June 2008

DEPARTMENT OF EDUCATION
2007–2008 School Year Reports

Dear School Board Members and School Personnel:

The Maine Educational Assessment (MEA) is the State's measure of student progress in achieving the State standards known as *Learning Results,* adopted by the Maine Legislature in 1997. These *Learning Results* established goals for what all students should know and be able to do at certain times in their school careers and are the basis for Grade Level/Span Expectations, which describe the assessment standards for each grade. The MEA is administered to students in all grades 3 through 8 to meet state assessment requirements and the requirements of the federal *No Child Left Behind* Act.

The 2007-2008 MEA summary reports contain the results of student achievement in reading and mathematics at all grades, science and technology at grades 4 and 8, and writing at grade 5 based on achievement standards set in 2006 and disaggregated by student and school characteristics. This report, together with MEA individual student and subject-specific class analysis reports, provides support for use in program evaluation and planning.

MEA results reflect scores based on test questions that are taken in common by the approximately 15,000 students in each grade level. Students' scores in each content area are based on answers to a combination of multiple-choice questions and questions that require students to construct an answer. The grade 5 writing reports provide information on a student's ability to respond to a prompt measuring narrative writing. More information about the design of the MEA is available at www.maine.gov/education/mea/index.htm.

I look forward to working with you in support of our continued efforts to improve the quality and effectiveness of the instructional opportunities designed to help all students achieve the high standards of the *Learning Results* and demonstrate that achievement through performance on the Maine Educational Assessment.

Sincerely,

Susan A. Gendron
Commissioner of Education

MEA
Maine Educational Assessment

School Report
Grade 4

Test Date: March 2008
Code: 11271335
SAU: Pembroke School Department
School: Pembroke Elementary School

Contents of the Report

The report is divided into two main sections including a section describing the students tested and a separate section for the results in each content area.

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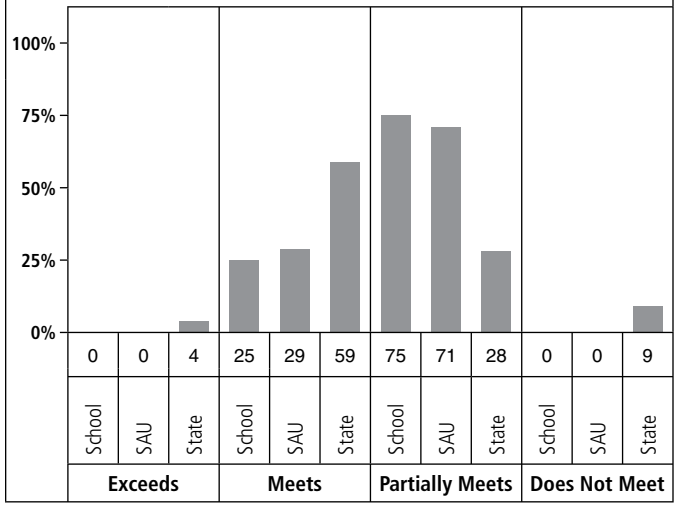
SUMMARY OF SCORES

Test Date: March 2008
Grade: 4
SAU: Pembroke School Department
School: Pembroke Elementary School

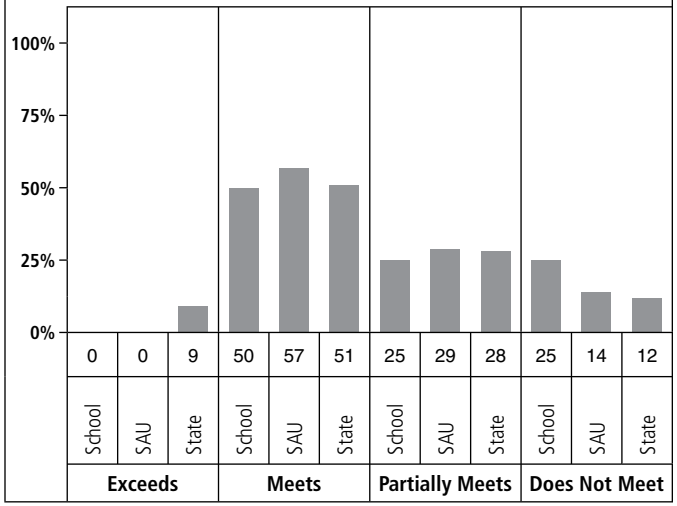
Summary of School, SAU, and State Scores

Year	Average Scaled Score		
	School	SAU	State
ELA – Reading			
2005–2006	443	442	444
2006–2007	440	443	445
2007–2008	**440**	**441**	**445**
Cum. Avg.*	441	442	445
Mathematics			
2005–2006	440	440	444
2006–2007	440	440	445
2007–2008	**442**	**444**	**445**
Cum. Avg.*	441	441	445
Science & Technology			
2005–2006	440	439	444
2006–2007	442	445	444
2007–2008	**440**	**441**	**444**
Cum. Avg.*	441	442	444

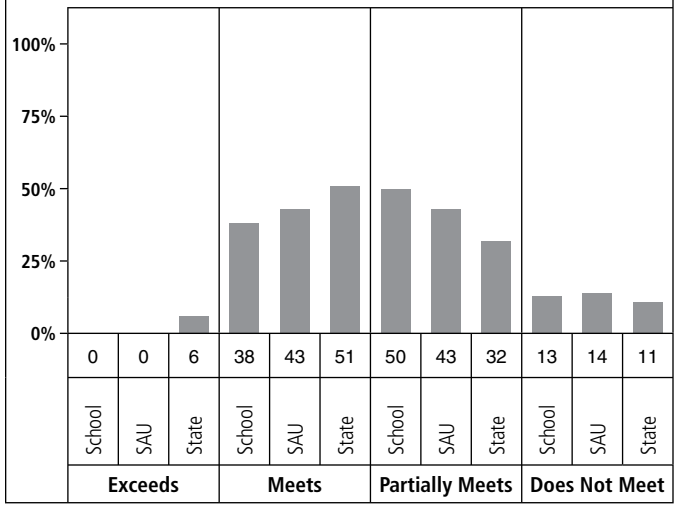
ELA – READING

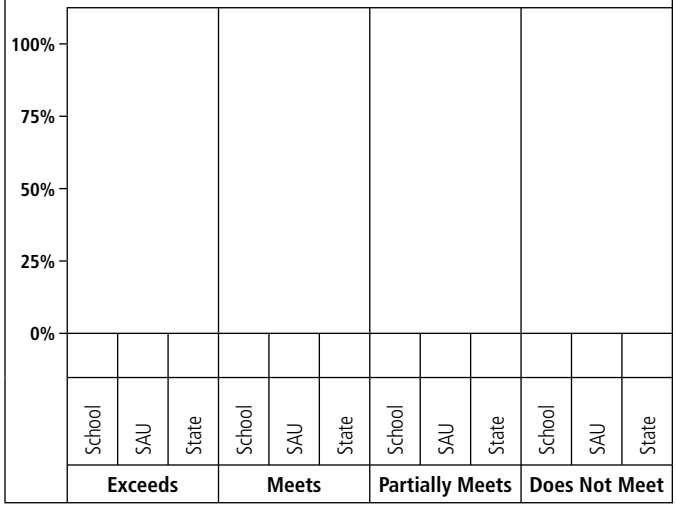


MATHEMATICS



SCIENCE AND TECHNOLOGY





*Cumulative averages are weighted, i.e., the scaled scores are averaged proportionally based on the numbers of students in each year.

SUMMARY OF STUDENT PARTICIPATION

Test Date: March 2008
Grade: 4
SAU: Pembroke School Department
School: Pembroke Elementary School

CATEGORY OF PARTICIPATION	Enrollment[1] during testing window						CONTENT AREA PARTICIPATION[2]																							
							ELA–Reading						Mathematics						Science and Technology											
	School		SAU		State		School		SAU		State		School		SAU		State		School		SAU		State		School		SAU		State	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Total number of students	8	100	7	100	14207	100	8	100	7	100	14181	100	8	100	7	100	14123	100	8	100	7	100	14115	99						
Ethnicity African American/Black	0	0	0	0	390	3	0	0	0	0	388	99	0	0	0	0	388	99	0	0	0	0	386	99						
American Indian or Native Alaskan	0	0	0	0	101	1	0	0	0	0	101	100	0	0	0	0	101	100	0	0	0	0	101	100						
Asian or Pacific Islander	0	0	0	0	263	2	0	0	0	0	259	98	0	0	0	0	262	100	0	0	0	0	262	100						
Hispanic	0	0	0	0	170	1	0	0	0	0	168	99	0	0	0	0	166	98	0	0	0	0	166	98						
Caucasian/White	8	100	7	100	13282	93	8	100	7	100	13264	100	8	100	7	100	13205	100	8	100	7	100	13199	99						
Not Reported	0	0	0	0	1	0	0	0	0	0	1	100	0	0	0	0	1	100	0	0	0	0	1	100						
Identified disability	0	0	0	0	2524	18	0	0	0	0	2514	100	0	0	0	0	2498	99	0	0	0	0	2494	99						
Current LEP	0	0	0	0	385	3	0	0	0	0	377	98	0	0	0	0	383	99	0	0	0	0	380	99						
Economically disadvantaged	6	75	5	71	5587	39	6	100	5	100	5569	100	6	100	5	100	5538	99	6	100	5	100	5534	99						
Migrant	0	0	0	0	5	0	0	0	0	0	5	100	0	0	0	0	5	100	0	0	0	0	5	100						

MODE OF PARTICIPATION[3]	ELA–Reading						Mathematics						Science and Technology											
	School		SAU		State		School		SAU		State		School		SAU		State		School		SAU		State	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Participation without accommodations	6	75	5	71	10755	76	6	75	5	71	10730	76	6	75	5	71	10776	76						
Identified disability (PET/IEP)	0	0	0	0	375	3	0	0	0	0	374	3	0	0	0	0	384	4						
LEP	0	0	0	0	148	1	0	0	0	0	148	1	0	0	0	0	150	1						
504 plan	0	0	0	0	114	1	0	0	0	0	114	1	0	0	0	0	115	1						
Participation with accommodations	2	25	2	29	3298	23	2	25	2	29	3267	23	2	25	2	29	3215	23						
Identified disability (PET/IEP)	0	0	0	0	2013	61	0	0	0	0	1998	61	0	0	0	0	1986	62						
LEP	0	0	0	0	225	7	0	0	0	0	233	7	0	0	0	0	229	7						
504 plan	0	0	0	0	69	2	0	0	0	0	68	2	0	0	0	0	67	2						
Other	2	100	2	100	1046	32	2	100	2	100	1023	31	2	100	2	100	987	31						
Participation through alternate assessment (PAAP)	0	0	0	0	126	1	0	0	0	0	126	1	0	0	0	0	124	1						
Identified disability (PET/IEP)	0	0	0	0	126	100	0	0	0	0	126	100	0	0	0	0	124	100						
LEP	0	0	0	0	2	2	0	0	0	0	2	2	0	0	0	0	1	1						
504 plan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Approved non-participation in reading – 1st year LEP	0	0	0	0	2	0																		
Approved non-participation – special consideration	0	0	0	0	15	0	0	0	0	0	16	0	0	0	0	0	12	0						
Non-participation – other	0	0	0	0	11	0	0	0	0	0	68	0	0	0	0	0	80	1						

1 Percents are the percentage of students enrolled in each participation category.
2 Percents are the percentage of students, including those who participated through alternate assessment (PAAP), who participated in the content area.
3 Percents are the percentage of students in each content area by mode.

ELA–READING RESULTS

Test Date:	March 2008
Grade:	4
SAU:	Pembroke School Department
School:	Pembroke Elementary School

ACHIEVEMENT LEVEL DEFINITIONS The quality of a student's work at each achievement level reflects progress in attaining Maine's Grade Level Expectations in English language arts – reading.		STUDENTS AT EACH ACHIEVEMENT LEVEL					
		School		SAU		State	
		N	%	N	%	N	%
Exceeds the Standards – The student's work demonstrates the ability to read and interpret literary and informational texts appropriate for the grade level by drawing in-depth inferences, analyzing texts for subtle clues, synthesizing information across texts, and using his/her knowledge of text features and literary devices to make deeper connections within or across texts to increase comprehension. (scaled score 461–480)	2005-2006	0	0	0	0	601	4
	2006-2007	0	0	0	0	507	4
	2007-2008	**0**	**0**	**0**	**0**	**559**	**4**
	Cum. Total*	0	0	0	0	1667	4
Meets the Standards – The student's work demonstrates the ability to read and interpret literary and informational texts appropriate for the grade level by drawing inferences, summarizing main ideas and providing supporting details, connecting ideas within and across texts, and using his/her knowledge of text features and literary devices to increase comprehension. (scaled score 441–460)	2005-2006	7	58	4	50	7910	57
	2006-2007	5	56	5	63	8749	63
	2007-2008	**2**	**25**	**2**	**29**	**8308**	**59**
	Cum. Total*	14	48	11	48	24967	60
Partially Meets the Standards – The student's work demonstrates an inconsistent ability to read and interpret literary and informational texts appropriate for the grade level. The student's ability to draw inferences, summarize main ideas and provide supporting details, connect ideas within and across texts, and use his/her knowledge of text features and literary devices varies depending on the texts. (scaled score 431–440)	2005-2006	4	33	3	38	3970	29
	2006-2007	2	22	2	25	3467	25
	2007-2008	**6**	**75**	**5**	**71**	**3922**	**28**
	Cum. Total*	12	41	10	43	11359	27
Does Not Meet the Standards – The student's work demonstrates a limited ability to read and interpret literary and informational texts appropriate for the grade level. The student's responses are often vague or incorrect leaving the impression that the student found it difficult to draw inferences, summarize main ideas and provide supporting details, connect ideas within and across texts, or use his/her knowledge of text features and literary devices to support comprehension. (scaled score 400–430)	2005-2006	1	8	1	13	1421	10
	2006-2007	2	22	1	13	1165	8
	2007-2008	**0**	**0**	**0**	**0**	**1264**	**9**
	Cum. Total*	3	10	2	9	3850	9

Learning Results Content Standard Cluster	Number of Points Possible		Average Points Attained (Number and Percent)					
			School		SAU		State	
	N	%	N	%	N	%	N	%
Total Reading Cluster	**48**	**100**	26.3	54.8	27.3	56.9	29.7	61.9
Literary Text	**24**	**50**	14.0	58.3	14.4	60.0	15.5	64.6
Informational Text	**24**	**50**	12.3	51.3	12.9	53.8	14.2	59.2

The Maine *Learning Results* reading cluster includes Content Standards A (Process of Reading), B (Literature and Culture), and D (Informational Texts). The MEA assesses students' reading skills based on questions related to two types of reading passages: literary and informational. Passages include both long and short texts, selected from developmentally appropriate works. Items on the MEA measure Grade Level Expectations, based on Maine's 1997 *Learning Results*, which can be found at http://www.maine.gov/education/lsalt/gles.htm.

*Percentages are calculated by dividing the cumulative total of the number of students in the achievement level by the cumulative total of the number of students tested.

ELA–READING RESULTS
(CONTINUED)

Test Date: March 2008
Grade: 4
SAU: Pembroke School Department
School: Pembroke Elementary School

REPORTING CATEGORIES	School										SAU						State					
	Tested	E		M		P		D		Mean Scaled Score	Tested	E	M	P	D	Mean Scaled Score	Tested	E	M	P	D	Mean Scaled Score
	N	N	%	N	%	N	%	N	%		N	%	%	%	%		N	%	%	%	%	
All Students	8	0	0	2	25	6	75	0	0	440	7	0	29	71	0	441	14053	4	59	28	9	445
Ethnicity																						
African American/Black	0										0						384	1	36	35	28	438
American Indian or Native Alaskan	0										0						101	1	46	44	10	442
Asian or Pacific Islander	0										0						259	6	61	22	11	445
Hispanic	0										0						164	0	45	38	16	440
Caucasian/White	8	0	0	2	25	6	75	0	0	440	7	0	29	71	0	441	13144	4	60	28	8	445
Not Reported	0										0						1					
Identified disability																						
Yes	0										0						2388	0	29	44	26	437
No	8	0	0	2	25	6	75	0	0	440	7	0	29	71	0	441	11665	5	65	25	6	446
Current LEP																						
Yes	0										0						373	1	32	35	32	436
No	8	0	0	2	25	6	75	0	0	440	7	0	29	71	0	441	13680	4	60	28	8	445
Economically disadvantaged																						
Yes	6	0	0	1	17	5	83	0	0	438	5	0	20	80	0	439	5502	1	47	37	14	441
No	2										2						8551	6	67	22	5	447
Migrant																						
Yes	0										0						5	0	40	60	0	445
No	8	0	0	2	25	6	75	0	0	440	7	0	29	71	0	441	14048	4	59	28	9	445
Gender																						
Female	4										3						6959	5	61	26	8	446
Male	4										4						7093	3	57	30	10	444
Not Reported	0										0						1					
Title 1A targeted program																						
Yes	2										1						1890	0	37	46	17	439
No	6	0	0	2	33	4	67	0	0	441	6	0	33	67	0	441	12163	5	63	25	8	446
Gifted/talented program																						
Yes	0										0						266	21	74	4	0	456
No	8	0	0	2	25	6	75	0	0	440	7	0	29	71	0	441	13787	4	59	28	9	445

E = Exceeds the Standards **M = Meets the Standards** **P = Partially Meets the Standards** **D = Does Not Meet the Standards**

NOTE: Some achievement level results have been left blank because fewer than five (5) students were tested. **N** = Number

ELA–READING RESULTS
(QUESTIONNAIRE ITEMS)

Test Date: March 2008
Grade: 4
SAU: Pembroke School Department
School: Pembroke Elementary School

QUESTIONNAIRE ITEMS	School										SAU						State					
	Students in Each Category	E		M		P		D		Mean Scaled Score	Students in Each Category	E	M	P	D	Mean Scaled Score	Students in Each Category	E	M	P	D	Mean Scaled Score
	%	N	%	N	%	N	%	N	%		%	%	%	%	%		%	%	%	%	%	
How much homework do you do on school nights?																						
A. none	13	0	0	1	100	0	0	0	0	442	14	0	100	0	0	442	5	1	42	36	21	440
B. less than one hour	63	0	0	1	20	4	80	0	0	440	71	0	20	80	0	440	74	4	62	27	7	445
C. one to two hours	25	0	0	0	0	2	100	0	0	437	14	0	0	100	0	440	18	5	59	29	7	446
D. more than two hours	0										0						2	3	32	34	31	438
How well do the questions that you have just been given on this MEA test match what you have learned in school about reading?																						
A. The questions on the test match what I have learned in reading class.	25	0	0	0	0	2	100	0	0	437	14	0	0	100	0	440	30	6	63	24	7	446
B. They match some of what I have learned.	38	0	0	2	67	1	33	0	0	444	43	0	67	33	0	444	52	4	63	27	6	446
C. They match just a little of what I have learned.	25	0	0	0	0	2	100	0	0	436	29	0	0	100	0	436	12	2	46	37	15	441
D. There is no match.	13	0	0	0	0	1	100	0	0	440	14	0	0	100	0	440	5	0	33	40	26	437
Which of the following best describes how you rate yourself as a student in reading?																						
A. very good	25	0	0	0	0	2	100	0	0	440	29	0	0	100	0	440	35	7	66	20	6	448
B. good	63	0	0	2	40	3	60	0	0	441	57	0	50	50	0	443	51	3	60	29	7	445
C. fair	13	0	0	0	0	1	100	0	0	432	14	0	0	100	0	432	12	1	44	40	16	440
D. poor	0										0						2	0	23	47	30	436
How hard was the reading part of this test?																						
A. harder than my regular schoolwork	13	0	0	0	0	1	100	0	0	434	0						19	2	46	34	17	442
B. about the same as my regular schoolwork	75	0	0	2	33	4	67	0	0	441	86	0	33	67	0	441	62	5	64	26	5	446
C. easier than my regular schoolwork	13	0	0	0	0	1	100	0	0	440	14	0	0	100	0	440	18	3	58	29	10	444
How hard were the reading passages on this test?																						
A. Most of the passages were more difficult than what I usually read.	13	0	0	0	0	1	100	0	0	440	14	0	0	100	0	440	14	0	32	46	22	438
B. Most of the passages were about the same as what I usually read.	88	0	0	2	29	5	71	0	0	440	86	0	33	67	0	441	52	3	62	28	7	445
C. Most of the passages were easier than what I usually read.	0										0						33	7	68	20	5	448
How much time do you spend reading at home each day?																						
A. more than one hour	0										0						18	7	64	22	7	447
B. 20 minutes to an hour	25	0	0	1	50	1	50	0	0	445	29	0	50	50	0	445	55	4	64	26	6	446
C. less than 20 minutes	50	0	0	0	0	4	100	0	0	438	57	0	0	100	0	438	14	2	53	33	12	443
D. I rarely read at home.	25	0	0	1	50	1	50	0	0	438	14	0	100	0	0	442	13	1	44	39	16	441
How many pages do you read in school and to complete homework assignments?																						
A. five or fewer pages	75	0	0	2	33	4	67	0	0	441	86	0	33	67	0	441	23	3	50	34	13	442
B. six to ten pages	0										0						25	3	60	29	8	444
C. eleven or more pages	25	0	0	0	0	2	100	0	0	437	14	0	0	100	0	440	52	5	64	24	6	446
Optional school/SAU question																						
A.	0										0											
B.	0										0											
C.	0										0											
D.	0										0											

E = Exceeds the Standards **M = Meets the Standards** **P = Partially Meets the Standards** **D = Does Not Meet the Standards**
N = Number

MATHEMATICS RESULTS

Test Date:	March 2008
Grade:	4
SAU:	Pembroke School Department
School:	Pembroke Elementary School

ACHIEVEMENT LEVEL DEFINITIONS The quality of a student's work at each achievement level reflects progress in attaining Maine's Grade Level Expectations in mathematics.		STUDENTS AT EACH ACHIEVEMENT LEVEL					
		School		SAU		State	
		N	%	N	%	N	%
Exceeds the Standards – The student's work demonstrates in-depth understanding of essential concepts in mathematics, including the ability to make multiple connections among central ideas. The student's responses demonstrate the ability to synthesize information; analyze and solve difficult problems, including developing and implementing strategies, efficiently and accurately performing procedures, and recording and justifying solutions; and explain complex concepts. (scaled score 461–480)	2005-2006	0	0	0	0	1294	9
	2006-2007	0	0	0	0	1054	8
	2007-2008	**0**	**0**	**0**	**0**	**1321**	**9**
	Cum. Total*	0	0	0	0	3669	9
Meets the Standards – The student's work demonstrates a general understanding of essential concepts in mathematics, including the ability to make connections among central ideas. The student's responses demonstrate the ability to analyze and solve problems including developing and implementing strategies, to perform procedures, and to record and explain solutions and concepts. The student's work may contain minor errors. (scaled score 441–460)	2005-2006	6	50	3	38	7000	50
	2006-2007	5	56	4	50	7394	53
	2007-2008	**4**	**50**	**4**	**57**	**7079**	**51**
	Cum. Total*	15	52	11	48	21473	51
Partially Meets the Standards – The student's work demonstrates incomplete understanding of essential concepts in mathematics and inconsistent connections among central ideas. The student's responses demonstrate some ability to analyze and solve problems, and explain concepts. Problem solving strategies may be flawed, procedures performed inaccurately, methods not recorded and/or problems not completed. (scaled score 429–440)	2005-2006	4	33	4	50	3784	27
	2006-2007	3	33	3	38	3729	27
	2007-2008	**2**	**25**	**2**	**29**	**3955**	**28**
	Cum. Total*	9	31	9	39	11468	27
Does Not Meet the Standards – The student's work demonstrates limited understanding of essential concepts in mathematics and infrequent or inaccurate connections among central ideas. The student's responses demonstrate minimal ability to solve problems and explain concepts. Problem solving strategies and procedures are often flawed or inappropriate and there may be many omissions. (scaled score 400–428)	2005-2006	2	17	1	13	1894	14
	2006-2007	1	11	1	13	1735	12
	2007-2008	**2**	**25**	**1**	**14**	**1642**	**12**
	Cum. Total*	5	17	3	13	5271	13

Learning Results Content Standard Clusters	Number of Points Possible		Average Points Attained (Number and Percent)					
			School		SAU		State	
	N	%	N	%	N	%	N	%
Cluster 1: Numbers and Operations	**15**	**31**	10.0	66.7	10.6	70.7	9.5	63.3
Cluster 2: Shape and Size	**14**	**29**	8.8	62.9	9.1	65.0	9.1	65.0
Cluster 3: Mathematical Decision Making	**5**	**10**	2.6	52.0	2.6	52.0	3.4	68.0
Cluster 4: Patterns	**14**	**29**	8.9	63.6	9.4	67.1	9.7	69.3

Cluster 1: Numbers and Operations
- A. Numbers and Number Sense
- B. Computation
- I. Discrete Mathematics (grades 3 and 4 only)

Cluster 2: Shape and Size
- E. Geometry
- F. Measurement

Cluster 3: Mathematical Decision Making
- C. Data Analysis and Statistics
- D. Probability

Cluster 4: Patterns
- G. Patterns, Relations, and Functions
- H. Algebra Concepts
- K. Mathematical Communication

Each content standard in the clusters above is defined in Maine's 1997 *Learning Results*, which are the basis for Grade Level Expectations. Each item on the MEA measures a grade level expectation, which can be found at http://www.maine.gov/education/lsalt/gles.htm.

*Percentages are calculated by dividing the cumulative total of the number of students in the achievement level by the cumulative total of the number of students tested.

MATHEMATICS RESULTS
(CONTINUED)

Test Date: March 2008
Grade: 4
SAU: Pembroke School Department
School: Pembroke Elementary School

REPORTING CATEGORIES	School										SAU						State					
	Tested	E		M		P		D		Mean Scaled Score	Tested	E	M	P	D	Mean Scaled Score	Tested	E	M	P	D	Mean Scaled Score
	N	N	%	N	%	N	%	N	%		N	%	%	%	%		N	%	%	%	%	
All Students	8	0	0	4	50	2	25	2	25	442	7	0	57	29	14	444	13997	9	51	28	12	445
Ethnicity																						
African American/Black	0										0						386	4	26	34	36	434
American Indian or Native Alaskan	0										0						101	3	46	41	11	442
Asian or Pacific Islander	0										0						262	14	51	23	12	447
Hispanic	0										0						162	4	41	34	21	440
Caucasian/White	8	0	0	4	50	2	25	2	25	442	7	0	57	29	14	444	13085	10	51	28	11	446
Not Reported	0										0						1					
Identified disability																						
Yes	0										0						2372	3	31	36	30	436
No	8	0	0	4	50	2	25	2	25	442	7	0	57	29	14	444	11625	11	54	27	8	447
Current LEP																						
Yes	0										0						381	4	33	28	35	435
No	8	0	0	4	50	2	25	2	25	442	7	0	57	29	14	444	13616	10	51	28	11	445
Economically disadvantaged																						
Yes	6	0	0	2	33	2	33	2	33	438	5	0	40	40	20	440	5472	5	41	35	19	440
No	2										2						8525	13	56	24	7	448
Migrant																						
Yes	0										0						5	0	80	20	0	448
No	8	0	0	4	50	2	25	2	25	442	7	0	57	29	14	444	13992	9	51	28	12	445
Gender																						
Female	4										3						6933	9	50	29	12	445
Male	4										4						7063	10	51	27	11	446
Not Reported	0										0						1					
Title 1A targeted program																						
Yes	2										1						1890	2	34	41	23	438
No	6	0	0	4	67	1	17	1	17	445	6	0	67	17	17	445	12107	11	53	26	10	446
Gifted/talented program																						
Yes	0										0						266	45	49	5	0	461
No	8	0	0	4	50	2	25	2	25	442	7	0	57	29	14	444	13731	9	51	29	12	445

E = Exceeds the Standards **M = Meets the Standards** **P = Partially Meets the Standards** **D = Does Not Meet the Standards**

NOTE: Some achievement level results have been left blank because fewer than five (5) students were tested. **N** = Number

MATHEMATICS RESULTS
(QUESTIONNAIRE ITEMS)

Test Date: March 2008
Grade: 4
SAU: Pembroke School Department
School: Pembroke Elementary School

QUESTIONNAIRE ITEMS	School										SAU						State					
	Students in Each Category	E		M		P		D		Mean Scaled Score	Students in Each Category	E	M	P	D	Mean Scaled Score	Students in Each Category	E	M	P	D	Mean Scaled Score
	%	N	%	N	%	N	%	N	%		%	%	%	%	%		%	%	%	%	%	
How much homework do you do on school nights?																						
A. none	13	0	0	0	0	1	100	0	0	434	14	0	0	100	0	434	5	6	34	33	27	438
B. less than one hour	63	0	0	4	80	0	0	1	20	447	71	0	80	0	20	447	74	10	52	28	10	446
C. one to two hours	25	0	0	0	0	1	50	1	50	434	14	0	0	100	0	440	18	10	52	28	10	446
D. more than two hours	0										0						2	5	33	28	34	436
How well do the questions that you have just been given on this MEA test match what you have learned in school about mathematics?																						
A. The questions on the test match what I have learned in mathematics class.	63	0	0	3	60	1	20	1	20	443	57	0	75	25	0	447	38	13	56	23	8	448
B. They match some of what I have learned.	25	0	0	1	50	1	50	0	0	447	29	0	50	50	0	447	48	8	52	29	10	445
C. They match just a little of what I have learned.	13	0	0	0	0	0	0	1	100	428	14	0	0	0	100	428	10	4	35	39	22	439
D. There is no match.	0										0						4	2	25	33	40	433
Which of the following best describes how you rate yourself as a student in mathematics?																						
A. very good	25	0	0	2	100	0	0	0	0	454	29	0	100	0	0	454	35	16	55	20	8	449
B. good	63	0	0	2	40	2	40	1	20	440	57	0	50	50	0	444	48	7	52	31	11	445
C. fair	13	0	0	0	0	0	0	1	100	428	14	0	0	0	100	428	14	3	41	38	18	440
D. poor	0										0						3	1	29	36	34	435
How hard was the mathematics part of this test?																						
A. harder than my regular schoolwork	13	0	0	0	0	0	0	1	100	428	14	0	0	0	100	428	15	4	38	33	25	439
B. about the same as my regular schoolwork	63	0	0	3	60	2	40	0	0	446	71	0	60	40	0	446	64	10	54	28	9	446
C. easier than my regular schoolwork	25	0	0	1	50	0	0	1	50	441	14	0	100	0	0	454	21	13	52	24	11	447
How often do you use hands-on materials in mathematics class?																						
A. almost every day	50	0	0	2	50	1	25	1	25	444	43	0	67	33	0	449	23	8	47	29	16	443
B. two or three days a week	13	0	0	1	100	0	0	0	0	446	14	0	100	0	0	446	36	11	54	27	9	447
C. two or three times each month	25	0	0	0	0	1	50	1	50	431	29	0	0	50	50	431	25	10	53	27	10	446
D. never or almost never	13	0	0	1	100	0	0	0	0	454	14	0	100	0	0	454	16	9	46	32	13	444
How often do you use calculators in mathematics class?																						
A. almost every day	13	0	0	0	0	1	100	0	0	434	14	0	0	100	0	434	5	3	30	33	33	436
B. two or three days a week	38	0	0	1	33	1	33	1	33	441	43	0	33	33	33	441	19	8	50	30	12	445
C. two or three times each month	13	0	0	1	100	0	0	0	0	446	14	0	100	0	0	446	38	11	55	26	8	447
D. never or almost never	38	0	0	2	67	0	0	1	33	445	29	0	100	0	0	454	38	9	50	29	12	445
On average, how many minutes a day do you spend working on mathematics in class?																						
A. less than 30 minutes	25	0	0	0	0	1	50	1	50	431	14	0	0	100	0	434	8	3	33	38	25	438
B. 30–45 minutes	13	0	0	1	100	0	0	0	0	446	14	0	100	0	0	446	27	6	48	33	13	443
C. 45–60 minutes	13	0	0	0	0	1	100	0	0	440	14	0	0	100	0	440	38	11	54	26	9	447
D. more than 60 minutes	50	0	0	3	75	0	0	1	25	448	57	0	75	0	25	448	26	13	55	23	9	448
Optional school/SAU question																						
A.	0										0											
B.	0										0											
C.	0										0											
D.	0										0											

E = Exceeds the Standards **M = Meets the Standards** **P = Partially Meets the Standards** **D = Does Not Meet the Standards**
N = Number

SCIENCE AND TECHNOLOGY RESULTS

Test Date:	March 2008
Grade:	4
SAU:	Pembroke School Department
School:	Pembroke Elementary School

ACHIEVEMENT LEVEL DEFINITIONS The quality of a student's work at each achievement level reflects progress in attaining Maine's Grade Span Expectations in science and technology.		STUDENTS AT EACH ACHIEVEMENT LEVEL					
		School		SAU		State	
		N	%	N	%	N	%
Exceeds the Standards – The student's work demonstrates in-depth understanding of essential concepts in science, including the ability to make multiple connections among central ideas. The student's responses demonstrate the ability to synthesize information, analyze and solve difficult problems using the processes of scientific inquiry, and explain complex concepts using evidence and proper terminology to support and communicate logical conclusions. (scaled score 461–480)	2005-2006	0	0	0	0	751	5
	2006-2007	0	0	0	0	963	7
	2007-2008	**0**	**0**	**0**	**0**	**882**	**6**
	Cum. Total*	0	0	0	0	2596	6
Meets the Standards – The student's work demonstrates a general understanding of essential concepts in science, including the ability to make connections among central ideas. The student's responses demonstrate the ability to analyze and solve routine problems using the processes of scientific inquiry and explain central concepts with sufficient clarity and accuracy to demonstrate general understanding. (scaled score 441–460)	2005-2006	4	33	1	13	7251	52
	2006-2007	6	67	6	75	6824	49
	2007-2008	**3**	**38**	**3**	**43**	**7130**	**51**
	Cum. Total*	13	45	10	43	21205	51
Partially Meets the Standards – The student's work demonstrates incomplete understanding of essential concepts in science and inconsistent connections among central ideas. The student's responses demonstrate some ability to analyze and solve problems using scientific inquiry but the quality of responses is inconsistent. Explanation of concepts may be incomplete or unclear. (scaled score 429–440)	2005-2006	7	58	7	88	4514	32
	2006-2007	2	22	2	25	4382	32
	2007-2008	**4**	**50**	**3**	**43**	**4433**	**32**
	Cum. Total*	13	45	12	52	13329	32
Does Not Meet the Standards – The student's work demonstrates limited understanding of essential concepts in science and infrequent or inaccurate connections among central ideas. The student's responses demonstrate minimal ability to solve problems and use the skills of scientific inquiry. There are many inaccuracies and explanations are illogical, incomplete, or missing. (scaled score 400–428)	2005-2006	1	8	0	0	1458	10
	2006-2007	1	11	0	0	1735	12
	2007-2008	**1**	**13**	**1**	**14**	**1546**	**11**
	Cum. Total*	3	10	1	4	4739	11

Learning Results Content Standard Clusters	Number of Points Possible		Average Points Attained (Number and Percent)					
			School		SAU		State	
	N	%	N	%	N	%	N	%
Cluster 1: Life Sciences	**12**	**25**	7.3	60.8	7.4	61.7	8.0	66.7
Cluster 2: Physical Sciences	**12**	**25**	6.3	52.5	6.3	52.5	7.2	60.0
Cluster 3: Earth and Space Sciences	**12**	**25**	6.6	55.0	6.9	57.5	7.4	61.7
Cluster 4: Nature and Implications of Science	**12**	**25**	7.5	62.5	7.7	64.2	7.6	63.3

Cluster 1: Life Sciences
- A. Classifying Life Forms
- B. Ecology
- C. Cells

Cluster 2: Physical Sciences
- E. Structure of Matter
- H. Energy
- I. Motion

Cluster 3: Earth and Space Sciences
- D. Continuity and Change
- F. The Earth
- G. The Universe

Cluster 4: Nature and Implications of Science
- J. Inquiry and Problem Solving
- K. Scientific Reasoning
- L. Communication
- M. Implications of Science & Technology

Each content standard in the clusters shown is defined in Maine's 1997 *Learning Results*, which are the basis for science and technology Grade Span Expectations. Each item on the MEA measures a grade span expectation, which can be found at http://www.maine.gov/education/lsalt/gles.htm.

*Percentages are calculated by dividing the cumulative total of the number of students in the achievement level by the cumulative total of the number of students tested.

SCIENCE AND TECHNOLOGY RESULTS
(CONTINUED)

Test Date: March 2008
Grade: 4
SAU: Pembroke School Department
School: Pembroke Elementary School

REPORTING CATEGORIES	School										SAU						State					
	Tested	E		M		P		D		Mean Scaled Score	Tested	E	M	P	D	Mean Scaled Score	Tested	E	M	P	D	Mean Scaled Score
	N	N	%	N	%	N	%	N	%		N	%	%	%	%		N	%	%	%	%	
All Students	8	0	0	3	38	4	50	1	13	440	7	0	43	43	14	441	13991	6	51	32	11	444
Ethnicity																						
African American/Black	0										0						385	2	27	35	36	434
American Indian or Native Alaskan	0										0						101	3	44	44	10	441
Asian or Pacific Islander	0										0						262	5	52	28	14	443
Hispanic	0										0						162	2	38	39	21	439
Caucasian/White	8	0	0	3	38	4	50	1	13	440	7	0	43	43	14	441	13080	7	52	31	10	444
Not Reported	0										0						1					
Identified disability																						
Yes	0										0						2370	2	32	41	25	437
No	8	0	0	3	38	4	50	1	13	440	7	0	43	43	14	441	11621	7	55	30	8	445
Current LEP																						
Yes	0										0						379	1	25	35	39	433
No	8	0	0	3	38	4	50	1	13	440	7	0	43	43	14	441	13612	6	52	32	10	444
Economically disadvantaged																						
Yes	6	0	0	1	17	4	67	1	17	436	5	0	20	60	20	436	5470	3	41	39	18	440
No	2										2						8521	9	57	27	7	446
Migrant																						
Yes	0										0						5	20	20	40	20	443
No	8	0	0	3	38	4	50	1	13	440	7	0	43	43	14	441	13986	6	51	32	11	444
Gender																						
Female	4										3						6929	6	49	33	12	443
Male	4										4						7061	7	53	30	10	444
Not Reported	0										0						1					
Title 1A targeted program																						
Yes	2										1						1888	1	32	44	23	437
No	6	0	0	3	50	2	33	1	17	442	6	0	50	33	17	442	12103	7	54	30	9	445
Gifted/talented program																						
Yes	0										0						266	30	65	5	1	457
No	8	0	0	3	38	4	50	1	13	440	7	0	43	43	14	441	13725	6	51	32	11	444

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NOTE: Some achievement level results have been left blank because fewer than five (5) students were tested. **N** = Number

SCIENCE AND TECHNOLOGY RESULTS
(QUESTIONNAIRE ITEMS)

Test Date: March 2008
Grade: 4
SAU: Pembroke School Department
School: Pembroke Elementary School

QUESTIONNAIRE ITEMS	School										SAU						State					
	Students in Each Category	E		M		P		D		Mean Scaled Score	Students in Each Category	E	M	P	D	Mean Scaled Score	Students in Each Category	E	M	P	D	Mean Scaled Score
	%	N	%	N	%	N	%	N	%		%	%	%	%	%		%	%	%	%	%	
How much homework do you do on school nights?																						
A. none	13	0	0	1	100	0	0	0	0	444	14	0	100	0	0	444	5	4	37	36	22	439
B. less than one hour	63	0	0	2	40	2	40	1	20	442	71	0	40	40	20	442	74	6	53	31	10	444
C. one to two hours	25	0	0	0	0	2	100	0	0	432	14	0	0	100	0	430	18	7	52	32	8	445
D. more than two hours	0										0						2	4	31	33	32	437
How well do the questions that you have just been given on this MEA test match what you have learned in school about science?																						
A. The questions on the test match what I have learned in science class.	13	0	0	1	100	0	0	0	0	444	14	0	100	0	0	444	24	9	53	28	10	446
B. They match some of what I have learned.	25	0	0	1	50	1	50	0	0	447	29	0	50	50	0	447	49	6	54	31	9	445
C. They match just a little of what I have learned.	38	0	0	0	0	2	67	1	33	433	43	0	0	67	33	433	21	4	47	36	13	442
D. There is no match.	25	0	0	1	50	1	50	0	0	441	14	0	100	0	0	448	6	2	35	37	25	438
Which of the following best describes how you rate yourself as a student in science?																						
A. very good	25	0	0	1	50	1	50	0	0	445	14	0	100	0	0	456	25	9	53	27	10	446
B. good	63	0	0	2	40	3	60	0	0	440	71	0	40	60	0	440	54	6	55	30	9	445
C. fair	13	0	0	0	0	0	0	1	100	428	14	0	0	0	100	428	19	3	43	40	15	441
D. poor	0										0						3	2	28	42	29	435
How difficult was the science part of this test?																						
A. harder than my regular schoolwork	13	0	0	0	0	1	100	0	0	440	14	0	0	100	0	440	22	5	45	35	15	442
B. about the same as my regular schoolwork	75	0	0	3	50	2	33	1	17	441	86	0	50	33	17	441	62	7	53	31	9	445
C. easier than my regular schoolwork	13	0	0	0	0	1	100	0	0	434	0						16	7	52	28	13	444
How often do you have science classes?																						
A. every day	13	0	0	1	100	0	0	0	0	444	14	0	100	0	0	444	24	7	48	33	12	444
B. a few times a week	63	0	0	2	40	3	60	0	0	443	57	0	50	50	0	446	53	7	54	31	9	445
C. once a week	13	0	0	0	0	1	100	0	0	430	14	0	0	100	0	430	9	6	46	33	15	442
D. a few times a month	13	0	0	0	0	0	0	1	100	428	14	0	0	0	100	428	14	5	50	31	14	443
Which statement best describes how you learn science?																						
A. I mostly read a textbook and answer questions, and/or take notes and do assignments. I use science kits for demonstrations and experiments.	38	0	0	1	33	1	33	1	33	437	29	0	50	0	50	438	25	5	48	34	13	443
B. I work in groups to design and conduct experiments.	50	0	0	2	50	2	50	0	0	442	57	0	50	50	0	442	27	4	46	37	13	442
C. I do a combination of A and B, but mostly A.	13	0	0	0	0	1	100	0	0	440	14	0	0	100	0	440	26	7	56	28	8	445
D. I do a combination of A and B, but mostly B.	0										0						22	9	55	26	9	446
Optional school/SAU question																						
A.	0										0											
B.	0										0											
C.	0										0											
D.	0										0											

E = Exceeds the Standards **M = Meets the Standards** **P = Partially Meets the Standards** **D = Does Not Meet the Standards**
N = Number