60	78	78	3	10	8	0	0	.40
61	86	86	9	3	1	0	0	.33
62	94	2	1	1	94	0	0	.18
63	90	3	3	3	90	0	0	.31
64	86	86	3	10	0	0	0	.25
65	84	2	14	84	0	0	0	.38
66	86	3	3	86	5	0	2	.31

KR20 =   .82

TEST WIDE RESPONSE ANALYSIS
—VOCABULARY BUILDING

NUMBER OF STUDENTS = 203   AIDS LEVEL 5

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	92	4	1	92	3	0	0	.24
2	94	94	1	2	2	0	0	.18
3	92	2	6	92	0	0	0	.25
4	89	89	9	1	1	0	0	.22
5	91	7	91	1	2	0	1	.18
6	91	6	91	0	2	0	0	.16
7	95	1	1	95	0	0	1	.13
8	92	92	5	2	0	0	0	.25
9	91	0	91	6	2	0	0	.27
10	95	2	0	95	2	0	0	.11
11	95	2	1	95	2	0	0	.15
12	94	0	2	94	4	0	0	.20
13	95	2	2	95	0	0	0	.09
14	96	96	1	3	0	1	0	.13
15	93	4	0	1	93	1	0	.10
16	81	3	12	81	2	1	0	.45
17	94	3	1	0	94	0	0	.18
18	61	0	61	2	36	0	0	.62
19	81	16	01	2	0	0	0	.42
20	80	80	17	2	0	0	0	.38
21	95	3	95	0	1	0	0	.09
22	86	86	10	1	1	0	0	.42
23	88	3	80	6	2	0	0	.36
24	83	83	7	4	5	0	1	.44
25	88	5	3	88	2	0	0	.36
26	77	16	77	4	1	0	1	.55
27	95	95	3	1	0	0	1	.15
28	76	2	76	1	19	0	1	.29
29	93	93	2	4	92	0	0	.22
30	92	4	1	2	1	0	0	.20
31	93	5	0	93	0	0	1	.13
32	96	0	3	96	2	0	0	.11
33	86	3	86	8	12	0	0	.25
34	84	84	2	2	11	0	1	.31
35	81	5	3	81	0	0	0	.49
36	90	5	3	90	6	0	0	.29
37	78	70	3	12	2	0	0	.44
38	95	2	95	1	0	0	0	.11
39	96	2	96	1	0	0	1	.05
40	63	24	63	4	7	0	1	.45
41	71	8	12	71	3	0	0	.51
42	67	67	11	17				.60

KP20 = .97

TEST WIDE RESPONSE ANALYSIS
—READING COMPREHENSION

NUMBER OF STUDENTS = 204   AIDS LEVEL 5

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
81	91	91	2	1	5	0	0	.22
82	53	3	41	53	3	0	0	.20
83	87	6	87	3	3	0	0	.29
84	82	10	82	4	3	0	1	.35
85	87	2	6	3	87	0	0	.33
86	66	3	66	3	27	0	0	.47
87	54	5	31	9	54	0	0	.40
88	72	7	10	72	10	0	1	.51
89	77	5	6	11	77	0	0	.49
90	48	32	3	48	15	0	1	.44
91	94	1	94	3	0	0	0	.16
92	72	72	10	6	11	0	0	.38
93	64	29	1	64	5	0	0	.27
94	57	11	14	18	57	0	0	.47
95	12	12	79	4	4	0	0	.00
96	40	6	18	40	35	0	0	.22
97	80	3	80	11	4	0	1	.36
98	82	8	7	3	82	0	0	.29
99	73	10	73	3	12	0	2	.35
100	76	4	18	76	1	0	0	.38
101	71	6	14	71	9	0	0	.42
102	86	5	86	4	3	0	0	.42
103	81	10	81	6	2	0	1	.53
104	52	32	52	6	9	0	1	.33
105	75	6	75	5	13	0	1	.53
106	80	5	7	80	6	0	1	.44
107	86	86	3	5	5	0	0	.38
108	78	78	8	6	7	0	0	.56
109	78	78	4	6	10	0	1	.51
110	89	2	4	5	89	0	0	.33
111	59	22	59	8	10	0	1	.55
112	75	11	8	75	4	0	1	.60
113	78	10	78	2	8	0	0	.45
114	47	6	47	25	21	0	1	.62
115	83	9	3	83	4	0	0	.44
116	88	88	7	3	1	0	0	.29
117	80	4	80	10	5	0	1	.53
118	80	9	80	6	3	0	1	.40
119	83	2	9	3	83	0	1	.51
120	54	14	22	8	54	0	1	.55
121	85	6	85	3	3	0	1	.45
122	75	6	3	13	75	0	1	.42
123	84	4	5	6	84	0	1	.47
124	44	44	5	43	6	0	1	.24
125	46	9	14	46	28	0	2	.35
126	20	31	25	22	20	0	1	.11
127	65	65	2	9	23	0	1	.29
128	74	4	12	74	9	0	1	.49
129	82	0	11	82	5	0	1	.51
130	70	70	3	5	19	0	2	.56
131	83	8	4	4	83	0	1	.51
132	70	15	8	70	5	0	1	.18
133	68	10	68	18	3	0	1	.53
134	57	9	11	57	22	0	1	.58
135	49	20	49	10	20	0	3	.22
136	39	23	28	39	7	0	3	.40
137	46	8	30	13	46	0	2	.33
138	46	8	46	13	31	0	4	.40
139	51	22	51	18	4	0	3	.53
140	56	7	56	23	11	0	5	.65

			16	10	57	0	4	.75
142	57	13	16	59	5	0	4	.60
143	59	16	16	5	12	0	5	.55
144	65	65	13					

KR20 =   .93

141

TEST WIDE RESPONSE ANALYSIS — MATH COMPUTATION

NUMBER OF STUDENTS = 205   AIOS LEVEL 5

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	83	3	6	7	83	0	0	.31
2	63	63	16	15	3	1	1	.50
3	66	66	5	9	17	0	3	.53
4	63	63	13	5	18	0	1	.44
5	57	20	57	13	10	0	0	.56
6	63	63	17	6	14	0	0	.47
7	62	3	18	15	62	0	1	.75
8	72	72	17	6	4	0	1	.62
9	67	14	5	10	67	1	2	.51
10	71	71	10	8	7	0	3	.49
11	61	13	11	61	11	0	3	.40
12	70	70	15	9	4	0	2	.55
13	35	35	14	37	13	0	1	.45
14	33	0	40	17	33	0	0	.47
15	39	39	16	32	12	0	1	.44
16	62	11	15	62	8	0	3	.58
17	49	21	49	18	9	0	2	.53
18	48	7	16	48	25	0	3	.49
19	69	6	69	12	11	0	2	.65
20	79	6	6	79	7	0	2	.58
21	73	11	5	8	73	0	3	.62
22	72	5	8	72	12	1	3	.53
23	49	6	32	10	49	0	3	.58
24	36	9	15	34	36	1	5	.69
25	45	2	43	45	6	0	3	.64
26	48	35	7	7	48	0	2	.64
27	49	49	10	9	28	1	3	.73
28	53	17	8	53	18	0	4	.64
29	46	24	46	7	17	0	5	.75
30	51	16	11	51	18	0	4	.65
31	67	12	67	9	7	0	5	.62
32	56	9	17	11	56	0	6	.75
33	67	11	11	67	4	1	7	.71
34	42	13	28	42	8	0	9	.44
35	39	12	28	39	12	0	10	.50
36	37	37	14	10	28	0	10	.58
37	72	4	72	11	5	0	7	.55
38	61	3	61	11	14	1	10	.69
39	65	65	10	7	0	0	10	.65
40	49	18	49	13	6	0	15	.47
41	40	21	19	40	4	0	17	.60
42	48	8	17	40	7	1	19	.67
43	54	15	12	54	4	0	14	.73
44	63	10	63	6	6	0	15	.65
45	60	10	60	6	8	0	16	.56
46	40	11	27	40	6	0	16	.75
47	45	45	12	13	12	0	18	.71
48	45	10	45	20	7	0	18	.65
49	46	10	8	16	46	0	20	.75
50	51	6	13	51	9	0	21	.69
51	34	34	10	16	7	0	25	.73
52	44	11	44	17	4	0	23	.62
53	40	13	40	14	7	0	25	.62
54	36	14	36	17	6	0	26	.45

KR20 = .95

17FM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
81	80	4	5	00	10	0	0	.27
82	83	83	2	11	3	0	0	.27
83	43	3	43	16	36	1	1	.38
84	77	6	77	2	14	0	0	.27
85	70	7	14	70	7	0	1	.47
86	71	71	6	3	10	0	0	.47
87	49	49	5	7	39	0	0	.49
88	51	51	28	12	0	0	2	.36
89	95	95	0	2	2	0	0	.13
90	79	4	7	9	79	0	0	.31
91	49	8	40	8	34	0	7	.13
92	31	32	31	26	4	0	4	.09
93	32	29	32	23	11	0	10	.20
94	32	32	24	30	3	0	5	.05
95	51	22	13	51	8	0	6	.53
96	15	14	45	15	20	0	6	.02
97	37	30	37	26	0	0	0	.31
98	87	2	87	4	5	0	1	.33
99	80	80	10	7	1	0	1	.33
100	60	23	5	60	10	0	1	.44
101	38	36	38	18	6	0	2	.51
102	71	6	13	71	8	0	2	.40
103	12	20	47	17	12	1	4	.56
104	33	32	23	33	9	0	3	.02
105	89	7	89	3	1	0	0	.40
106	76	6	12	76	6	0	0	.16
107	78	5	7	9	78	0	0	.42
108	78	5	7	1	1	0	1	.29
109	95	1	95	91	3	0	0	.13
110	91	2	3	7	14	0	0	.24
111	74	74	4	30	52	0	2	.49
112	52	8	9	14	78	0	0	.04
113	78	1	6	3	74	0	0	.42
114	74	3	10	83	5	0	1	.31
115	83	3	88	1	7	0	1	.18
116	88	51	10	5	33	0	0	.33
117	51	3	16	27	51	0	2	.55
118	27	42	39	11	6	0	1	.25
119	39	14	35	30	14	0	7	.38
120	14	36	20	24	10	0	10	.05
121	24	8	41	3	45	0	2	.04
122	45	3	4	4	86	0	1	.18
123	86	44	33	14	6	0	2	.45
124	44	5	82	4	6	0	2	.29
125	87	13	11	63	9	0	3	.31
126	63	26	14	29	24	0	4	.55
127	24	65	10	13	7	0	2	.22
128	65	7	9	78	3	0	5	.60
129	78	53	11	9	22	0	4	.45
130	22	9	5	71	10	0	2	.36
131	71	5	9	76	8	0	3	.65
132	76	23	5	58	10	0	0	.58
133	58	75	8	3	14	0	0	.67
134	75	7	6	80	8	0	0	.55
135	80	67	6	8	18	0	0	.49
136	67	6	4	8	85	0	0	.64
137	05	7	7	63	75	0	1	.40
138	75	21	16	11	31	0	2	.53
139	31	9	22	31	40	0	5	.55
140	49	21	7	61	5	0	5	.33
	61							.56

KR20 = .89

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 233   AIDS LEVEL 5   -STRUCTURAL ANALYSIS

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PEPCENT OMITTED	DISCRIM FACTOR
43	94	1	4	94	0	0	0	.17
44	88	9	88	1	3	0	0	.33
45	81	14	3	81	2	0	0	.35
46	91	3	2	3	91	0	0	.22
47	85	2	2	11	85	0	0	.40
48	94	2	94	0	4	0	0	.14
49	93	5	93	2	0	0	0	.21
50	90	90	2	4	4	0	0	.32
51	91	91	1	5	2	0	0	.27
52	94	2	2	2	94	0	0	.14
53	94	1	3	94	1	0	0	.11
54	93	3	93	0	3	0	0	.19
55	86	7	4	2	86	0	0	.35
56	83	15	83	2	0	0	0	.30
57	95	0	2	95	3	0	0	.13
58	52	6	28	52	14	0	0	.48
59	52	12	15	52	21	0	1	.63
60	74	74	6	12	9	0	0	.32
61	90	90	5	3	1	0	1	.27
62	94	2	1	2	94	0	1	.17
63	89	5	2	3	89	0	1	.29
64	79	79	5	10	4	0	2	.46
65	81	0	16	81	2	0	1	.41
66	81	2	6	81	10	0	1	.40

KR20 =   .85

NUMBER OF STUDENTS = 233   AIOS LEVEL 5

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	93	1	1	93	6	0	0	.14
2	95	95	1	1	3	0	0	.13
3	94	0	4	94	1	0	0	.11
4	91	91	6	3	0	0	0	.24
5	94	3	94	0	2	0	0	.13
6	88	7	88	1	3	0	0	.25
7	91	5	1	91	3	0	0	.24
8	88	88	8	3	1	0	0	.33
9	90	0	90	9	0	0	0	.29
10	94	3	1	94	3	0	0	.16
11	92	3	1	92	4	0	0	.22
12	95	0	3	95	2	0	0	.14
13	90	6	3	90	0	0	0	.27
14	94	94	1	4	1	0	0	.13
15	94	3	1	1	94	0	0	.13
16	83	4	9	83	5	0	0	.46
17	94	1	4	0	94	0	0	.17
18	59	2	59	2	37	0	0	.67
19	82	14	82	3	0	0	0	.38
20	82	82	14	3	1	0	0	.38
21	97	2	97	0	0	0	0	.05
22	82	82	13	2	3	0	0	.54
23	86	3	86	10	0	0	0	.44
24	87	87	5	1	6	0	1	.32
25	88	3	3	88	5	0	1	.30
26	79	13	79	6	1	0	1	.57
27	93	93	4	2	0	0	0	.24
28	74	4	74	4	17	0	0	.46
29	91	91	1	4	3	1	0	.29
30	90	3	2	4	90	0	0	.30
31	94	4	0	94	1	0	1	.16
32	96	0	3	96	0	0	1	.13
33	91	2	91	6	1	0	1	.19
34	91	91	3	2	1	1	1	.24
35	79	5	4	79	1	1	1	.44
36	91	4	3	91	1	4	0	.25
37	77	77	4	13	4	1	0	.52
38	94	4	94	1	1	0	1	.14
39	94	3	94	0	0	0	2	.11
40	61	23	61	6	8	0	1	.48
41	73	6	15	73	4	0	0	.56
42	76	76	10	8	4	0	0	.57

KR 20 = .93

146

TEST WIDE RESPONSE ANALYSIS
—READING CONPREHENSION

NUMBER OF STUDENTS = 236   ATOS LEVEL 5

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
A1	A5	85	3	3	A	0	1	.39
A2	53	2	42	53	2	0	1	.00
A3	88	5	88	4	2	0	1	.38
A4	81	9	81	4	6	0	1	.40
A5	85	2	8	5	85	0	1	.45
A6	54	5	54	7	33	0	2	.50
87	53	7	30	8	53	0	1	.47
AB	72	10	8	72	9	0	1	.64
A9	82	3	6	9	82	0	1	.53
90	50	31	4	50	13	0	2	.40
91	A9	3	89	5	2	0	1	.33
92	69	69	13	8	9	0	2	.55
93	65	25	3	65	5	0	2	.44
94	60	11	10	18	60	0	2	.69
95	1A	1A	74	3	3	0	2	.02
96	39	8	24	39	28	0	2	.28
97	80	0	80	12	5	0	2	.25
98	77	5	10	5	77	0	2	.42
99	68	13	68	3	13	0	3	.25
100	64	1	30	64	3	0	3	.41
101	68	6	15	68	9	0	2	.48
102	A4	4	84	3	7	0	3	.52
103	78	9	78	7	3	0	3	.44
104	50	28	50	10	9	0	3	.42
105	76	3	76	6	11	0	3	.48
106	70	12	7	70	8	0	3	.64
107	84	84	4	3	5	0	3	.42
108	A0	80	7	4	5	0	4	.52
109	75	75	5	6	11	0	3	.67
110	A9	2	3	4	89	0	3	.38
111	63	19	63	6	8	0	3	.55
112	74	11	9	74	4	0	3	.70
113	77	5	77	5	11	0	2	.45
114	52	5	52	24	17	0	2	.70
115	A3	11	3	83	1	0	2	.20
116	BA	88	6	2	2	0	2	.39
117	A1	2	81	9	5	0	2	.42
118	A1	4	81	11	2	0	2	.45
119	A1	4	8	4	81	0	2	.58
120	53	9	24	12	53	0	2	.44
121	A6	6	86	1	5	0	3	.33
122	72	8	5	13	72	0	3	.47
123	85	4	4	3	85	0	4	.39
124	45	45	8	36	6	0	4	.42
125	46	11	8	46	30	0	5	.45
126	15	27	32	21	15	0	4	.08
127	64	64	2	10	21	0	4	.52
128	64	8	9	64	15	0	4	.53
129	75	4	10	75	6	0	4	.66
130	69	69	2	4	19	0	6	.48
131	81	5	5	3	81	0	6	.50
132	68	12	11	68	3	0	6	.25
133	72	6	72	12	4	0	7	.56
134	61	9	4	61	17	0	8	.72
135	53	10	53	15	13	1	8	.64
136	54	10	18	54	9	0	9	.53
137	54	8	22	7	54	0	9	.67
138	36	8	36	J	40	0	10	.64
139	47	18	47	19	6	0	10	.47
140	56	6	56	19	9	0	10	.59
141	56	9	10	56	14	0	11	.66

147

142	56	11	10	10	56	0	13	.67
143	56	10	11	56	9	0	13	.55
144	56	56	14	8	7	1	14	.58

KR20 =   .94

TEST WIDE RESPONSE ANALYSIS

NUMBER OF STUDENTS = 233   ATOS LEVEL 5   —MATH COMPUTATION

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
1	82	7	4	6	82	0	0	.44
2	67	67	16	9	6	0	2	.63
3	71	71	8	9	11	0	1	.70
4	67	67	9	4	19	0	0	.40
5	49	26	49	12	12	0	0	.76
6	65	65	12	6	17	0	1	.46
7	67	3	16	13	67	0	1	.71
8	79	79	11	3	6	0	0	.54
9	70	11	6	13	70	0	U	.54
10	64	64	15	12	6	0	3	.51
11	49	25	14	49	7	1	4	.49
12	62	62	18	9	6	0	4	.60
13	36	36	16	35	12	0	0	.63
14	37	9	34	18	37	0	1	.67
15	36	36	18	34	9	0	1	.63
16	68	8	14	68	8	1	1	.60
17	55	19	55	13	12	0	1	.54
18	56	8	15	56	19	0	2	.67
19	81	6	81	9	4	0	0	.41
20	86	3	5	86	6	0	0	.29
21	73	6	8	12	73	1	0	.67
22	76	6	6	76	11	0	1	.49
23	56	6	24	12	56	1	2	.62
24	45	8	12	29	45	0	4	.73
25	60	3	33	60	3	0	1	.67
26	57	28	5	9	57	0	1	.71
27	63	63	6	8	22	0	2	.65
28	51	19	6	51	23	0	1	.79
29	50	25	50	8	16	0	0	.75
30	47	21	10	47	21	0	0	.75
31	70	10	70	14	4	1	0	.65
32	59	9	18	12	59	1	1	.75
33	76	8	12	76	3	0	1	.67
34	51	14	23	51	10	0	2	.65
35	45	9	24	45	17	0	3	.81
36	52	52	14	10	21	0	3	.70
37	76	3	76	13	6	0	1	.59
38	66	7	66	9	14	1	2	.65
39	77	77	4	6	11	0	2	.62
40	56	21	56	14	5	2	3	?.49
41	48	17	20	48	10	0	4	.54
42	56	8	18	56	12	1	5	.57
43	67	10	11	67	6	1	4	.76
44	77	7	77	7	5	0	3	.59
45	76	9	76	7	4	0	3	.60
46	56	7	24	56	8	1	5	.60
47	58	58	10	9	17	1	6	.81
48	56	10	56	24	4	0	7	.71
49	60	9	9	14	60	2	7	.75
50	63	6	11	63	12	0	8	.75
51	48	48	18	18	6	1	9	.76
52	54	9	54	18	10	0	10	.71
53	53	9	53	18	10	0	9	.70
54	45	12	45	20	10	1	11	.68

KR20 = .95

NUMBER OF STUDENTS = 236   AIDS LEVEL 5

ITEM NUMBER	PERCENT ANSWERING CORRECT RESPONSE	PERCENT RESPONSE 1	PERCENT RESPONSE 2	PERCENT RESPONSE 3	PERCENT RESPONSE 4	PERCENT RESPONSE 5	PERCENT OMITTED	DISCRIM FACTOR
81	87	5	3	87	5	0	1	.23
82	75	75	4	17	3	0	1	.47
83	44	9	44	15	29	0	2	.50
84	75	4	75	3	17	0	1	.48
85	74	6	7	74	12	0	1	.53
86	68	68	3	4	23	0	1	.50
87	40	40	7	7	45	0	1	.47
88	35	35	43	8	12	0	1	.44
89	88	88	3	3	5	0	1	.28
90	72	5	10	11	72	0	1	.47
91	45	11	45	13	29	0	2	.06
92	44	23	44	24	4	0	5	.16
93	36	21	36	29	0	0	6	.38
94	21	21	29	31	0	0	10	.13
95	53	17	13	53	12	0	6	.46
96	31	14	37	31	10	0	8	.34
97	42	25	42	22	6	0	6	.53
98	82	2	82	7	8	0	1	.41
99	74	74	13	8	5	0	1	.52
100	68	18	4	68	8	1	1	.70
101	42	33	42	19	3	0	1	.41
102	68	6	18	68	6	0	1	.63
103	22	11	42	23	22	0	3	.38
104	38	29	24	38	8	0	2	.48
105	87	5	87	4	3	0	1	.30
106	70	7	17	70	6	0	1	.42
107	72	4	13	9	72	0	1	.61
108	85	3	85	7	4	0	2	.39
109	80	6	6	80	6	1	1	.48
110	65	65	6	13	15	1	1	.77
111	43	8	11	34	43	1	3	.17
112	71	2	9	17	71	0	1	.39
113	71	6	15	?	71	0	1	.44
114	70	7	18	70	3	0	1	.63
115	84	4	84	5	7	0	1	.44
116	51	51	17	6	24	0	2	.63
117	42	6	10	42	40	0	3	.45
118	41	30	41	15	11	0	2	.56
119	22	22	31	31	11	0	6	.17
120	29	28	19	29	17	1	7	.34
121	50	9	34	4	50	0	3	.08
122	84	3	6	5	84	0	2	.45
123	44	44	25	18	10	0	4	.34
124	75	9	75	7	6	0	3	.47
125	59	11	15	59	11	0	3	.56
126	29	16	17	32	29	0	5	.20
127	60	60	13	12	13	0	2	.91
128	69	12	11	69	6	0	2	.66
129	30	45	8	12	30	0	4	.63
130	71	9	11	71	7	0	2	.61
131	75	5	7	75	10	0	3	.59
132	69	16	6	69	6	0	3	.61
133	68	68	6	6	19	0	1	.47
134	76	8	4	76	11	0	1	.55
135	64	64	5	9	20	0	2	.58
136	87	3	5	3	87	0	1	.31
137	75	5	5	14	75	0	1	.55
138	31	22	14	31	31	0	2	.34
139	46	7	29	15	46	0	3	.50
140	72	13	5	72	8	0	2	.53

KR20 = .92

APPENDIX C

Difficulty, Discrimination and Reliability Indices by Item

The decimal point has been omitted for the difficulty
indices. It should be placed two digits to the left.

AIDS Phonetic Analysis - Level One

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX			DISCRIMINATION INDEX			ITEM RELIABILITY INDEX		
	Grade =	1	2	3	1	2	3	1	2	3*
	N =	202	99	86	202	99	86	202	99	86**
1	A=SINGLE INIT. CONSON.	90	92	80	.27	.19	.61	.40	.28	.76
2		91	90	72	.18	.26	.83	.31	.31	.78
3		84	94	76	.33	.07	.65	.40	.18	.66
4		87	88	76	.22	.15	.74	.33	.23	.80
5		86	93	74	.36	.11	.70	.43	.30	.69
6		89	91	80	.27	.26	.61	.34	.45	.76
7		84	90	74	.38	.30	.70	.44	.62	.69
8		86	87	74	.36	.33	.74	.44	.59	.76
9	B=SINGLE PLUR. CONSON.	89	95	90	.25	.11	.26	.38	.63	.62
10		84	90	91	.40	.22	.13	.52	.57	.45
11		92	94	95	.24	.15	.09	.51	.60	.57
12		93	95	94	.16	.11	.09	.38	.69	.45
13		88	90	92	.31	.30	.09	.49	.66	.38
14		84	90	92	.27	.26	.17	.31	.70	.57
15	C=SINGLE MEDIAL CONS.	72	89	86	.51	.22	.35	.48	.56	.50
16		71	85	87	.51	.37	.22	.50	.58	.27
17		78	87	90	.38	.26	.22	.40	.49	.48
18		31	35	30	.15	.30	.61	.15	.10	.39
19		58	65	63	.49	.41	.48	.41	.40	.28
20		61	83	79	.45	.30	.26	.39	.25	.30
21		59	81	67	.35	.22	.39	.22	.19	.24
22		83	86	86	.11	.37	.22	.17	.46	.41
23		66	75	78	.38	.44	.30	.37	.54	.27
24	D=INIT. CONS. DIGRAPH	64	76	81	.65	.56	.43	.52	.62	.59
25		86	90	98	.40	.26	.04	.59	.63	.10
26		54	57	71	.47	.33	.17	.44	.35	.30
27	E=FINAL CON. DIGRAPH	83	81	93	.45	.44	.04	.58	.61	.19
28		79	86	83	.49	.30	.35	.60	.59	.49
29		49	67	76	.65	.70	.39	.50	.61	.51
30	F=INIT. DBL. CON. BLEND	79	84	84	.56	.44	.30	.66	.67	.61
31		72	79	67	.55	.41	.70	.53	.33	.63
32		71	72	80	.60	.52	.48	.58	.57	.61
33		75	79	78	.40	.56	.52	.46	.65	.67
34		77	80	80	.62	.37	.48	.68	.64	.69
35		80	85	85	.55	.41	.43	.67	.68	.76
36		77	80	79	.55	.48	.43	.62	.69	.66
37		76	78	80	.64	.52	.48	.70	.64	.71
38	G=FINAL DBL. CON. BLGN.	88	88	92	.36	.22	.13	.66	.52	.37
39		66	79	90	.51	.33	.17	.48	.42	.51
40		62	88	84	.58	.19	.26	.49	.42	.40

AIDS Structural Analysis - Level One

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX			DISCRIMINATION INDEX			ITEM RELIABILITY INDEX		
	Grade =	1	2	3	1	2	3	1	2	3
	N =	175	98	85	175	98	85	175	98	85
41	A=PL NOUN INFLEC. END	26	52	57	.28	.46	.65	.24	.44	.56
42		17	28	28	.02	.23	.43	.07	.18	.41
43		37	56	59	.45	.69	.83	.34	.58	.72
44		24	52	36	.23	.58	.48	.26	.40	.32
45		64	88	86	.68	.23	.17	.56	.43	.31
46	B=POSS. NOUN INFL. END	10	22	9	.13	.08	.35	.17	.05	.32
47		19	25	13	.02	.15	.17	.04	.19	.18
48	C=3RD PERSON SINGLE	38	64	57	.45	.54	.65	.38	.49	.58
49		45	68	72	.64	.77	.70	.51	.72	.65
50		38	52	59	.49	.73	.48	.42	.54	.46
51	D=PAST TENSE VERB	41	66	59	.49	.58	.57	.44	.50	.59
52		39	67	61	.36	.69	.61	.33	.57	.57
53		62	87	90	.72	.31	.35	.63	.59	.66
54		71	91	84	.79	.46	.17	.69	.66	.43
55	E=PRESENT TENSE VERB	67	88	88	.79	.35	.35	.67	.62	.59
56		57	68	69	.55	.58	.61	.52	.56	.46
57		65	88	79	.72	.58	.30	.65	.70	.59

154

AIDS Vocabulary Building - Level One

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX			DISCRIMINATION INDEX			ITEM RELIABILITY INDEX		
		Grade = 1	2	3	1	2	3	1	2	3
		N = 192	101	84	192	101	84	192	101	84
58	A=BASIC SIGHT WORDS	79	88	96	.46	.33	.00	.52	.59	.43
59		65	75	90	.69	.63	.13	.60	.68	.50
60		82	84	95	.50	.52	.04	.63	.76	.45
61		86	90	99	.38	.26	.04	.58	.44	.04
62		87	84	96	.33	.48	.04	.48	.67	.27
63		76	76	87	.56	.56	.22	.59	.66	.51
64		69	75	95	.73	.74	.09	.66	.82	.59
65		79	75	89	.48	.63	.09	.58	.72	.35
66		72	83	90	.67	.52	.22	.64	.69	.56
67		29	31	39	.08	.52	.43	.07	.34	.25
68		68	75	90	.56	.56	.17	.49	.62	.50
69		81	77	98	.54	.74	.00	.67	.83	.53
70		74	74	85	.37	.59	.22	.36	.65	.47
71		77	78	94	.55	.59	.13	.58	.71	.63
72		82	81	98	.43	.63	.00	.60	.79	.55
73		85	77	95	.27	.59	.04	.47	.65	.24
74	E=SYNONYMS	62	71	76	.77	.59	.74	.61	.58	.78
75		56	70	74	.87	.56	.83	.68	.49	.80
76		60	67	77	.85	.70	.61	.69	.60	.69
77		49	61	69	.62	.56	.74	.43	.38	.70
78		66	75	83	.77	.63	.43	.66	.66	.72
79		23	34	55	.19	.48	.87	.15	.37	.67
80		77	77	90	.40	.44	.17	.42	.48	.57
81		79	80	92	.55	.59	.22	.63	.69	.76
82		43	67	69	.81	.74	.74	.60	.63	.66
83		41	63	58	.67	.59	.74	.55	.51	.59
84		60	60	77	.85	.89	.65	.71	.75	.78
35		79	77	89	.56	.48	.13	.58	.54	.43

155

AIDS Math Computation - Level One

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX			DISCRIMINATION INDEX			ITEM RELIABILITY INDEX		
		Grade = 1 / N = 190	2 / 101	3 / 84	1 / 190	2 / 101	3 / 84	1 / 190	2 / 101	3 / 84
86	A=ADD WH NUM W/O REG.	93	84	98	.12	.37	.04	.22	.51	.09
87		86	87	95	.12	.33	.04	.13	.53	.05
88		92	88	99	.18	.26	.09	.25	.43	.06
89		96	90	99	.06	.09	.09	.16	.53	.06
90		95	87	99	.16	.37	.09	.30	.54	.06
91		50	75	83	.59	.59	.26	.53	.63	.41
92		39	67	82	.49	.67	.35	.46	.61	.47
93		45	79	87	.69	.44	.26	.56	.47	.46
94		69	84	93	.59	.48	.13	.47	.64	.35
95		48	73	87	.73	.63	.35	.64	.61	.63
96		56	82	92	.65	.44	.13	.61	.64	.41
97		49	79	90	.75	.48	.13	.47	.64	.39
98		36	72	83	.71	.67	.30	.56	.59	.49
99		43	79	87	.73	.44	.44	.59	.68	.53
100		45	66	81	.82	.70	.35	.61	.56	.43
101		48	80	96	.76	.59	.04	.70	.61	.39
102		35	58	80	.51	.74	.13	.57	.66	.57
103		37	67	77	.55	.63	.26	.46	.54	.20
104		29	65	83	.73	.81	.35	.51	.56	.41
105		33	72	86	.84	.74	.22	.67	.69	.47
106	B=ADD WH NUM W/REG.	53	65	85	.49	.70	.43	.43	.62	.60
107		47	67	82	.59	.59	.48	.50	.53	.57
108		31	63	80	.49	.70	.48	.57	.54	.61
109		24	45	77	.37	.70	.61	.41	.53	.56
110		23	52	63	.43	.56	.57	.47	.46	.54
111		23	49	69	.41	.74	.57	.51	.54	.56
112		25	51	71	.24	.56	.57	.32	.41	.58
113		20	39	64	.25	.44	.48	.28	.37	.47
114		17	41	60	.43	.52	.70	.56	.32	.61
115		21	25	52	.16	.37	.74	.26	.32	.55
116		26	54	74	.41	.70	.65	.43	.57	.69
117		22	33	57	.27	.70	.74	.32	.54	.65
118		14	32	52	.20	.63	.74	.32	.48	.59
119		14	38	64	.24	.70	.57	.43	.54	.57
120		18	35	55	.24	.41	.61	.30	.37	.53
121	F=SUB WH NUM W/O REG.	93	85	87	.18	.37	.39	.32	.52	.59
122		90	80	90	.20	.52	.26	.27	.66	.47
123		93	85	90	.20	.41	.26	.33	.59	.49
124		92	80	88	.22	.44	.35	.34	.62	.61
125		94	81	89	.12	.41	.30	.29	.57	.53
126		43	78	77	.73	.41	.52	.57	.57	.52
127		41	69	77	.67	.56	.52	.57	.52	.56
128		35	75	81	.75	.44	.52	.63	.52	.52
129		37	65	74	.69	.74	.61	.57	.68	.60
130		43	65	82	.71	.63	.35	.52	.62	.52

AIDS Phonetic Analysis - Level Two

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX			DISCRIMINATION INDEX			ITEM RELIABILITY INDEX		
	Grade =	2	3	4	2	3	4	2	3	4
	N =	81	102	87	81	102	87	81	102	87
1	G=FINAL DBL CON BLEND	77	90	91	.45	.11	.22	.49	.16	.30
2		35	66	63	.64	.75	.83	.51	.66	.52
3		89	98	98	.18	.04	.04	.36	.15	.24
4		60	83	89	.36	.25	.04	.34	.33	.13
5		42	69	71	.64	.43	.35	.45	.27	.29
6		72	89	93	.55	.14	.09	.56	.35	.37
7	H=INIT TRI CON BLEND	65	82	78	.64	.39	.39	.50	.50	.40
8		77	96	87	.41	.04	.17	.42	.32	.50
9		56	77	86	.55	.50	.13	.47	.45	.38
10	I=INIT SIL CON BLEND	70	91	92	.45	.21	.17	.49	.38	.54
11		65	80	78	.50	.54	.43	.50	.60	.54
12		78	89	93	.55	.29	.17	.58	.57	.73
13	J=FINAL SILENT CONS	25	52	48	.27	.64	.70	.25	.44	.39
14		63	82	87	.23	.36	.22	.27	.47	.38
15		42	76	74	.64	.57	.57	.52	.61	.64
16	K=LONG VOWEL SOUND	83	93	93	.18	.18	.17	.37	.42	.43
17		78	96	95	.45	.07	.04	.56	.56	.41
18		77	96	97	.36	.07	.00	.42	.36	.14
19	L=SHORT VOWEL SOUND	60	92	92	.82	.18	.22	.75	.58	.45
20		78	94	98	.45	.14	.00	.60	.61	.38
21		68	90	91	.68	.25	.26	.65	.57	.55
22	M=Y AS VOWEL	75	86	95	.45	.29	.09	.50	.48	.54
23		62	69	85	.27	.32	.00	.26	.26	.19
24		57	81	91	.41	.32	.22	.41	.33	.63
25	N=OIPTHONGS	78	95	98	.55	.11	.00	.60	.55	.51
26		77	94	98	.41	.14	.00	.46	.44	.45
27		27	45	61	.45	.64	.04	.44	.40	.10
28	O=SILENT VOWEL	67	95	94	.73	.11	.13	.71	.54	.63
29		63	96	95	.77	.07	.09	.72	.49	.59
30		49	75	72	.68	.50	.61	.67	.47	.62
31	P=IRREGULAR VOWEL	59	85	87	.86	.36	.35	.78	.58	.51
32		78	97	95	.36	.00	.09	.47	.19	.15
33		70	90	95	.68	.21	.09	.74	.56	.61
34		57	87	93	.86	.29	.13	.72	.56	.62
35	Q=CONSON CONT VOWEL	56	86	90	.73	.21	.26	.66	.52	.60
36		68	92	97	.64	.21	.04	.60	.69	.44
37		54	89	97	.59	.21	.04	.54	.44	.38
38	R=SCHWA SOUNDS	89	93	97	.18	.04	.00	.31	.21	.25
39		64	87	90	.73	.25	.30	.64	.55	.70
40		78	87	94	.27	.29	.04	.28	.60	.53
41	S=RHYMING WORDS	51	81	78	.45	.21	.30	.35	.28	.33
		78	89	87	.41	.04	.13	.41	.07	.50
		78	87	90	.36	.04	.17	.37	.23	.55

AIDS Structural Analysis - Level Two

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX			DISCRIMINATION INDEX			ITEM RELIABILITY INDEX		
	Grade =	2	3	4	2	3	4	2	3	4
	N=	80	102	87	80	102	87	80	102	87
44	F=COMP ADV AND ADS INFLE	71	77	95	.50	.54	.00	.40	.60	.23
45		81	93	99	.36	.18	.04	.40	.69	.36
46		66	89	97	.59	.29	.00	.50	.60	.34
47	G=SUPER ADV AND ADJ INFL	64	80	92	.68	.57	.22	.59	.61	.56
48		71	88	95	.59	.32	.09	.55	.67	.61
49		80	94	97	.45	.14	.04	.53	.83	.68
50		75	94	98	.68	.14	.00	.74	.74	.59
51	S=CONTRACTIONS	91	98	94	.23	.04	.13	.43	.29	.62
52		84	94	94	.41	.14	.09	.53	.39	.31
53		84	95	95	.36	.04	.09	.47	.35	.29
54		78	92	95	.41	.14	.09	.53	.48	.47
55		73	86	92	.55	.32	.13	.54	.60	.35
56		75	87	85	.41	.18	.30	.33	.21	.49
57		88	93	99	.23	.14	.09	.49	.61	.00
58		85	94	99	.23	.11	.04	.45	.37	.24
59		79	96	98	.50	.07	.00	.58	.64	.42
60		86	93	97	.32	.14	.04	.52	.65	.48
61		79	93	98	.45	.11	.00	.53	.63	.29
62		83	94	97	.50	.11	.00	.67	.62	.20

AIDS Vocabulary Building - Level Two

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX			DISCRIMINATION INDEX			ITEM RELIABILITY INDEX		
		Grade = 2	3	4	2	3	4	2	3	4
		N = 80	102	86	80	102	86	80	102	86
63	F=ANTONYMS	78	95	93	.55	.11	.09	.67	.47	.45
64		90	97	99	.27	.04	.04	.68	.60	.04
65		89	98	98	.27	.00	.00	.64	.70	.42
66		83	94	94	.23	.11	.13	.45	.50	.42
67		96	99	100	.05	.04	.09	.44	.06	.00
68		94	98	100	.14	.00	.09	.59	.70	.00
69		89	92	86	.23	.21	.26	.46	.54	.38
70		84	88	98	.32	.21	.09	.49	.30	.06
71		94	99	100	.14	.04	.04	.59	.57	.00
72		88	97	98	.32	.04	.04	.55	.06	.12
74		95	93	94	.09	.11	.00	.56	.45	.18
74		79	96	97	.45	.04	.04	.52	.54	.00
75	G=HOMOGRAPHS	80	90	92	.23	.18	.13	.37	.44	.54
76		51	83	95	.64	.39	.09	.35	.61	.64
77		84	96	100	.36	.07	.09	.51	.53	.00
78	H=HOMOPHONES	78	95	100	.64	.11	.09	.63	.60	.00
79		73	87	95	.45	.18	.00	.47	.28	.19
80		71	90	94	.68	.21	.09	.62	.28	.42
81		59	89	95	.59	.29	.09	.38	.59	.56
82		96	97	99	.05	.00	.04	.42	.53	.46
83		90	100	99	.14	.07	.04	.38	.00	.04
84		70	75	86	.27	.43	.30	.26	.41	.55
85		91	96	100	.23	.07	.09	.50	.66	.00
86		89	98	99	.23	.00	.04	.50	.55	.46
87		75	95	94	.59	.04	.09	.58	.10	.48
88		93	97	99	.18	.00	.04	.39	.22	.21
89		96	99	98	.00	.04	.04	.40	.06	.12
90	I=MULTIPLE MEANINGS	51	73	74	.41	.54	.65	.31	.40	.66
91		31	54	80	.41	.75	.57	.34	.45	.65
92		90	94	98	.18	.07	.00	.41	.44	.24
93		58	76	87	.68	.50	.26	.56	.54	.37

AIDS Math Computation - Level Two

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX			DISCRIMINATION INDEX			ITEM RELIABILITY INDEX		
		Grade = 2	3	4	2	3	4	2	3	4
		N = 81	101	86	81	101	86	81	101	86
94	F=SU8 WH NUM W/O REG	75	90	98	.18	.11	.00	.23	.42	.26
95		84	97	91	.23	.04	.04	.28	.38	.20
96		84	92	92	.18	.15	.04	.24	.51	.07
97		89	88	95	.05	.22	.04	.17	.47	.14
98		90	93	90	.18	.15	.09	.32	.41	.22
99	G=SU8 WH NUM W/REG	35	90	87	.18	.15	.26	.11	.41	.52
100		31	88	87	.32	.30	.39	.34	.50	.61
101		22	74	84	.41	.41	.39	.39	.50	.50
102		52	96	93	.73	.07	.00	.55	.47	.15
103		35	80	79	.45	.19	.26	.35	.36	.44
104		4	63	70	.00	.63	.61	.09	.58	.59
105		6	55	67	.09	.78	.70	.16	.61	.69
106		6	70	69	.00	.67	.48	.09	.69	.44
107		14	77	77	.27	.37	.39	.41	.51	.53
108		6	64	63	.18	.70	.52	.25	.63	.49
109	K=MULT WH NUM W/O CA	57	94	98	.68	.04	.04	.59	.30	.08
110		41	99	100	.73	.04	.09	.62	.00	.00
111		28	82	99	.55	.33	.04	.57	.51	.20
112		22	92	99	.27	.19	.04	.38	.46	.19
113		40	94	99	.77	.04	.09	.67	.28	.04
114		31	86	95	.64	.33	.09	.58	.57	.34
115		11	82	92	.36	.44	.09	.44	.55	.33
116		16	88	97	.50	.26	.00	.59	.53	.24
117		9	75	87	.23	.63	.22	.29	.63	.43
118		21	84	97	.55	.33	.04	.54	.51	.39
119		9	8	65	.27	.19	.70	.41	.26	.59
120		10	9	56	.18	.26	.74	.32	.33	.61
121		5	3	57	.14	.11	.70	.28	.23	.58
122		6	7	56	.18	.04	.61	.26	.04	.55
123		15	11	69	.27	.15	.57	.35	.11	.55
124	P=DIV WH NUM W/O REM	14	69	90	.32	.52	.04	.39	.47	.14
125		11	49	85	.32	.81	.35	.53	.57	.46
126		7	66	93	.05	.74	.17	.13	.65	.39
127		4	46	70	.05	.70	.48	.05	.55	.47
128		6	63	95	.14	.89	.00	.38	.73	.18
129		6	6	60	.09	.00	.65	.18	.05	.62
130		7	6	48	.27	.04	.52	.50	.23	.47
131		7	5	62	.18	.00	.65	.23	.05	.62
132		6	8	77	.14	.22	.52	.28	.29	.61
133		6	0	63	.18	.00	.65	.39	.00	.55
134		32	9	74	.68	.19	.26	.65	.19	.30
135		10	4	56	.14	.00	.39	.25	.09	.35
136		4	4	58	.05	.04	.48	.13	.10	.45
137		7	10	45	.18	.11	.26	.34	.15	.18
138		10	4	47	.18	.11	.65	.27	.19	.45

AIDS Phonetic Analysis - Level Three

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX		DISCRIMINATION INDEX		ITEM RELIABILITY INDEX	
	Grade =	3	4	3	4	3	4
	N ≈	79	73	79	73	79	73
1	A=SING INIT CONSONAN	82	89	.52	.30	.73	.69
2		85	85	.43	.40	.59	.70
3		84	82	.48	.50	.69	.79
4		82	86	.57	.35	.74	.67
5		87	82	.38	.45	.49	.71
6		90	84	.24	.40	.43	.70
7	D=INIT CON DIAGRAPHS	82	84	.57	.45	.72	.74
8		77	75	.62	.65	.69	.71
9		84	97	.29	.00	.35	.22
10	F=INIT DBL CON BLEND	65	82	.57	.45	.60	.79
11		70	85	.48	.45	.52	.82
12		82	86	.43	.40	.48	.85
13	H=INIT TRI CON BLEND	68	84	.52	.30	.47	.60
14		86	92	.33	.20	.52	.62
15		87	90	.33	.20	.48	.65
16	B=FINAL CONSONANT	96	97	.05	.00	.36	.41
17		92	100	.14	.10	.48	.00
18		91	100	.10	.10	.36	.00
19		94	92	.05	.05	.19	.02
20		90	97	.19	.10	.48	.03
21		86	96	.29	.10	.58	.07
22	E=FINAL CON DIAGRAPH	87	95	.33	.05	.61	.33
23		90	92	.19	.00	.46	.20
24		94	97	.05	.10	.30	.08
25	G=FINAL DBL CON BLEND	92	100	.14	.10	.44	.00
26		89	96	.24	.00	.53	.13
27		96	100	.05	.10	.55	.00
28	C=SINGLE MEDIAL CONS	44	67	.33	.30	.20	.13
29		91	97	.10	.00	.19	.13
30		62	67	.33	.30	.27	.15
31		89	96	.29	.05	.50	.27
32		51	48	.38	.70	.26	.35
33		66	77	.62	.20	.51	.16
34	K=LONG VOWEL SOUND	89	92	.24	.10	.56	.20
35		80	93	.19	.05	.38	.23
36		91	96	.14	.05	.37	.23
37	L=SHORT VOWEL SOUND	89	90	.14	.15	.34	.42
38		77	82	.43	.45	.58	.56
39		80	89	.38	.15	.53	.31
40	M=Y AS VOWEL	78	90	.38	.10	.53	.15
41		62	75	.38	.45	.32	.42
42		70	70	.67	.40	.59	.28

AIDS Vocabulary Building - Level Three

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX		DISCRIMINATION INDEX		ITEM RELIABILITY INDEX	
		Grade = 3	4	3	4	3	4
		N = 79	73	79	73	79	73
43	A=BASIC SIGHT WORDS	95	100	.10	.10	.76	.00
44		92	97	.10	.00	.48	.46
45		90	93	.14	.05	.32	.14
46		92	100	.19	.10	.81	.00
47		92	99	.14	.05	.60	.08
48		91	99	.24	.05	.66	.04
49		92	100	.14	.10	.51	.00
50		91	100	.14	.10	.48	.00
51		91	95	.19	.10	.72	.24
52	E=SYNONYMS	91	95	.19	.05	.60	.24
53		86	92	.24	.20	.53	.65
54		85	89	.38	.15	.54	.55
55	H=HOMOPHONES	94	99	.14	.05	.65	.53
56		94	97	.10	.05	.53	.12
57		95	99	.10	.10	.64	.04
58	F=ANTONYMS	84	85	.43	.40	.66	.69
59		92	92	.19	.20	.66	.44
60		87	84	.29	.40	.50	.62
61	G=HOMOGRAPHS	81	93	.52	.10	.62	.45
62		80	86	.38	.20	.40	.32
63		90	96	.24	.05	.61	.58
64	I=MULTIPLE MEANINGS	77	90	.52	.20	.57	.50
65		91	93	.24	.15	.56	.61
66		82	95	.43	.10	.72	.66

162.

AIO5 Reading Comprehension - Level Three

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX		DISCRIMINATION INDEX		ITEM RELIABILITY INDEX	
		Grade = 3	4	3	4	3	4
		N= 79	73	79	73	79	73
81	A=FACTS STATED	95	96	.10	.00	.44	.34
32	FACTS PARAPHRASED	84	81	.24	.35	.48	.42
83	C=SEQUENCE	76	79	.62	.40	.67	.57
84	E=COMPARE AND CONTRAST	85	92	.33	.15	.53	.55
85	C=SEQUENCE	78	79	.57	.10	.68	.14
86	F=CAUSE AND EFFECT	85	90	.38	.20	.58	.43
87	A=FACTS STATED	81	88	.33	.30	.51	.54
88	D=LIST	72	88	.43	.25	.50	.41
89	FACTS PARAPHRASED	33	49	.19	.25	.21	.22
90	D=LIST	70	89	.38	.20	.50	.59
91	G=PUNCTUATION	57	79	.67	.40	.54	.53
92	H=REFERENTS	81	88	.48	.10	.63	.36
93	J=CONCLUS AND SUP FAC	75	79	.29	.25	.43	.40
94	L=SENSORY IMAGES	78	77	.24	.40	.38	.50
95	O=GEOGRAPHIC CLUE	80	92	.48	.15	.66	.39
96	K=MOODS	84	85	.38	.25	.54	.49
97	M=FIGURATIVE SPEECH	65	78	.52	.35	.57	.49
98	P=ORGANIZATION PATT	35	42	.14	.05	.08	.01
99	I=MAIN IDEA AND SUB	63	67	.29	.40	.33	.43
100	N=INFER AND GENERAL	77	85	.48	.40	.46	.57
101	S=EVAL TONE OF PASS	84	88	.38	.20	.61	.43
102	Q=DIST FACT, OPIN, FIC	81	82	.48	.20	.63	.33
103	IDENT PROPAGANDA TGC	39	48	.24	.50	.20	.38
104	T=JUDGE AUTHOR PURPOSE	73	84	.57	.10	.37	.35
105	A=FACTS STATED	80	86	.43	.25	.60	.49
106	FACTS PARAPHRASED	85	97	.33	.00	.54	.43
107	F=CAUSE AND EFFECT	76	88	.62	.30	.71	.54
108	E=COMPARE AND CONTRAST	73	90	.57	.15	.55	.45
109	F=CAUSE AND EFFECT	62	84	.67	.40	.68	.61
110	H=REFERENTS	63	77	.57	.30	.52	.39
111	C=SEQUENCE	43	53	.38	.40	.29	.35
112	D=LIST	63	82	.62	.25	.56	.40
113	G=PUNCTUATION	71	90	.67	.20	.68	.54
114	E=COMPARE AND CONTRAST	58	59	.43	.30	.41	.20
115	G=PUNCTUATION	67	70	.62	.50	.51	.42
116	H=REFERENTS	57	63	.71	.65	.59	.55
117	I=MAIN IDEA AND SUB	68	88	.71	.25	.61	.49
118	J=CONCLUS AND SUP FACT	77	96	.62	.05	.66	.40
119	P=ORGANIZATION PATT	58	62	.62	.65	.52	.53
120	M=FIGURATIVE SPEECH	68	75	.57	.15	.57	.28
121	N=INFER AND GENERAL	57	75	.52	.35	.49	.45
122	O=GEOGRAPHIC CLUE	39	53	.14	.35	.17	.21
123	K=MOODS	70	82	.57	.40	.55	.55
124	L=SENSORY IMAGES	58	70	.33	.35	.41	.32
125	W=FORMULATE CONCLUS	54	74	.52	.45	.49	.40
126	U=JUDGE AUTHORS CRED	58	77	.71	.35	.60	.32
127	U=JUDGE AUTHORS CRED	62	74	.67	.60	.59	.53
128	X=GEN SOL PRED OUTCO	49	66	.62	.45	.45	.42
129	I=MAIN IDEA AND SUB	35	49	.33	.45	.25	.42
130	K=MOODS	76	90	.52	.20	.53	.51
131	N=INFER AND GENERAL	66	84	.71	.35	.69	.56
132	O=GEOGRAPHIC CLUE	59	77	.71	.55	.64	.68
133	J=CONCLUS AND SUP FACT	58	77	.62	.40	.54	.43
134	L=SENSORY IMAGES	22	44	.19	.60	.19	.51
135	M=FIGURATIVE SPEECH	11	47	.62	.65	.43	.52
136	P=ORGANIZATION PATT	19	42	.19	.05	.15	.03
137	U=JUDGE AUTHORS CRED	32	34	.52	.40	.44	.37
138	W=FORMULATE CONCLUSION	35	62	.52	.40	.46	.31
139	Q=DIST FACT, OPIN, FIC	61	78	.71	.25	.64	.35
140	S=EVAL TONE OF PASSAGE	67	73	.52	.25	.56	.38
141	U=JUDGE VALIDITY CON	37	48	.48	.35	.36	.29
142	IDENT PROPAGANDA TGC	47	48	.52	.55	.40	.46
143	T=JUDGE AUTHOR PURPOSE	54	53	.38	.25	.35	.29
144	X=GEN SOL PRED OUTCOME	75	75	.52	.45	.52	.39

AIDS Math Application - Level Three

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX		DISCRIMINATION INDEX		ITEM RELIABILITY INDEX	
	Grade =	3	4	3	4	3	4
	N =	75	71	75	71	75	71
81	G=PERFORM COMPUTAT	98	99	.25	.05	.43	.17
82	G=PERFORM COMPUTAT	89	99	.25	.05	.47	.10
83	G=PERFORM COMPUTAT	81	87	.30	.05	.43	.05
84	C=DET WHAT IS ASKED	80	92	.45	.21	.56	.43
85	E=DETERMINE MATH REL	84	96	.40	.05	.48	.34
86	A=EX FACT AND NUM VALU	77	70	.50	.47	.55	.52
87	D=IDENT XTRA-INSUFF	61	76	.50	.58	.48	.60
88	D=IDENT XTRA-INSUFF	52	55	.60	.68	.52	.61
89	F=TRANSLATE TO EQUAT	57	58	.45	.58	.39	.45
90	C=DET WHAT IS ASKED	60	72	.70	.74	.57	.63
91	E=DETERMINE MATH REL	56	68	.45	.63	.47	.60
92	A=EX FACT AND NUM VALU	79	86	.50	.21	.56	.36
93	D=IDENT XTRA-INSUFF	68	79	.70	.53	.70	.59
94	F=TRANSLATE TO EQUAT	64	75	.55	.21	.50	.33
95	A=EX FACT AND NUM VALU	64	68	.70	.21	.58	.31
96	D=IDENT XTRA-INSUFF	55	63	.60	.74	.56	.57
97	E=DETERMINE MATH REL	50	79	.45	.47	.49	.50
98	A=EX FACT AND NUM VALU	71	85	.35	.26	.37	.45
99	C=DET WHAT IS ASKED	63	80	.75	.47	.67	.53
100	F=TRANSLATE TO EQUAT	63	87	.75	.16	.62	.31
101	G=PERFORM COMPUTAT	65	68	.60	.63	.51	.61
102	G=PERFORM COMPUTAT	79	89	.55	.11	.57	.32
103	G=PERFORM COMPUTAT	72	77	.50	.32	.47	.42
104	A=EX FACT AND NUM VALU	77	86	.60	.16	.64	.33
105	C=DET WHAT IS ASKED	63	73	.75	.74	.68	.71
106	D=IDENT XTRA-INSUFF	63	76	.70	.53	.59	.50
107	A=EX FACT AND NUM VALU	71	89	.60	.26	.65	.44
108	F=TRANSLATE TO EQUAT	60	80	.80	.37	.69	.41
109	C=DET WHAT IS ASKED	72	83	.55	.37	.59	.50
110	E=DETERMINE MATH REL	67	82	.70	.37	.69	.46
111	D=IDENT XTRA-INSUFF	56	72	.70	.63	.64	.45
112	E=DETERMINE MATH REL	48	65	.60	.58	.58	.41
113	C=DET WHAT IS ASKED	57	80	.70	.37	.61	.50
114	F=TRANSLATE TO EQUAT	52	66	.70	.53	.57	.48
115	A=EX FACT AND NUM VALU	71	77	.65	.37	.67	.46
116	D=IDENT XTRA-INSUFF	28	46	.45	.53	.36	.44
117	F=TRANSLATE TO EQUAT	29	58	.60	.68	.56	.60
118	A=EX FACT AND NUM VALU	63	76	.65	.42	.64	.51
119	C=DET WHAT IS ASKED	47	73	.65	.58	.57	.57
120	E=DETERMINE MATH REL	15	25	.10	.42	.07	.29
121	G=PERFORM COMPUTAT	67	79	.60	.47	.61	.52
122	G=PERFORM COMPUTAT	41	54	.75	.53	.64	.44
123	G=PERFORM COMPUTAT	61	82	.50	.32	.52	.36
124	A=EX FACT AND NUM VALU	57	73	.70	.53	.59	.46
125	D=IDENT XTRA-INSUFF	48	55	.60	.68	.56	.43
126	F=TRANSLATE TO EQUAT	65	86	.65	.32	.60	.43
127	A=EX FACT AND NUM VALU	59	56	.60	.42	.51	.32
128	F=TRANSLATE TO EQUAT	71	82	.60	.42	.66	.48
129	C=DET WHAT IS ASKED	41	63	.70	.53	.58	.42
130	E=DETERMINE MATH REL	28	45	.45	.74	.38	.52
131	C=DET WHAT IS ASKED	33	48	.70	.32	.58	.28
132	D=IDENT XTRA-INSUFF	51	51	.40	.42	.36	.32
133	A=EX FACT AND NUM VALU	61	73	.55	.58	.53	.55
134	E=DETERMINE MATH REL	27	41	.35	.68	.31	.42
135	A=EX FACT AND NUM VALU	40	51	.55	.79	.46	.60
136	C=DET WHAT IS ASKED	51	68	.60	.68	.68	.53
137	E=DETERMINE MATH REL	36	51	.35	.53	.37	.35
138	C=DET WHAT IS ASKED	59	50	.55	.89	.59	.77
139	C=DET WHAT IS ASKED	41	51	.30	.37	.64	.34
140	F=TRANSLATE TO EQUAT	33	52	.60	.68	.53	.53

164

AIOS Phonetic Analysis - Level Four

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX			DISCRIMINATION INDEX			ITEM RELIABILITY INDEX		
	Grade =	5	6	7	5	6	7	5	6	7
	N =	97	77	54	97	77	54	97	77	54
1	N=DIPTHONG	96	86	70	.08	.38	.80	.54	.65	.85
2		32	56	37	.08	.38	.27	.00	.32	.32
3		85	90	78	.42	.29	.40	.68	.70	.52
4	O=SILENT VOWEL	86	96	72	.42	.05	.73	.69	.59	.82
5		89	92	85	.27·	.14	.27	.61	.62	.44
6		84	86	59	.42	.29	.73	.50	.57	.74
7	P=IRREGULAR VERB	90	92	85	.27	.14	.13	.56	.57	.21
8		82	79	57	.38	.62	.87	.65	.71	.80
9		81	84	81	.42	.38	.27	.53	.65	.40
10	Q=CONSONANT CONTR. VO.	79	74	48	.31	.62	.73	.47	.64	.63
11		95	88	76	.12	.29	.73	.42	.69	.84
12		92	91	70	.15	.14	.80	.42	.61	.86
13.	S=RHYMING WORDS	85	82	74	.23	.33	.67	.33	.57	.79
14		90	91	74	.31	.14	.73	.70	.74	.84
15		92	88	67	.19	.29	.73	.68	.68	.73
16	R=SCHWA. SOUNDS	68	79	39	.54	.43	.87	.47	.45	.60
17		78	82	54	.31	.38	.67	.41	.56	.56
18		73	68	54	.42	.38	.07	.31	.43	.01
19	I=INITIAL SILENT CON.	85	95	67	.42	.10	.67	.53	.67	.72
20		81	92	70	.50	.19	.80	.67	.72	.80
21		80	84	78	.50	.29	.27	.59	.53	.30
22	J=FINAL SILENT CON.	65	62	52	.58	.57	.00	.52	.45	.11
23		84	92	63	.46	.19	.80	.57	.73	.79
24		84	91	72	.35	.19	.60	.50	.58	.67

AIOS Vocabulary Building - Level Four

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX			DISCRIMINATION INDEX			ITEM RELIABILITY INDEX		
	Grade =	5	6	7	5	6	7	5	6	7
	N =	96	76	54	96	76	54	96	76	54
25	B=IRREGULAR VERBS	94	96	89	.12	.05	.13	.41	.19	.45
26		99	100	83	.04	.10	.47	.17	.00	.81
27		82	84	67	.38	.19	.73	.60	.30	.74
28	C=IRREGULAR PL. NOUNS	89	89	78	.27	.19	.60	.62	.51	.77
29		70	76	54	.69	.38	.60	.63	.43	.53
30		91	89	76	.23	.19	.67	.64	.52	.82
31	D=IRREGULAR COMPARE	73	66	54	.54	.67	.93	.54	.61	.73
32		95	97	78	.12	.05	.53	.45	.14	.77
33		91	93	93	.19	.10	.07	.44	.42	.37
34	J=CAPITALIZATION	54	63	46	.58	.57	.73	.47	.46	.57
35		67	76	50	.69	.48	.53	.54	.5B	.43
36		66	66	43	.69	.67	.33	.55	.55	.34

AIDS Structural Analysis - Level Four

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX			DISCRIMINATION INDEX			ITEM RELIABILITY INDEX		
	Grade =	5	6	7	5	6	7	5	6	7
	n =	97	76	54	97	76	54	97	76	54
37	A=PLURALS	88	84	65	.31	.24	.47	.62	.40	.54
38		87	95	67	.23	.10	.67	.41	.38	.65
39		88	92	85	.27	.10	.07	.61	.30	.12
40		63	63	46	.42	.57	.20	.31	.52	.08
41		93	95	85	.15	.00	.27	.43	.10	.55
42		76	88	59	.35	.24	.73	.41	.60	.65
43	B=POSSESSIVES	55	72	37	.54	.57	.47	.26	.59	.40
44		55	74	46	.58	.43	.53	.32	.47	.51
45		38	32	44	.50	.62	.07	.25	.37	.13
46	C=3RD PERSON SINGUL.	85	83	63	.27	.29	.67	.42	.46	.67
47		81	84	72	.38	.38	.53	.57	.62	.64
48		85	84	65	.27	.38	.67	.53	.71	.72
49	D=PAST TENSE	89	96	76	.27	.05	.60	.64	.38	.81
50		87	92	76	.38	.19	.67	.67	.61	.85
51		79	87	63	.42	.29	.60	.51	.52	.61
52		85	95	91	.46	.05	.07	.74	.52	.27
53		72	82	80	.46	.43	.00	.48	.60	.05
54		70	82	54	.62	.43	.73	.46	.55	.67
55	F=COMPARATIVES	86	91	69	.35	.10	.73	.67	.51	.72
56		89	99	96	.35	.05	.00	.67	.11	.22
57		73	95	94	.58	.10	.07	.62	.76	.03
58	C=3RD PERSON SINGUL.	85	78	70	.23	.48	.40	.44	.66	.54
59		81	83	74	.46	.43	.53	.70	.72	.68
60		81	89	83	.50	.19	.00	.75	.63	.05
61	G=SUPERLATIVES	78	89	72	.46	.14	.60	.55	.48	.74
62		75	83	76	.69	.33	.20	.73	.65	.22
63		89	93	80	.35	.10	.47	.66	.63	.70
64		89	86	81	.27	.43	.47	.51	.73	.74
65		80	86	74	.27	.33	.47	.46	.56	.56
66		64	80	72	.58	.43	.40	.53	.61	.49

167

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX			DISCRIMINATION INDEX			ITEM RELIABILITY INDEX		
	Grade =	5	6	7	5	6 -	7	5	6	7
	N =	98	77	55	98	77	55	98	77	55
81	D=LIST	92	92	71	.04	.19	.53	.26	.49	.59
82	E=COMPARE/CONTRAST	92	94	69	.12	.10	.53	.36	.48	.61
83	F=CAUSE/EFFECT	92	97	76	.12	.00	.60	.33	.46	.72
84	B=FACTS PARAPHRASED	35	96	73	.31	.05	.67	.38	.46	.75
85	C=SEQUENCE	77	87	71	.38	.24	.47	.48	.48	.54
86	H=REFERENTS	47	64	58	.46	.71	.27	.40	.64	.28
87	A=FACTS STATED	87	92	73	.27	.14	.67	.49	.52	.70
88	G=PUNCTUATION	81	86	67	.31	.29	.47	.36	.47	.58
89	A=FACTS STATED	89	95	78	.15	.05	.60	.34	.44	.71
90	B=FACTS PARAPHRASED	74	82	67	.42	.24	.40	.44	.46	.45
91	H=REFERENTS	89	94	73	.27	.10	.67	.50	.42	.69
92	D=LIST	68	78	65	.50	.48	.27	.49	.57	.32
93	C=SEQUENCE	80	82	65	.46	.29	.80	.52	.40	.77
94	F=CAUSE/EFFECT	65	82	62	.54	.43.	.47	.49	.57	.46
95	E=COMPARE/CONTRAST	57	52	45	.50	.43	.47	.43	.36	.37
96	G=PUNCTUATION	85	88	65	.38	.19	.80	.55	.43	.72
97	K=MOODS	83	84	67	.42	.24	.73	.50	.47	.75
98	J=CONCL/SUPPORT FACT	60	58	49	.46	.57	.30	.43	.51	.58
99	L=SENSORY IMAGES	92	91	73	.35	.14	.67	.45	.41	.75
100	N=INFERENCE/GENERAL	74	94	76	.54	.05	.27	.51	.39	.32
101	I=MAIN IDEA/SUB DET.	78	74	50	.38	.24	.60	.40	.21	.56
102	M=FIGURATIVE SPEECH	71	84	71	.55	.29	.73	.62	.45	.72
103	P=ORGANIZATIONAL PAT.	74	74	62	.42	.33	.40	.39	.53	.39
104	O=GRAPHICAL CLUES	85	88	80	.31	.14	.47	.45	.47	.53
105	T=JUDGE AUTHORS PURP.	51	48	44	.58	.57	.53	.45	.50	.41
106	X=GEN. SOL. PRED. OUTCO.	78	86	57	.23	.19	.60	.32	.34	.61
107	Q=DIST. FACT & OPINION	77	83	62	.38	.24	.53	.45	.41	.61
108	S=EVALUATE TONE & PASS	86	91	32	.15	.24	.40	.32	.63	.50
109	W=FORMULATE CONCLUS.	69	82	75	.54	.33	.53	.55	.50	.56
110	V=JUDGE VALIDITY CON.	46	49	51	.38	.52	.13	.38	.44	.06
111	R=IDENT. PROPAGANDA T	63	70	65	.54	.62	.53	.49	.58	.48
112	U=JUDGE AUTHOR CRED.	54	65	51	.46	.62	.67	.34	.58	.53
113	A=FACTS STATED	85	93	84	.46	.43	.33	.59	.61	.48
114	B=FACTS PARAPHRASED	69	37	67	.73	.33	.67	.64	.64	.72
115	E=COMPARE/CONTRAST	78	79	73	.65	.43	.20	.56	.51	.25
116	C=SEQUENCE	72	71	66	.31	.24	.60	.36	.46	.56
117	F=CAUSE/EFFECT	82	90	73	.50	.29	.60	.57	.66	.59
118	G=PUNCTUATION	81	98	69	.27	.19	.87	.39	.46	.80
119	D=LIST	86	87	71	.38	.29	.67	.51	.52	.71
120	H=REFERENTS	59	58	47	.50	.81	.67	.41	.67	.59
121	I=MAIN IDEA/SUB. DET.	66	75	47	.73	.38	.87	.65	.46	.70
122	J=CONCL/SUPPORT FACT	76	83	65	.46	.48	.30	.52	.61	.71
123	K=MOODS	51	66	45	.73	.62	.40	.61	.58	.44
124	M=FIGURATIVE SPEECH	55	74	62	.46	.57	.67	.45	.55	.55
125	L=SENSORY IMAGES	91	92	76	.19	.19	.60	.44	.53	.70
126	N=INFERENCES/GENERAL	46	47	44	.38	.29	.33	.38	.17	.43
127	P=ORGANIZATIONAL PAT.	41	43	31	.31	.05	.50	.31	.18	.47
128	O=GRAPHICAL CLUES	26	39	38	.23	.33	.27	.21	.24	.25
129	Q=DIST. FACT & OPINION	45	56	53	.58	.71	.90	.44	.65	.65
130	R=IDENT. PROPAGANDA	48	62	47	.73	.71	.53	.54	.60	.49
131	X=GEN. SOL. PRED. OUTCO.	65	61	42	.62	.43	.67	.55	.41	.64
132	T=JUDGE AUTHORS PURP.	53	53	42	.42	.48	.53	.38	.44	.41
133	W=FORMULATE CONCLUS.	61	64	53	.46	.67	.33	.49	.52	.32
134	S=EVALUATE TONE & PASS	37	55	35	.31	.57	.73	.20	.41	.55
135	U=JUDGE AUTHOR CRED.	34	48	49	.62	.38	.47	.47	.44	.47
136	V=JUDGE VALIDITY CON.	63	64	44	.69	.48	.53	.55	.48	.60
137	Q=DIST. FACT & OPINION	43	35	42	.42	.62	.47	.34	.45	.41
138	U=JUDGE AUTHOR CRED.	56	69	56	.31	.62	.27	.60	.61	.34
139	R=IDENT. PROPAGANDA T	32	42	27	.23	.24	.27	.31	.19	.24
140	V=JUDGE VALIDITY CON.	29	55	45	.54	.71	.33	.31	.19	.24
141	W=FORMULATE CONCLUS.	42	30	24	.35	.29	.40	.23	.15	.45
142	S=EVALUATE TONE & PASS	46	50	45	.62	.91	.67	.52	.72	.61
143	T=JUDGE AUTHORS PURP.	63	79	65	.50	.33	.47	.43	.47	.48
144	X=GEN. SOL. PRED. OUTCO.	51	62	55	.31	.57	.67	.39	.62	.53

AIOS Math Computation - Level Four

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX			DISCRIMINATION INDEX			ITEM RELIABILITY INDEX		
		Grade = 5	6	7	5	6	7	5	6	7
		N = 95	75	54	95	75	54	95	75	54
1	Q=DIV. WH. NUM. W/REM.	82	89	70	.31	.20	.53	.43	.27	.66
2		60	85	61	.54	.45	.67	.46	.66	.63
3		62	81	57	.42	.50	.87	.38	.64	.70
4	I=SUBTRACT FRACTIONS	36	56	37	.54	.90	.13	.44	.69	.14
5		75	83	61	.35	.25	.53	.39	.37	.56
6		49	71	35	.69	.80	.60	.55	.66	.55
7	9=ADD WH. NUM. W/REGRP.	76	92	76	.46	.20	.47	.48	.48	.60
8		87	91	78	.31	.15	.53	.42	.29	.63
9		58	75	69	.54	.30	.53	.47	.35	.50
10	J=SUBTRACT DECIMALS	85	92	83	.35	.10	.33	.43	.31	.48
11		85	91	72	.35	.20	.67	.41	.52	.66
12		82	89	78	.31	.15	.60	.35	.38	.70
13	G=SUB. WH. NUM. W/REGRO.	79	89	81	.42	.05	.33	.42	.09	.54
14		73	83	63	.42	.20	.20	.46	.29	.25
15		69	80	67	.58	.35	.73	.51	.39	.64
16	E=ADD DECIMALS	51	64	59	.58	.40	.47	.48	.47	.44
17		78	92	81	.46	.20	.53	.47	.43	.67
18		92	96	80	.15	.05	.47	.31	.33	.59
19	P=DIV. WH. NUM. NO/REM.	63	73	56	.65	.65	.67	.51	.68	.60
20		55	68	46	.38	.60	.67	.31	.64	.55
21		45	73	56	.46	.60	.47	.43	.60	.48
22	O=ADD FRACTIONS	43	47	44	.54	.75	.47	.49	.56	.43
23		71	64	65	.42	.70	.27	.39	.65	.41
24		48	56	54	.64	.75	.40	.48	.62	.41
25	I=SUBTRACT FRACTIONS	34	49	43	.46	.85	.13	.47	.71	.19
26		76	85	70	.42	.30	.67	.40	.53	.64
27		55	75	59	.69	.70	.33	.53	.71	.35
28	M=MULTIPLY FRACTIONS	32	59	43	.08	.60	.47	.10	.58	.46
29		27	59	46	.46	.65	.27	.44	.58	.22
30		22	67	43	.12	.70	.80	.07	.73	.52
31	O=MULTIPLY DECIMALS	15	48	30	.00	.30	.00	.02	.59	.10
32		35	51	17	.31	.96	.20	.30	.71	.27
33		22	47	24	.35	.30	.53	.34	.62	.53
34	T=DIVIDE DECIMALS	32	48	33	.12	.65	.20	.04	.52	.24
35		21	33	15	.15	.60	.13	.20	.44	.26
36		4	31	22	.04	.63	.00	.19	.52	.06
37		23	37	28	.04	.70	.27	.07	.59	.25
38		28	41	22	.15	.45	.27	.19	.36	.36
39		21	47	20	.04	.40	.33	.09	.39	.42
40	L=MULT. WH. NUM. W/CARR.	53	72	46	.31	.45	.73	.38	.55	.58
41		32	53	35	.31	.35	.40	.30	.43	.37
42		37	45	35	.19	.55	.27	.23	.49	.32
43		23	17	13	.15	.20	.20	.14	.19	.29
44		12	7	17	.00	.06	.13	.15	.07	.28
45		23	39	24	.08	.25	.47	.06	.34	.41
46	O=MULTIPLY DECIMALS	29	57	44	.50	.85	.57	.49	.69	.51
47		27	51	24	.23	.55	.53	.27	.58	.52
48		13	47	26	.04	.80	.47	.09	.65	.50
49	T=DIVIDE DECIMALS	15	51	20	.08	.60	.27	.05	.56	.35
50		19	49	30	.08	.70	.53	.14	.53	.53
51		22	52	28	.15	.70	.07	.12	.56	.29
52	E=ADD DECIMALS	32	64	41	.23	.55	.67	.24	.64	.51
53		36	57	37	.08	.60	.67	.03	.55	.56
54		24	59	39	.12	.50	.53	.16	.57	.48

169

AIDS Math Application - Level Four

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX			DISCRIMINATION INDEX			ITEM RELIABILITY INDEX		
		Grade = 5	6	7	5	6	7	5	6	7
		N = 95	69	54	95	69	54	95	69	54
31	G=PERFORM COMPUTATION	72	77	37	.54	.42	.54	.46	.46	.73
82	G=PERFORM COMPUTATION	76	91	69	.54	.16	.40	.50	.37	.60
83	G=PERFORM COMPUTATION	44	65	35	.46	.47	.39	.39	.54	.40
84	D=IDENT. EX. OR INSUFF.	41	64	30	.69	.68	.51	.52	.60	.67
85	E=DET. MATH RELATION.	61	75	52	.50	.47	.39	.45	.52	.53
36	A=FACTS & NUM. VALUES	67	84	57	.50	.26	.56	.50	.50	.93
87	C=DET. WHAT IS ASKED	75	84	70	.54	.32	.40	.55	.55	.53
88	D=IDENT. EX. OR INSUFF.	59	71	51	.77	.42	.50	.58	.47	.60
89	B=MATH VOCABULARY	57	75	50	.46	.47	.60	.46	.55	.30
90	C=DET. WHAT IS ASKED	77	38	63	.38	.21	.51	.45	.46	.67
91	F=TRANSLATE TO EQUAT	31	42	28	.35	.21	.15	.30	.16	.20
92	A=FACTS & NUM. VALUES	30	88	76	.46	.32	.38	.54	.68	.47
93	B=MATH VOCABULARY	71	77	41	.55	.47	.49	.57	.56	.67
94	F=TRANSLATE TO EQUAT	73	80	46	.65	.26	.43	.58	.43	.60
95	B=MATH VOCABULARY	37	46	31	.46	.32	.34	.36	.35	.33
36	D=IDENT. EX. OR INSUFF.	67	83	52	.52	.42	.40	.54	.57	.67
97	E=DET. MATH RELATION	74	78	63	.65	.47	.45	.61	.57	.53
98	A=FACTS & NUM. VALUES	72	83	54	.46	.32	.58	.44	.44	.73
99	C=DET. WHAT IS ASKED	61	72	57	.59	.58	.52	.54	.66	.60
100	E=DET. MATH RELATION	59	70	50	.62	.47	.55	.50	.53	.73
101	A=FACTS & NUM. VALUES	56	67	59	.27	.47	.33	.32	.56	.40
102	C=DET. WHAT IS ASKED	59	74	46	.58	.37	.35	.46	.43	.67
103	F=TRANSLATE TO EQUAT	29	41	31	.31	.37	.40	.37	.38	.53
104	G=PERFORM COMPUTATION	28	32	30	.12	.16	.20	.14	.14	.20
105	G=PERFORM COMPUTATION	19	46	22	.08	.32	.21	.09	.34	.20
106	G=PERFORM COMPUTATION	35	64	31	.62	.47	.49	.50	.44	.60
107	C=DET. WHAT IS ASKED	59	77	61	.35	.42	.30	.38	.43	.33
108	D=IDENT. EX. OR INSUFF.	27	42	28	.15	.53	.52	.20	.45	.67
109	E=DET. MATH RELATION	22	17	30	.19	.26	.23	.12	.30	.33
110	A=FACTS & NUM. VALUES	52	70	48	.46	.58	.35	.49	.60	.49
111	C=DET. WHAT IS ASKED	79	88	74	.50	.21	.47	.53	.39	.60
112	F=TRANSLATE TO EQUAT	43	68	41	.54	.68	.36	.48	.63	.53
113	B=MATH VOCABULARY	39	51	30	.15	.37	.09	.27	.29	.07
114	F=TRANSLATE TO EQUAT	53	72	39	.46	.47	.34	.38	.57	.47
115	H=LABEL ANSWERS	56	64	41	.62	.05	.41	.48	.13	.60
116	A=FACTS & NUM. VALUES	66	86	72	.54	.21	.29	.56	.35	.33
117	B=MATH VOCABULARY	45	71	44	.65	.63	.52	.54	.70	.73
118	E=DET. MATH RELATION	43	67	44	.35	.53	.22	.39	.49	.27
119	H=LABEL ANSWERS	23	35	26	.04	.47	.13	.04	.33	.13
120	B=MATH VOCABULARY	34	48	37	.35	.21	.13	.37	.26	.13
121	D=INDENT. EX. OR INSUFF.	38	61	44	.38	.58	.38	.36	.53	.40
122	E=DET. MATH RELATION	55	62	44	.42	.42	.50	.37	.50	.57
123	H=LABEL ANSWERS	31	29	30	.46	.37	.26	.41	.33	.40
124	A=FACTS & NUM. VALUES	62	84	57	.52	.32	.53	.52	.39	.67
125	C=DET. WHAT IS ASKED	53	75	48	.46	.53	.37	.37	.52	.47
125	D=IDENT. EX. OR INSUFF.	35	43	43	.35	.63	.10	.32	.50	.20
127	B=MATH VOCABULARY	59	54	46	.50	.68	.43	.46	.56	.53
128	C=DET. WHAT IS ASKED	47	74	43	.62	.58	.57	.55	.58	.73
129	F=TRANSLATE TO EQUAT	24	59	31	.42	.53	.33	.48	.40	.40
130	G=PERFORM COMPUTATION	15	28	22	.12	.00	.09	.04	.04	.13
131	G=PERFORM COMPUTATION	34	61	33	.38	.53	.22	.37	.48	.20
132	G=PERFORM COMPUTATION	29	41	30	.00	.47	.40	.09	.41	.40
133	E=DET. MATH RELATION	23	28	30	.23	.32	.31	.28	.20	.40
134	A=FACTS & NUM. VALUES	49	68	39	.42	.37	.42	.34	.44	.53
135	C=DET. WHAT IS ASKED	46	58	44	.54	.74	.33	.43	.63	.33
136	F=TRANSLATE TO EQUAT	18	19	24	.19	.11	.24	.08	.10	.27
137	C=DET. WHAT IS ASKED	51	75	39	.54	.42	.39	.41	.51	.47
138	F=TRANSLATE TO EQUAT	23	28	19	.27	.32	.01	.20	.27	.07
139	A=FACTS & NUM. VALUES	64	72	56	.50	.68	.52	.45	.70	.57
140	C=DET. WHAT IS ASKED	63	67	46	.31	.42	.49	.34	.48	.60

AIDS Vocabulary Building - Level Five

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX				DISCRIMINATION INDEX				ITEM RELIABILITY INDEX			
	Grade =	5	6	7	8	5	6	7	8	5	6	7	8
	N =	80	85	203	233	80	85	203	233	80	85	203	233
1	E=SYNONYMS	88	91	92	93	.27	.09	.24	.14	.60	.42	.70	.48
2		86	96	94	95	.27	.00	.18	.13	.57	.32	.59	.65
3		83	88	92	94	.41	.30	.25	.11	.57	.54	.56	.29
4	H=HOMOPHONES	74	88	89	91	.36	.35	.22	.24	.43	.71	.45	.60
5		83	91	91	94	.27	.22	.18	.13	.53	.52	.42	.25
6		81	87	91	88	.27	.30	.16	.25	.43	.63	.37	.54
7	F=ANTONYMS	85	87	95	91	.41	.26	.13	.24	.59	.37	.33	.36
8		89	38	92	38	.27	.26	.25	.33	.43	.42	.54	.60
9		85	87	91	90	.41	.30	.27	.29	.61	.48	.46	.38
10	G=HOMOGRAPHS	89	92	95	94	.09	.22	.11	.16	.31	.68	.44	.50
11		81	89	95	92	.45	.22	.15	.22	.65	.51	.67	.65
12		91	94	94	95	.23	.13	.20	.14	.54	.53	.73	.69
13	I=MULTI MEAN	83	95	95	90	.50	.09	.09	.27	.64	.44	.51	.61
14		93	98	96	94	.18	.00	.13	.13	.61	.29	.66	.55
15		84	91	93	94	.36	.13	.18	.13	.62	.33	.47	.59
16	E=SYNONYMS	63	76	81	83	.73	.39	.45	.46	.61	.48	.55	.59
17		90	93	94	94	.27	.17	.18	.17	.71	.58	.66	.73
18		40	53	61	59	.32	.57	.52	.67	.16	.34	.46	.50
19	H=HOMOPHONES	64	78	81	82	.36	.39	.42	.38	.41	.57	.57	.55
20		70	78	80	82	.41	.48	.38	.38	.53	.58	.40	.54
21		85	99	95	97	.32	.13	.09	.05	.59	.10	.40	.29
22	F=ANTONYMS	59	72	36	82	.36	.48	.42	.54	.33	.51	.59	.65
23		74	86	88	36	.55	.22	.36	.44	.54	.43	.63	.63
24		70	86	83	87	.55	.30	.44	.32	.58	.43	.57	.46
25	G=HOMOGRAPHS	63	80	88	38	.50	.30	.36	.30	.35	.43	.52	.32
26		54	72	77	79	.68	.57	.55	.57	.48	.53	.61	.64
27		81	93	95	93	.50	.17	.15	.24	.69	.66	.69	.67
28	I=MULTI MEAN	58	67	76	74	.27	.26	.29	.46	.34	.31	.33	.45
29		85	93	93	91	.36	.17	.22	.29	.61	.63	.62	.71
30		86	88	92	90	.27	.30	.20	.30	.43	.71	.57	.64
31	B=IRREG VERBS	94	93	93	94	.05	.09	.13	.16	.25	.42	.48	.59
32		96	94	96	96	.05	.13	.11	.13	.54	.53	.55	.71
33		76	85	86	91	.36	.17	.25	.19	.40	.21	.39	.37
34	C=IRREG PLUR	76	89	34	91	.36	.22	.31	.24	.57	.44	.36	.57
35		73	79	81	79	.50	.26	.49	.14	.57	.32	.50	.50
36		90	89	90	91	.14	.30	.29	.25	.50	.66	.65	.58
37	D=IRREG COMP	66	81	78	77	.50	.43	.44	.52	.49	.60	.55	.58
38		86	91	95	94	.14	.26	.11	.14	.54	.53	.44	.58
39		81	88	96	94	.27	.26	.05	.11	.38	.57	.30	.27
40	J=CAPITALIZA	51	53	53	61	.23	.48	.45	.48	.21	.38	.29	.32
41		55	72	71	73	.55	.43	.51	.56	.48	.32	.34	.31
42		66	67	67	76	.45	.52	.60	.57	.46	.41	.43	.57

AIDS Structural Analysis - Level Five

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX				DISCRIMINATION INDEX				ITEM RELIABILITY INDEX			
	Grade =	5	6	7	8	5	6	7	8	5	6	7	8
	N =	81	86	202	233	81	86	202	233	81	86	202	233
43	E=PR TNS VER END	93	97	93	94	.14	.04	.15	.17	.31	.47	.44	.59
44		91	84	94	88	.41	.30	.13	.33	.44	.44	.42	.54
45		71	79	87	81	.41	.35	.18	.35	.34	.45	.25	.43
46	H=PREFIXES	81	90	91	91	.41	.26	.16	.22	.61	.57	.45	.56
47		58	78	85	85	.86	.48	.44	.40	.70	.68	.58	.61
48		88	93	95	94	.23	.13	.07	.14	.50	.56	.43	.54
49	I=SUFFIXES	93	87	93	93	.14	.22	.16	.21	.54	.66	.45	.65
50		84	88	92	90	.36	.30	.24	.32	.53	.73	.64	.68
51		83	91	93	91	.36	.22	.18	.27	.61	.76	.58	.62
52	J=CONTRACTIONS	90	94	93	94	.18	.09	.16	.14	.36	.53	.39	.40
53		83	92	93	94	.36	.04	.18	.11	.60	.38	.40	.31
54		88	95	94	93	.27	.04	.20	.19	.50	.42	.60	.64
55	K=COMPOUND WDS	76	86	87	96	.55	.39	.35	.35	.66	.55	.68	.55
56		78	88	87	83	.45	.13	.15	.30	.53	.37	.15	.25
57		79	92	94	95	.50	.22	.16	.13	.68	.68	.37	.41
58	L=SYLLABICATN	54	58	55	52	.05	.17	.31	.48	.15	.21	.27	.29
59		39	50	49	52	.50	.52	.50	.63	.37	.32	.34	.42
60		76	73	78	74	.27	.26	.40	.32	.41	.34	.35	.21
61	H=PREFIXES	64	83	86	90	.77	.48	.33	.27	.71	.57	.55	.62
62		80	90	94	94	.50	.26	.18	.17	.58	.72	.52	.47
63		80	86	90	89	.59	.39	.31	.29	.74	.73	.66	.64
64	I=SUFFIXES	73	71	86	79	.36	.22	.25	.46	.49	.42	.43	.57
65		64	74	84	81	.54	.48	.38	.41	.55	.54	.57	.50
66		53	77	86	81	.68	.57	.31	.40	.53	.61	.46	.42

AIDS Reading Comprehension - Level Five

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX				DISCRIMINATION INDEX				ITEM RELIABILITY INDEX			
	Grade =	5	6	7	8	5	6	7	8	5	6	7	8
	N =	80	85	204	236	80	85	204	236	80	85	204	236
81	O=LIST	78	84	91	85	.55	.39	.22	.39	.54	.49	.43	.51
82	E=COMPARE/CONTRAST	48	53	53	53	.32	.13	.20	.08	.38	.08	.15	.08
83	H=REFERENTS	64	81	87	88	.32	.30	.29	.38	.34	.42	.45	.57
84	B=FACTS PARAPHRA	73	75	82	81	.50	.30	.35	.48	.54	.35	.54	.51
85	F=CAUSE AND EFFECT	76	82	87	85	.18	.30	.33	.45	.30	.47	.54	.55
86	G=PUNCTUATION	43	54	66	54	.36	.35	.47	.50	.33	.34	.39	.41
87	A=FACTS STATED	40	55	54	53	.23	.17	.40	.47	.22	.21	.35	.35
88	C=SEQUENCE	48	71	72	72	.36	.48	.51	.64	.30	.51	.54	.59
89	O=GRAPHICAL CLUES	71	79	77	82	.59	.39	.49	.53	.54	.53	.52	.59
90	K=MOODS	46	54	48	50	.36	.48	.44	.48	.27	.40	.30	.38
91	L=SENSORY IMAGES	88	89	94	89	.32	.17	.16	.33	.51	.43	.53	.53
92	N=INFERENCE/GENER	60	66	72	69	.77	.61	.38	.55	.65	.56	.42	.49
93	I=MAIN IDEA & SUB	41	56	64	65	.41	.13	.27	.44	.33	.27	.25	.42
94	J=CONCLUSION & SUP	35	56	57	60	.77	.61	.47	.69	.66	.57	.42	.59
95	M=FIGURATIVE SPEECH	28	18	12	18	.18	.22	.00	.02	.10	.15	.06	.04
96	P=ORGANIZA PATT	28	28	40	39	.18	.26	.22	.28	.16	.28	.26	.26
97	A=FACTS STATED	76	73	80	80	.23	.30	.36	.25	.34	.30	.41	.40
98	C=SEQUENCE	71	72	82	77	.27	.30	.29	.42	.34	.36	.40	.46
99	O=LIST	65	67	73	68	.36	.30	.35	.25	.37	.31	.36	.26
100	B=FACTS PARA	53	61	76	64	.32	.30	.38	.41	.29	.25	.38	.31
101	I=MAIN IDEA & SUB	54	71	71	68	.23	.43	.42	.48	.24	.45	.45	.43
102	K=MOODS	80	87	86	84	.45	.17	.42	.52	.52	.34	.65	.69
103	M=FIGURATIVE SPEECH	76	75	81	78	.45	.30	.53	.44	.49	.42	.53	.50
104	N=INFERENCE/GEN	31	40	62	50	.18	.30	.33	.42	.25	.15	.22	.31
105	O=GRAPHICAL CLUES	66	75	75	76	.36	.39	.53	.48	.36	.44	.57	.52
106	J=CONCLUSION & SUP	60	74	80	70	.68	.13	.44	.66	.65	.32	.50	.62
107	L=SENSORY IMAGES	66	87	86	84	.50	.26	.38	.42	.47	.43	.58	.60
108	P=ORGANIZA PATT	53	72	78	80	.68	.61	.56	.52	.56	.56	.58	.51
109	Q=DIST FACT, OPIN,	58	67	78	75	.55	.65	.51	.67	.49	.59	.59	.68
110	T=JUDGE AUTHOR PUR	76	87	89	89	.36	.22	.33	.30	.42	.50	.53	.52
111	U=JUDGE AUTHOR CRED	36	52	59	63	.50	.57	.55	.55	.49	.53	.45	.43
112	Q=DIST FACT, OPIN,	51	71	75	74	.59	.30	.50	.70	.55	.44	.57	.55
113	T=JUDGE AUTHOR PUR	63	64	78	77	.68	.57	.45	.45	.59	.43	.46	.47
114	W=FORMULATIONS	36	39	47	52	.32	.39	.62	.70	.32	.34	.43	.48
115	R=IDENT PROPA TECH	63	80	83	93	.59	.35	.44	.20	.57	.48	.48	.31
116	S=EVAL TONE PASSGE	73	84	88	88	.64	.43	.29	.39	.58	.61	.47	.50
117	V=JUDGE VALID OF CO	63	69	80	81	.64	.35	.53	.42	.55	.35	.61	.55
118	X=GEN SOLU, PRE, AP	58	69	80	81	.50	.65	.60	.45	.41	.67	.67	.55
119	S=EVAL TONE PASSGE	70	76	83	81	.59	.48	.51	.58	.53	.55	.62	.68
120	R=IDENT PROPA TECH	48	33	54	53	.36	.26	.55	.44	.31	.20	.39	.38
121	F=CAUSE AND EFFECT	73	80	95	86	.68	.48	.45	.33	.61	.61	.64	.55
122	E=COMPARE AND CONTR	54	69	75	72	.55	.57	.42	.47	.49	.56	.47	.52
123	H=REFERENTS	68	81	84	85	.55	.39	.47	.39	.52	.53	.63	.49
124	G=PUNCTUATION	36	54	44	45	.32	.26	.24	.42	.29	.31	.20	.33
125	J=CONCLU & SUB FAC	29	47	46	46	.41	.13	.35	.45	.37	.22	.31	.39
126	P=ORGANIZA PATT	30	25	20	15	.05	.13	.11	.08	.01	.07	.04	.01
127	I=MAIN IDEAS & SUB	55	51	65	64	.36	.30	.29	.52	.34	.23	.27	.45
128	K=MOODS	50	60	74	64	.27	.13	.49	.53	.20	.17	.50	.48
129	N=INFERENCE/GEN	69	72	82	75	.45	.52	.51	.66	.49	.53	.61	.68
130	L=SENSORY IMAGES	53	66	70	69	.45	.30	.56	.48	.41	.31	.50	.44
131	M=FIGURATIVE SPEECH	66	81	83	81	.68	.43	.51	.50	.66	.59	.65	.61
132	O=GRAPHICAL CLUES	59	53	70	68	.50	.22	.18	.25	.41	.27	.21	.29
133	Q=DIST FACT, OPIN,	50	67	68	72	.50	.57	.53	.66	.48	.49	.41	.54
134	T=JUDGE AUTHOR PUR	43	58	57	61	.45	.65	.58	.72	.45	.54	.50	.61
135	X=GEN SOLU, PRE, AP	38	41	49	53	.23	.39	.49	.64	.24	.31	.41	.49
136	V=JUDGE VALID OF CO	40	36	39	54	.00	.43	.22	.53	.11	.31	.15	.41
137	W=FORMULATIONS	33	36	46	54	.36	.52	.40	.67	.25	.39	.27	.52
138	X=GEN SOLU, PRE, AP	31	36	46	36	.14	.35	.33	.64	.00	.27	.26	.46
139	S=EVAL TONE PASS	36	44	51	47	.09	.35	.40	.47	.07	.28	.35	.40
140	U=JUDGE AUTHOR CRED	33	48	56	56	.41	.57	.53	.59	.34	.46	.39	.48
141	W=FORMULATIONS	38	59	58	56	.50	.52	.65	.56	.35	.44	.54	.51
142	R=IDENT PROPA TECH	30	55	57	56	.27	.43	.75	.67	.31	.42	.65	.53
143	U=JUDGE AUTHOR CRED	46	54	59	56	.36	.48	.60	.55	.29	.41	.44	.41
144	V=JUDGE VALID OF CO	58	61	65	56	.41	.48	.65	.58	.34	.50	.47	.46

AIDS Math Computation - Level Five

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX				DISCRIMINATION INDEX				ITEM RELIABILITY INDEX			
	Grade = 5	5	5	7	8	5	6	7	8	5	6	7	8
	N =	79	89	205	233	79	89	205	233	79	89	205	233
1	S=DIVIDE FRACTIONS	61	79	83	82	.29	.33	.31	.44	.32	.35	.33	.49
2		18	36	63	67	.05	.42	.58	.63	.07	.38	.51	.51
3		10	38	66	71	.05	.38	.53	.70	.03	.34	.48	.60
4	C=ADD INTEGERS	49	48	63	67	.52	.04	.44	.40	.42	.01	.38	.36
5		32	31	57	49	.33	.21	.56	.76	.21	.25	.46	.62
6		44	52	63	65	.38	.08	.47	.46	.32	.01	.41	.38
7	D=ADD FRACTIONS	32	44	62	67	.52	.67	.75	.71	.48	.51	.60	.64
8		49	60	72	79	.62	.46	.62	.54	.51	.35	.54	.58
9		34	51	67	70	.29	.42	.51	.54	.36	.32	.40	.52
10	Q=DIV WH NUM W/REM	43	54	71	54	.38	.57	.49	.51	.38	.46	.41	.47
11		32	40	61	49	.43	.54	.40	.49	.39	.46	.36	.41
12		39	46	70	62	.33	.54	.55	.60	.38	.47	.47	.50
13	H=SUBTRACT INTEG	13	16	35	36	.14	.00	.45	.63	.16	.03	.38	.53
14		14	8	33	37	.24	.04	.47	.67	.37	.01	.42	.53
15		13	12	39	36	.00	.08	.44	.63	.01	.05	.39	.50
16	I=SUBTRACT FRACT	19	52	62	68	.24	.46	.58	.60	.44	.33	.50	.57
17		23	27	49	55	.24	.33	.53	.54	.35	.35	.42	.43
18		20	33	48	56	.10	.29	.69	.67	.21	.22	.52	.53
19	J=SUBTRACT DECI	48	53	59	81	.33	.53	.65	.41	.41	.51	.54	.45
20		57	57	79	86	.57	.50	.58	.29	.50	.45	.55	.39
21		48	55	73	73	.52	.57	.62	.67	.50	.57	.56	.59
22	N=MULT FRACTIONS	18	54	72	76	.10	.46	.53	.49	.03	.44	.48	.48
23		14	31	49	56	.00	.33	.58	.62	.06	.33	.45	.51
24		15	27	36	45	.00	.25	.69	.73	.08	.34	.54	.55
25	M=MULT INTEGERS	33	28	45	60	.52	.21	.64	.67	.45	.21	.55	.56
26		23	26	48	57	.38	.29	.64	.71	.43	.32	.55	.61
27		38	37	49	63	.33	.25	.73	.65	.40	.28	.57	.55
28	C=ADD INTEGERS	19	27	53	51	.24	.21	.64	.79	.34	.24	.53	.53
29		13	19	46	50	.14	.25	.75	.75	.09	.31	.59	.60
30		32	19	51	47	.33	.13	.65	.75	.36	.31	.55	.50
31	D=ADD FRACTIONS	24	49	67	70	.57	.54	.52	.65	.54	.50	.53	.61
32		18	39	56	59	.24	.54	.75	.75	.36	.52	.58	.59
33		34	47	67	75	.43	.58	.71	.67	.45	.44	.58	.62
34	R=DIVIDE INTEG	32	25	42	51	.24	.13	.44	.65	.32	.17	.45	.54
35		25	22	39	45	.29	.17	.58	.81	.33	.27	.53	.61
36		34	34	37	52	.00	.38	.58	.70	.12	.37	.49	.55
37	J=SUBTRACT DECI	44	52	72	76	.57	.63	.55	.59	.47	.52	.51	.58
38		24	42	61	66	.33	.50	.69	.65	.40	.51	.56	.52
39		44	40	65	77	.67	.50	.55	.62	.47	.51	.52	.59
40	T=DIV DECIMALS	32	40	49	56	.29	.29	.47	.49	.17	.32	.40	.41
41		20	30	40	48	.00	.29	.60	.54	.10	.35	.49	.45
42		24	36	48	56	.24	.33	.67	.57	.33	.39	.54	.45
43	S=ADD DECIMALS	43	38	54	67	.24	.46	.73	.76	.30	.49	.56	.61
44		44	46	63	77	.57	.67	.55	.59	.43	.51	.56	.56
45		46	42	60	76	.43	.54	.56	.50	.40	.56	.51	.58
46	M=MULT INTEGERS	32	29	40	56	.43	.54	.75	.60	.39	.41	.63	.53
47		23	29	45	58	.38	.42	.71	.81	.45	.38	.53	.65
48		33	29	45	55	.29	.25	.65	.71	.46	.31	.60	.60
49	S=DIVIDE FRAC	24	31	46	60	.10	.50	.75	.75	.00	.47	.63	.52
50		16	35	51	63	.05	.67	.69	.75	.11	.55	.61	.61
51		13	21	34	48	.19	.21	.73	.76	.20	.36	.63	.61
52	R=DIVIDE INTEG	32	28	44	54	.33	.21	.62	.71	.39	.30	.55	.56
53		25	36	40	53	.29	.29	.62	.70	.33	.26	.51	.52
54		28	20	36	45	.19	.17	.45	.68	.29	.20	.43	.54

174

ITEM NUMBER	OBJECTIVE	DIFFICULTY INDEX				DISCRIMINATION INDEX				ITEM RELIABILITY INDEX			
	Grade =	5	6	7	8	5	6	7	8	5	6	7	8
	N =	79	86	205	236	79	86	205	236	79	86	205	236
81	A=NOTE EX. FACT NUM Y	77	80	80	37	.24	.13	.27	.23	.28	.21	.33	.43
82	C=DETERMINE WHAT ASK	72	78	83	75	.19	.22	.27	.47	.23	.26	.36	.48
83	E=DETERMINE MATH REL.	11	26	43	44	.14	.04	.38	.50	.17	.13	.29	.36
84	A=NOTE EX FACT NUM Y	62	63	77	75	.52	.52	.27	.48	.46	.43	.30	.50
85	C=DETERMINE WHAT ASK	61	67	70	74	.67	.48	.47	.53	.56	.46	.47	.57
86	D=IDENT EX OR INSUFF	56	59	71	68	.48	.61	.47	.50	.40	.54	.40	.46
87	D=IDENT EX OR INSUFF	32	47	49	40	.29	.35	.49	.47	.26	.35	.35	.34
88	E=DETERMINE MATH REL	35	45	51	35	.05	.00	.36	.44	.10	.01	.35	.36
89	A=NOTE EX FACT NUM Y	78	96	95	88	.57	.26	.13	.28	.50	.33	.38	.51
90	D=INDENT EX OR INSUFF	58	67	79	72	.67	.48	.31	.47	.57	.45	.32	.49
91	F=TRANS TO MATH EQUA	42	45	49	45	.10	.09	.13	.06	.08	.01	.01	.06
92	G=PERFORM COMPUTAT	33	40	31	44	.14	.09	.09	.16	.12	.15	.09	.14
93	G=PERFORM COMPUTAT	20	24	32	36	.10	.30	.20	.38	.03	.21	.14	.28
94	G=PERFORM COMPUTAT	37	24	32	21	.10	.04	.05	.13	.14	.03	.02	.09
95	B=KNOW MATH VOCAB	46	53	51	53	.57	.22	.53	.66	.49	.28	.37	.54
96	F=TRANS TO MATH EQUA	9	22	15	31	.10	.13	.02	.34	.15	.16	.02	.27
97	H=LABEL ANSWERS	39	36	37	42	.19	.43	.33	.53	.28	.30	.28	.40
98	A=NOTE EX FACT NUM Y	67	62	87	82	.67	.43	.33	.41	.54	.45	.45	.53
99	C=DETERMINE WHAT ASK	73	62	80	74	.24	.70	.44	.52	.30	.57	.47	.53
100	E=DETERMINE MATH REL	52	53	60	68	.48	.35	.51	.70	.41	.38	.42	.63
101	H=LABEL ANSWERS	37	27	38	42	.19	.17	.40	.41	.27	.19	.29	.31
102	B=KNOW MATH VOCAB	57	57	71	68	.38	.39	.56	.63	.35	.36	.47	.52
103	F=TRANS TO MATH EQUA	20	8	12	22	.24	.17	.02	.38	.09	.28	.04	.34
104	H=LABEL ANSWERS	22	31	33	38	.29	.09	.49	.48	.29	.19	.33	.37
105	A=NOTE EX FACT NUM Y	80	78	89	87	.24	.33	.16	.30	.31	.40	.30	.48
106	B=KNOW MATH VOCAB	18	50	76	70	.05	.39	.42	.42	.19	.37	.41	.42
107	D=IDENT EX OR INSUFF	53	55	78	72	.67	.70	.29	.61	.51	.53	.37	.55
108	A=NOTE EX FACT NUM Y	75	83	95	85	.43	.30	.13	.39	.41	.46	.35	.55
109	C=DETERMINE WHAT ASK	75	79	91	80	.52	.48	.24	.48	.49	.55	.45	.55
110	D=IDENT EX OR INSUFF	47	58	74	65	.67	.70	.49	.77	.46	.61	.48	.64
111	E=DETERMINE MATH REL	37	29	52	43	.76	.09	.04	.17	.62	.14	.11	.21
112	A=NOTE EX FACT NUM Y	59	63	78	71	.57	.65	.42	.39	.48	.60	.41	.37
113	C-DETERMINE WHAT ASK	57	59	74	71	.43	.57	.31	.44	.35	.47	.27	.47
114	F=TRANS TO MATH EQUA	56	67	83	70	.48	.39	.38	.63	.46	.48	.50	.60
115	C=DETERMINE WHAT ASK	67	72	88	84	.67	.57	.33	.44	.60	.53	.47	.56
116	D=IDENT EX OR INSUFF	34	47	51	51	.05	.39	.55	.63	.20	.29	.47	.51
117	E=DETERMINE MATH REL	19	34	27	42	.00	.13	.25	.45	.02	.18	.18	.38
118	G=PERFORM COMPUTAT	28	35	39	41	.19	.39	.36	.56	.19	.29	.32	.44
119	G=PERFORM COMPUTAT	22	14	14	22	.24	.09	.05	.17	.15	.12	.07	.21
120	G=PERFORM COMPUTAT	14	30	24	29	.05	.04	.04	.36	.09	.13	.09	.31
121	A=NOTE EX FACT NUM Y	51	43	45	50	.24	.25	.18	.08	.26	.23	.16	.10
122	C=DETERMINE WHAT ASK	75	73	86	34	.33	.57	.45	.45	.38	.55	.59	.56
123	F=TRANS TO MATH EQUA	18	36	44	34	.05	.39	.29	.34	.16	.31	.25	.28
124	A=NOTE EX FACT NUM Y	53	56	32	75	.71	.57	.31	.47	.53	.51	.40	.50
125	B=KNOW MATH VOCAB	37	45	63	59	.43	.55	.55	.56	.40	.50	.46	.49
126	F=TRANS TO MATH EQUA	11	23	24	29	.24	.22	.22	.29	.24	.23	.17	.23
127	B=KNOW MATH VOCAB	41	45	65	60	.52	.39	.50	.31	.42	.37	.47	.64
128	C=DETERMINE WHAT ASK	49	53	78	69	.29	.70	.45	.66	.29	.61	.46	.58
129	F=TRANS TO MATH EQUA	4	16	22	30	.14	.09	.36	.53	.15	.04	.31	.51
130	B=KNOW MATH VOCAB	54	52	71	71	.52	.13	.65	.61	.44	.41	.55	.58
131	D=IDENT EX OR INSUFF	56	58	76	75	.62	.61	.58	.59	.48	.56	.53	.61
132	E=DETERMINE MATH REL	49	47	58	69	.38	.43	.67	.51	.33	.41	.56	.54
133	A=NOTE EX FACT NUM Y	46	56	75	68	.57	.61	.55	.47	.39	.56	.47	.44
134	C=DETERMINE WHAT ASK	62	54	80	76	.38	.65	.49	.55	.36	.59	.47	.56
135	D=IDENT EX OR INSUFF	38	41	67	64	.29	.74	.64	.58	.24	.65	.54	.49
136	A=NOTE EX FACT NUM Y	57	74	85	87	.71	.57	.40	.33	.57	.53	.50	.49
137	C=DETERMINE WHAT ASK	54	58	75	75	.62	.65	.53	.55	.55	.56	.54	.53
138	E=DETERMINE MATH REL	13	26	31	31	.05	.22	.55	.34	.13	.20	.46	.33
139	D=IDENT EX OR INSUFF	33	29	49	60	.29	.43	.33	.50	.25	.38	.30	.39
140	E=DETERMINE MATH REL	41	47	61	72	.24	.52	.56	.53	.25	.44	.45	.50

APPENDIX D

Reliability Indices by Subtest and Objective

Table D-1

Level One Skill Area and Objective Kuder-Richardson 20 and 21 Reliability
Coefficients, Standard Errors of Measurement, and Related Data.

Skill Area	Number of Items	Grade One n=202			Grade Two n=103			Grade Three n=86		
		$K\text{-}R_{20}$	$K\text{-}R_{21}$	SE_m	$K\text{-}R_{20}$	$K\text{-}R_{21}$	SE_m	$K\text{-}R_{20}$	$K\text{-}R_{21}$	SE_m
Phonetic Analysis	40	.90		2.3	.92		2.1	.93		2.1
Single Initial Consonant	8		.86	.7		.92	.5		.96	.6
Single Plural Consonant	6		.72	.7		.89	.4		.89	.4
Single Medial Consonant	9		.59	1.3		.65	1.2		.62	1.2
Initial Consonant Digraphs	3		.49	.7		.47	.7		.50	.6
Final Consonant Digraphs	3		.47	.7		.70	.5		.47	.6
Initial Double Consonant Blends	8		.90	.8		.91	.8		.94	.7
Final Double Consonant Blends	3		.51	.7		.67	.5		.54	.5
Structural Analysis	17	.71		1.7	.77		1.6	.80		1.6
Plural Noun Inflectional Endings	5		.02	1.0		1.6	1.1		.40	1.0
Possessive Noun Inflectional Endings	2		.03	.5		.18	.4		.70	.4
Third Person Singular	3		.41	.8		.63	.7		.55	.7
Past Tense Verbs	4		.50	.9		.56	.8		.62	.7
Present Tense Verbs	3		.65	.7		.72	.5		.65	.5
Vocabulary Building	28	.91		2.0	.94		1.8	.91		1.5
Basic Sight Words	16		.85	1.5		.92	1.2		.72	1.3
Synonyms	12		.84	1.4		.85	1.3		.90	1.1
Math Computation	45	.92		2.5	.95		2.4	.93		2.2
Adding Whole Numbers Without Regrouping	20		.83	2.0		.92	1.5		.82	1.3
Adding Whole Numbers With Regrouping	15		.83	1.5		.85	1.6		.88	1.5
Subtracting Whole Numbers Without Regrouping	10		.69	1.4		.91	.9		.89	.9

177

Table D-2

Level Two Skill Area and Objective Kuder-Richardson 20 and 21 Reliability
Coefficients, Standard Errors of Measurement, and Related Data

Skill Area	Number of Items	Grade Two n=81 K-R$_{20}$	K-R$_{21}$	SE$_m$	Grade Three n=102 K-R$_{20}$	K-R$_{21}$	SE$_m$	Grade Four n=87 K-R$_{20}$	K-R$_{21}$	SE$_m$
Phonetic Analysis	43	.94		2.5	.09		2.0	.89		1.9
Final Double Consonant Blends	6		.64	1.0		.44	.7		.30	.9
Initial Triple Consonant Blends	3		.73	.6		.38	.6		.72	.5
Initial Silent Consonant Blends	3		.63	.6		.67	.4		.66	.4
Final Silent Consonant	3		.24	.8		.48	.7		.23	.0
Long Vowel Sounds	3		.65	.6		.69	.3		.26	.4
Short Vowel Sounds	3		.75	.6		.74	.3		.62	.3
Y as a Vowel	3		.52	.7		.39	.6		.49	.4
Diphthongs	3		.18	.8		a			a	
Silent Vowels	3		.79	.6		.47	.5		.43	.5
Irregular Vowels	4		.79	.7		.52	.5		.41	.5
Consonant-Controlled Vowels	3		.60	.5		.59	.4		.47	.3
Schwa Sounds	3		.41	.7		.63	.4		.55	.4
Rhyming Words	3		.42	.7		.09	.6		.49	.5
Structural Analysis	19	.91		1.4	.87		1.0	.71		.9
Comparative Adverb and Adjective Inflectional Endings	3		.62	.6		.56	.5		.27	.3
Superlative Adverb and Adjective Inflectional Endings	4		.73	.7		.72	.5		.00	.3
Contractions	12		.80	1.0		.66	.7		.50	.7
Vocabulary Building	31	.90		1.8	.05		1.3	.73		1.1
Antonyms	12		.88	.9		.79	.6		.21	.6
Homographs	3		.32	.7		.46	.5		.47	.3
Homophones	12		.73	1.2		.54	.8		.60	.6
Multiple Meanings	4		.19	1.0		.38	.8		.57	.6
Math Computation	45	.85		2.2	.88		2.1	.89		2.3
Subtract Whole Numbers Without Regrouping	5		.72	.7		.70	.5		.60	.5
Subtract Whole Numbers With Regrouping	10		.65	1.2		.01	1.1		.00	1.1
Multiply Whole Numbers Without Carrying	15		.81	1.4		.23	1.9		.65	1.3
Divide Whole Numbers Without Remainder	15		.75	1.0		.48	1.6		.73	1.6

a The K-R 21 formula calls for items of equal difficulty. When the assumption is not met, uninterpretable correlation coefficients will occur.

178

Table D-3

Level Three Skill Area and Objective Kuder-Richardson 20 and 21 Reliability
Coefficients, Standard Errors of Measurement, and Related Data

Skill Area	Number of Items	Three n=79			Four n=73		
		K-R 20	K-R 21	SE m	K-R 20	K-R 21	SE m
Phonetic Analysis	42	.91		2.2	.87		1.9
Single Initial Consonants	6		.92	.5		.96	.4
Initial Consonant Digraphs	3		.73	.5		.68	.5
Initial Double Consonant Blends	3		.00	.5		.94	.3
Initial Triple Consonant Blends	3		.65	.7		.79	.4
Single Final Consonants	6		.75	.3		a	
Final Consonant Digraphs	3		.54	.4		a	
Final Double Consonant Blends	3		.66	.9		a	
Single Medial Consonants	6		.50	.5		.48	1.0
Long Vowel Sounds	3		.43	.6		.04	.4
Short Vowel Sounds	3		.52	.6		.66	.4
Y as a Vowel	3		.60	.6		.53	.6
Vocabulary Building	24	.91		1.3	.75		1.1
Basic Sight Words	9		.85	.6		.42	.4
Synonyms	3		.58	.5		.70	.4
Homophones	3		.65	.3		.08	.2
Antonyms	3		.67	.4		.82	.2
Homographs	3		.56	.5		.22	.5
Multiple Meanings	3		.71	.5		.59	.4
Reading Comprehension	64	.95		3.2	.92		3.0
Facts Stated	3		.56	.5		.23	.5
Facts Paraphrased	3		.07	.8		a	
Sequence	3		.50	.7		.08	.8
List	3		.51	.7		.61	.5
Compare and Contrast	3		.46	.7		.12	.7
Cause and Effect	3		.71	.6		.70	.4
Punctuation	3		.56	.7		.52	.6
Referents	3		.48	.7		a	
Main Ideas and Subordinate Details	3		.16	.8		.20	.8
Conclusions and Supporting Facts	3		.45	.7		.40	.6
Moods	3		.59	.6		.60	.5
Sensory Images	3		.11	.8		.28	.8

a   The K-R 21 formula calls for items of equal difficulty.   When the assumption is not met, uninterpretable correlation coefficients will occur.

Table D-4

Level Three Skill Area and Objective Kuder-Richardson 20 and 21 Reliability
Coefficients, Standard Errors of Measurement, and Related Data

		Grade					
Skill Area	Number	Three			Four		
	of Items	$K-R_{20}$	$K-R_{21}$	SE_m	$K-R_{20}$	$K-R_{21}$	SE_m
Figurative Speech	3		.41	.8		.15	.8
Inferences and Generalizations	3		.51	.7		.37	.6
Graphical Clues	3		.30	.8		.08	.7
Organizational Patterns	3		a			a	
Distinguish Fact, Opinion, Fiction and Non-Fiction	2		.34	.6		.17	.5
Identify Propaganda Techniques	2		a			.30	.6
Evaluate Tone of Passage	2		.36	.5		.01	.6
Judge Author's Purpose	2		.08	.7		a	
Judge Author's Credibility	2		.34	.6		a	
Judge Validity of Conclusions	2		.24	.7		.10	.7
Formulations (Conclusions, Generalizations and Unstated Assumptions)	2		.27	.6		.06	.6
Generate Solutions, Predict Outcomes, Apply ideas to New Situations	2		.32	.6		.20	.6
Math Computation	53	.93		2.7	.95		2.2
Add Whole Numbers Without Regrouping	15		.82	1.3		.58	.9
Add Whole Numbers With Regrouping	6		.66	1.1		.70	.9
Subtract Whole Numbers Without Regrouping	15		.88	1.4		.67	1.0
Subtract Whole Numbers With Regrouping	6		.73	1.0		.78	.9
Multiply Whole Numbers Without Carrying	6		.18	1.3		.65	.9
Multiply Whole Numbers With Carrying	2		.27	.5		.44	.6
Divide Whole Numbers Without Remainder	3		.02	.7		.54	.7
Math Application	60	.96		3.0	.96		2.9
Exact Facts and Numerical Values	12		.83	1.4		.79	1.3
Determine What Is Asked	12		.85	1.4		.83	1.3
Identify Extra or Insufficient Information	9		.76	1.3		.78	.9
Determine Math Relationships	9		.78	1.3		.67	1.2
Translate to Math Equation	9		.57	1.4		.64	1.3
Perform Computations	9		.74	1.2		.51	.9

a The K-R 21 formula calls for items of equal-difficulty. When the assumption is not met, uninterpretable correlation coefficients will occur.

Table B-5

Level Four Skill Area and Objective Kuder-Richardson 20 and 21 Reliability
Coefficients, Standard Errors of Measurement, and Related Data

Skill Area	Number of Items	Grade Five n=99			Grade Six n=77			Grade Seven n=55		
		$K-R_{20}$	$K-R_{21}$	SE_m	$K-R_{20}$	$K-R_{21}$	SE_m	$K-R_{20}$	$K-R_{21}$	SE_m
Phonetic Analysis	24	.87		1.6	.91		1.4	.92		1.8
Initial Silent Consonant	3		.74	.5		.60	.4		.69	.4
Final Silent Consonant	3		.68	.6		.40	.6		.52	.5
Diphthongs	3		a			.55	.6		.45	.7
Silent Vowels	3		.62	.5		.71	.4		.62	.6
Irregular Verb	3		.56	.5		.68	.5		.40	.7
Consonant-Controlled Vowel	3		.45	.5		.57	.5		.76	.6
Schwa Sounds	3		.54	.7		.42	.7		.44	.8
Rhyming Words	3		.65	.4		.65	.5		.87	.4
Vocabulary Building	12	.74		1.1	.58		1.2	.84		1.3
Irregular Verbs	3		.12	.5		a			.62	.6
Irregular Plural Nouns	3		.55	.5		.53	.5		.60	.7
Irregular Comparisons	3		.24	.6		.04	.6		.45	.7
Capitalization	3		.45	.7		.52	.7		.15	.8
Structural Analysis	30	.90		1.9	.91		1.6	.89		2.1
Plurals	6		.50	.9		.39	.8		.45	.3
Possessives	3		.47	.8		.31	.8		.28	.8
Third Person Singular	6		.75	.7		.81	.7		.71	.9
Past Tense	6		.73	.8		.67	.7		.65	.9
Present Participle	3		.38	.7		.55	.5		.59	.6
Comparatives	3		.71	.5		.43	.3		a	
Superlatives	3		.71	.5		.66	.4		.55	.6
Reading Comprehension	64	.93		3.3	.94		3.0	.96		3.2
Facts Stated	3		.43	.5		.53	.4		.67	.5
Facts Paraphrased	3		.45	.7		.60	.4		.69	.6
Sequence	3		.36	.7		.25	.7		.64	.6
List	3		.30	.6		.41	.5		.48	.7
Compare and Contrast	3		.29	.7		.10	.7		.12	.8
Cause and Effect	3		.21	.7		.51	.5		.66	.6
Punctuation	3		.55	.6		.44	.5		.73	.6
Referents	3		.26	.8		.41	.7		.46	.7

181

Level Four Skill Area and Objective Kuder-Richardson 20 and 21 Reliability
Coefficients, Standard Errors of Measurement, and Related Data

Skill Area	Number of Items	Grade Five n=99			Grade Six n=77			Grade Seven n=55		
		$K\text{-}R_{20}$	$K\text{-}R_{21}$	SE_m	$K\text{-}R_{20}$	$K\text{-}R_{21}$	SE_m	$K\text{-}R_{20}$	$K\text{-}R_{21}$	SE_m
Main Ideas and Subordinate Details	2		.59	.5		a			.55	.6
Conclusions and Supporting Facts	2		.24	.6		.51	.5		.46	.6
Moods	2		.11	.6		.29	.5		.00	.7
Sensory Images	2		.15	.5		.30	.3		.68	.4
Figurative Speech	2		.42	.6		.22	.5		.64	.5
Inferences and Generalizations	2		.12	.7		a			.03	.7
Graphical Clues	2		a			a			a	
Organizational Patterns	2		a			a			a	
Distinguish Fact and Opinion	3		.07	.0		.41	.7		.53	.7
Identify Propaganda Techniques	3		.50	.7		.24	.8		.19	.8
Evaluate Tone of Passage	3		a			.39	.7		.29	.8
Judge Author's Purpose	3		.45	.8		.46	.7		.39	.8
Judge Author's Credibility	3		.44	.8		.63	.7		.25	.0
Judge Validity of Conclusions	3		.35	.8		.49	.7		.14	.8
Formulations (Conclusions)	3		.46	.7		a			.30	.0
Generate Solutions, Predict Outcomes	3		.27	.8		.40	.7		.46	.8
Math Computation	54	.82		3.1	.95		2.7	.92		3.1
Add Whole Numbers With Regrouping	3		.57	.6		.52	.5		.04	.5
Add Fractions	3		.62	.7		.69	.7		.57	.7
Add Decimals	6		.22	1.2		.65	1.0		.69	1.0
Subtract Whole Numbers With Regrouping	3		.60	.6		.39	.6		.62	.6
Subtract Integers	3		.02	.7		a			.43	.6
Subtract Fractions	6		.58	1.1		.78	.9		.51	1.1
Subtract Decimals	3		.79	.4		.52	.4		.80	.5
Multiply Whole Numbers With Carrying	3		.27	.8		.63	.7		.56	.7
Multiply Fractions	3		.01	.8		.72	.6		.46	.8
Multiply Decimals	6		.42	1.0		.83	.9		.53	1.0
Divide Whole Numbers Without Remainder	3		.53	.7		.72	.6		.67	.7
Divide Whole Numbers With Remainder	3		.44	.7		.70	.5		.77	.6
Divide Fractions	3		a			.70	.6		.45	.6
Divide Decimals	6		a			.73	1.0		.43	1.0
Math Application	60	.90		3.4	.93		3.1	.94		3.2
Facts and Numerical Values	9		.73	1.3		.78	1.1		.79	1.2
Math Vocabulary	7		.51	1.2		.63	1.2		.59	1.2
Determine What Is Asked	11		.71	1.5		.78	1.2		.81	1.4
Identify Extra or Insufficient Information	6		.54	1.1		.58	1.1		.54	1.1
Determine Math Relationships	7		.39	1.3		.42	1.2		.43	1.2
Translate to Math Equations	8		.30	1.3		.41	1.4		.54	1.2
Perform Computations	9		.24	1.4		.47	1.4		.60	1.6
Label Answers	3		.30	.8		a			a	

Table 0-6

Level Five Skill Area and Objective Kuder-Richardson 20 and 21 Reliability Coefficients, Standard Errors of Measurement, and Related Data

Skill Area	Number of Items	Grade Five (n=80) K-R$_{20}$	K-R$_{21}$	SE$_m$	Grade Six (n=89) K-R$_{20}$	K-R$_{21}$	SE$_m$	Grade Seven (n=206) K-R$_{20}$	K-R$_{21}$	SE$_m$	Grade Eight (n=239) K-R$_{20}$	K-R$_{21}$	SE$_m$
Figurative Speech	3		.18	.8		a			a			a	
Organizational Patterns	3		a			a			a			a	
Distinguish Fact, Opinion, Fiction, and Non-Fiction	3		.45	.8		.67	.6		.51	.7		.66	.6
Judge Author's Credibility	3		.38	.8		.59	.7		.53	.7		.47	.7
Judge Author's Purpose	3		.59	.7		.35	.7		.39	.7		.38	.7
Formulations	3		.34	.8		.39	.8		.35	.8		.60	.7
Identify Propaganda Techniques	3		.28	.8		a			.47	.7		.17	.8
Evaluate Tone of Passage	3		.1f	.8		.13	.8		.30	.7		.36	.7
Judge Validity of Conclusions	3		.17	.8		.13	.0		.06	.8		.39	.7
Generate Solutions, Predict Outcomes, Apply Ideas to New Solutions	3		a			.12	.8		.12	.8		.23	.8
Math Computation	54	.83		3.1	.87		3.2	.95		3.0	.95		3.1
Divide Fractions	6		a			.55	1.1		.75	1.0		.81	.9
Add Integers	6		.48	1.1		.59	1.0		.77	1.0		.85	.9
Add Fractions	6		.58	1.0		.66	.6		.80	.9		.84	.8
Divide Whole Numbers With Remainder	3		.58	.7		.55	.4		.61	.7		.57	.7
Subtract Integers	3		a			.20	.9		.73	.6		.79	.6
Subtract Fractions	3		.39	.6		.49	1.4		.64	.7		.61	.7
Subtract Decimals	6		.75	1.0		.71	1.0		.81	.9		.78	.8
Multiply Fractions	3		.32	.6		.23	.8		.59	.7		.56	.7
Multiply Integers	6		.72	.9		.60	1.0		.84	.9		.05	.9
Divide Integers	6		.39	1.1		.40	1.0		.73	1.0		.83	.9
Divide Decimals	3		.11	.7		.22	.8		.58	.7		.48	.7
Add Decimals	3		.65	.7		.69	.6		.82	.5		.83	.5
Math Application	60	.84		3.3	.88		3.4	.89		3.2	.92		3.3
Note Exact Facts and Numerical Values	11		.76	1.4		.69	1.4		.62	1.2		.72	1.2
Know Math Vocabulary	6		.47	1.1		.53	1.1		.68	1.0		.73	1.0
Determine What Is Asked	10		.71	1.4		.78	1.3		.74	1.1		.84	1.1
Identify Extra or Insufficient Information	9		.54	1.4		.72	1.3		.62	1.3		.70	1.3
Determine Math Relationships	8		.34	1.3		.23	1.3		.49	1.3		.53	1.3
Translate to Math Equation	7		a			a			a			.42	1.2
Perform Computations	6		a			.08	1.1		.07	1.1		.28	1.1
Label Answers	3		.45	.7		.13	.8		.40	.0		.47	.7

[a] The K-R$_{21}$ formula calls for items of relatively equal difficulty. When the assumption is not met, uninterpretable correlation coefficients will occur and are thus not reported.

Level Five Skill Area and Objective Kuder-Richardson 20 and 21 Reliability
Coefficients, Standard Errors of Measurement, and Related Data

Skill Area	Number of Items	Five n=80			Six n=89			Seven n=206			Eight n=239		
		$K\text{-}R_{20}$	$K\text{-}R_{21}$	SE_m	$K\text{-}R_{20}$	$K\text{-}R_{21}$	SE_m	$K\text{-}R_{20}$	$K\text{-}R_{21}$	SE_m	$K\text{-}R_{20}$	$K\text{-}R_{21}$	SE_m
Vocabulary Building	42	.92		2.3	.91		2.0	.92		1.0	.93		1.0
Synonyms	6		.63	.9		.48	.9		.69	.7		.61	.7
Homophones	6		.66	.9		.60	.7		.63	.7		.69	.7
Antonyms	6		.75	.8		.79	.7		.02	.6		.06	.6
Homographs	6		.59	.9		.65	.7		.14	.6		.10	.6
Meaning Meanings	6		.68	.8		.63	.7		.69	.6		.74	.6
Irregular Verbs	3		.10	.5		.39	.5		.53	.4		.53	.4
Irregular Plural Nouns	3		.54	.6		.31	.6		.58	.5		.60	.5
Irregular Comparisons	3		.35	.7		.55	.5		.10	.5		.34	.5
Capitalization	3		.50	.7		.52	.7		.53	.7		.56	.7
Structural Analysis	24	.88		1.7	.87		1.6	.82		1.4	.05		1.5
Present Tense Verb Endings	3		.37	.6		.56	.5		.19	.5		.47	.5
Prefixes	6		.70	.8		.79	.7		.73	.6		.74	.6
Suffixes	6		.63	.9		.71	.0		.65	.7		.71	.3
Contractions	3		.65	.4		.50	.4		.60	.4		.50	.3
Compound Words	3		.75	.5		.56	.5		.41	.5		.41	.5
Syllabication	3		.65	.8		a			.14	.8		.13	.8
Reading Comprehension	64	.91		3.5	.91		3.4	.93		3.1	.94		3.2
List	2		.35	.6		.22	.6		.08	.5		.25	.6
Compare and Contrast	2		.35	.6		a			.11	.7		a	
Referents	2		.40	.6		.46	.5		.31	.5		.20	.4
Facts Paraphrased	2		.26	.6		.14	.6		.21	.5		.10	.6
Cause and Effect	2		.21	.6		.36	.5		.49	.4		.40	.4
Punctuation	2		.06	.7		.10	.7		a			.16	.7
Facts Stated	2		a			.00	.7		.10	.6		a	
Sequence	2		a			.19	.6		.41	.5		.31	.5
Graphical Clues	3		.47	.7		.33	.7		.46	.7		.37	.7
Moods	3		.10	.8		a			.38	.7		.33	.8
Sensory Images	3		.49	.7		.32	.6		.51	.6		.40	.6
Inferences and Generalizations	3		.31	.0		.20	.0		.28	.8		.39	.7
Main Ideas and Subordinate Details	3		.00	.9		.03	.8		.13	.0		.40	.7
Conclusions and Supporting Facts	3		.47	.7		.41	.0		.31	.8		.50	.7