

Maine's Learning Results Science and Technology Performance Indicators Content Clarification Crosswalk for Elementary Grades 3-4

* For an explanation of the codes used in this document, please refer to the coding guide.

Standard A: Classifying Life Forms

Maine's Learning Results	Maine's Curriculum Framework	Science for All Americans	Project 2061 Benchmarks for Science Literacy	National Science Education Standards	Project 2061 Atlas of Science Literacy
A1: Group the same organisms in different ways using different characteristics.	A(3-4)#1 p II-64	Diversity of Life pp 60-61	5A(3-5) Essay p103 5A(3-5)#1,2 5A Research pp340-41	K-4/C Essay p128 K-4/C1a,b p 129	Biological Evolution Map p 81
A2: Design and describe a classification system for organisms.	A(3-4)#2 p II-64	Diversity of Life 60-61	5A(3-5) Essay p103 5A(3-5)#1,2 5A Research pp340-41	K-4/C Essay p128	Biological Evolution Map p 81
A3: Describe the different living things within a given habitat.	A(3-4)#3 p II-64 Snapshot p II-64	Diversity of Life pp 60-61	5D Essay p115 5D(K-2) Essay p116 5D(3-5) Essay p116 5D(K-2)#2 5D(3-5)#1	K-4/C Essay pp127-9 K-4/C1a,b p129	No Maps
A4: Compare and contrast the life cycles, behavior, and structure of different organisms.	A(3-4)#4 p II-64	Diversity of Life pp 60-61	5A Essay p101 5A(3-5) Essay p103 5A(6-8)#2 6A(3-5)#1 6B(3-5)#1,2,3 5A Research p340	K-4/C Essay p127-9 K-4/C1b,c, 2a p129	Effects of Heredity Strand p 97

Standard B: Ecology

Maine's Learning Results	Maine's Curriculum Framework	Science for All Americans	Project 2061 Benchmarks for Science Literacy	National Science Education Standards	Project 2061 Atlas of Science Literacy
B1: Describe a food web and the relationships within a given ecosystem.	B(3-4)#1 p II-65	Diversity of Life p 61 Interdependence of Life pp 64-66 Flow of Matter and Energy p 66	5A(6-8) Essay p104 5A(6-8)#5 5E Essay p118 5E(3-5) Essay p119 5E(3-5)#1,2 5E(6-8) Essay p120 5D Research p342	K-4/C Essay pp128-9 K-4/C3a,3b p129 5-8/C 4b, 4c pp157-58	Food Web Strands pp 77 & 79

Standard B: Ecology (continued)

B2: Explain the difference between producers, consumers, and decomposers and identify examples of each.	B(3-4)#2 p II-65	Flow of Matter and Energy p 66	<u>5A(6-8)#1</u> <u>5D(3-5)#2</u> 5E(3-5) Essay p119 5E(3-5)#1,3 5E(6-8)#1 5E Research pp342-43	K-4/C Essay pp 128-129 K-4/3a p129 <u>5-8/C4b</u> p 157	Flow of Matter in Ecosystems Map p 77 Flow of Energy in Ecosystems Map p 79
B3: Compare and contrast physical and living components of different biomes.	B(3-4)#3 p II-65	Interdependence of Life p 65	5D Essay 115 5D(3-5) Essay p116 5D(3-5)#1 <u>5D(6-8)#1</u>	K-4/C Essay pp 128-129 <u>K-4/C1a, 3b</u> p 129	No Maps
B4: Investigate the connection between major living and non-living components of a local ecosystem.	B(3-4)#5 p II-64	Interdependence of Life pp 64-66	5D(3-5) Essay p 116 5D(3-5)#1,2,3 <u>5D(6-8)#1</u> 5D Research p342	K-4/C Essay pp 128-129 <u>K-4/1a,3a,3b</u> ,3c,3d p129 5-8/C4d p 158	Flow of Matter in Ecosystems Map p 77 Flow of Energy in Ecosystems Map p 79

Standard C: Cells

Maine's Learning Results	Maine's Curriculum Framework	Science for All Americans	Benchmarks for Science Literacy	National Science Education Standards	Project 2061 Atlas of Science Literacy
C1: Demonstrate an understanding that a cell is the basic unit of living organisms.	C(3-4)#4 p II-66	Cells pp 62-64	5C Essay 110 <u>5C(3-5)#2</u> 5C(6-8) Essay p112 5C(6-8)#1 5C Research p 342	5-8/C Essay pp155-156 <u>5-8/C1b</u> p156	Structures Strand pp 73 & 75
C2: Describe how single celled organisms exist.	C(3-4)#1 p II-66 Snapshot p II-67	Diversity of Life p 60 Cells p 62	5C(3-5) Essay p111 <u>5C(3-5)#1</u>	5-8/C Essay p155 <u>5-8/C1b,c</u> p156	Basic Needs Strand p 73
C3: Explore how the use of a microscope allows one to see cells in a variety of organisms.	C(3-4)#2 p II-66	Cells p 62	5C(3-5) Essay p111 <u>5C(3-5)#2</u>	5-8/C Essay p155	Structures Strand pp 73 & 75
C4: Describe the functions of the major human organ systems.	C(3-4)#3 p II-66	Basic Functions pp 76-78	6C(3-5) Essay p136 <u>6C(3-5)#1,2,3,4</u> 11A(3-5)#1 6C Research pp344-45	K-4/C1b p 129 5-8/C Essay pp155-6 <u>5-8/C1a,d,e</u> p156	Functions of Organs Strand p 75

Standard D: Continuity and Change

Maine's Learning Results	Maine's Curriculum Framework	Science for All Americans	Benchmarks for Science Literacy	National Science Education Standards	Project 2061 Atlas of Science Literacy
D1: Identify present day organisms that have not always existed, and past life forms that have become extinct.	D(3-4)#1 p II-67	Evolution of Life pp 67-68 Evolution pp 177-78	5F(3-5) Essay p123 <u>5F(3-5)#2</u>	<u>K-4/D1c</u> p134 5-8/C5c p158	Fossil Evidence Strand p 81
D2: Describe how fossils form.	D(3-4)#2 p II-67 Snapshot p II-68 F(3-4)#3 p II-71	Processes that Shape the Earth pp 45-46	5F Essay 122 <u>4C(6-8)#3</u>	No related NSES	Rocks and Sediments Strand p 51
D3: Explain how adaptations, in response to change over time, may increase a species' chances of survival.	D(3-4)#4 p II-67	Evolution of Life pp 68-69	5F(3-5) Essay p123 5F(3-5)#1 5F Research pp 343-44	5-8/C Essay p156 <u>5-8/C5b</u> p158	Variation and Advantage Strand p 83
D4: Describe the ways in which organisms may be similar to and different from their parents and explore the possible reasons for this.	D(3-4)#5 p II-67	Heredity pp 61-62	5B Essay p106 5B(3-5) Essay p107 <u>5B(3-5)#1,2</u> 5B Research p341	K-4/C Essay p128 <u>K-4/C2b,c</u> p129	Mechanism of Inheritance Strand pp 69 & 71

Standard E: Structure of Matter

Maine's Learning Results	Maine's Curriculum Framework	Science for All Americans	Benchmarks for Science Literacy	National Science Education Standards	Project 2061 Atlas of Science Literacy
E1: Describe how the physical properties of objects sometimes change when one object chemically combines with another.	E(3-4)#1 p II-69	Structure of Matter p 47	4D(K-2)#1,2 <u>4D(3-5)#4</u> 4D Research p337	K-4/B Essay p126 K-4/B1a p127 <u>5-8/ B1b</u> p 154	Basic Ingredients Strand p 55 Changing Properties Strand p 61
E2: Explain how matter changes in both chemical and physical ways.	E(3-4)#3 p II-69	Structure of Matter pp 46-47	4D(3-5) Essay p76 4B(3-5)#3 <u>4D(3-5)#1,4</u> 4D Research p337	K-4/B Essay p126 <u>K-4/B1a,c</u> p127 <u>5-8/B1b</u> p154	Basic Ingredients Strand p 55 Changing Properties Strand p 61 Changes of State Strand p 59

Standard F: The Earth

Maine's Learning Results	Maine's Curriculum Framework	Science for All Americans	Benchmarks for Science Literacy	National Science Education Standards	Project 2061 Atlas of Science Literacy
F1: Describe the change in position of the continents over time.	F(3-4)#1 p II-71	Processes that Shape the Earth p 45	4C(6-8) Essay p73 4C(9-12)#4 10E(9-12) Essay p248 10E(9-12)#1,2,3	5-8/D Essay p159 5-8/D1b p160	Plate Tectonics Map p 53
F2: Demonstrate an understanding that many things about the earth occur in cycles that vary in length and frequency.	F(3-4)#2 p II-71	The Earth p 43	K-2 Essay p67 4B(K-2)#1 3-5 Essay p67, p72 4B(3-5)#2, 3 4C(3-5)#1 11C(3-5)#1,2	K-4/D Essay pp 130,134 K-4/D3a,b_p 134 5-8/D1d,f p 160	Changes in the Earth's Surface Map p 51
F3: Describe differences among minerals, rocks, and soils.	F(3-4)#5 p II-71 Essay #2 p II-6	Processes that Shape the Earth p 45-46	4C(3-5) Essay p72 4C(3-5)#2 4C(6-8)#3,4,6	K-4/D Essay p130 K-4/D1a,b p 134	Rocks and Sediments Strand p 51
F4: Illustrate how water and other substances go through a cyclic process of change in the environment.	B(3-4)#4 p II-65	The Earth p 43 Processes that Shape the Earth p 45	4B(3-5) Essay p 68 4B(3-5)#3 4B(6-8)#7 4B Research p 336	K-4/B 1c p 127 Vignette pp 124-25 K-4/B Essay p 126 5-8/D Essay p159 5-8/D1d,f,g,h,i p160	Conservation of Matter Map p 57 States of Matter Map p 59

Standard G: The Universe

Maine's Learning Results	Maine's Curriculum Framework	Science for All Americans	Benchmarks for Science Literacy	National Science Education Standards	Project 2061 Atlas of Science Literacy
G1: Illustrate the relative positions of the sun, moon, and planets	G(3-4)#1 p II-72	The Universe p 41	4A(3-5) Essay pp 62-63 4B(3-5) Essay p67 4A(3-5)#3,4 4A(6-8) Essay p63 4A Research p335	K-4/D Essay p130 K-4/D2a p134 5-8/D Essay p159 5-8/D 3a p 160	Observation of the Sky Strand pp 43 Solar System Map p 45
G2: Trace the source of earth's heat and light energy to the sun	G(3-4)#2 p II-72	The Earth p 42	4E Essay p 83 4E(K-2)#1 4E(3-5)#1	K-4/D2b p134	No Maps
G3: Describe the earth's rotation on its axis and its revolution around the sun.	G(3-4)#4 p II-72 F(3-4)#4 p II-71	The Earth p 43	4B(3-5) Essay p67 4B(3-5)#2 4A(3-5)#4 4B(6-8)#4 4B Research pp 335-6	K-4/D2a, 3c p 134 5-8/D3b p160	Observation of the Sky Strand pp 43 & 45

Standard G: The Universe (continued)

G4: Explore the relationship between the earth and its moon.	G(3-4)#4 p II-72	The Earth p 43	<u>4A(K-2)#2,3</u> <u>4A(3-5)#4</u> <u>4B(6-8)#5</u> 4B Research pp 335-6	K-4/D Essay p130 <u>K-4/D3c</u> p134 5-8/D3b,3c p160	Observation of the Sky Strand pp 43 Phases of the Moon Strand p 45
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Standard H: Energy

Maine's Learning Results	Maine's Curriculum Framework	Science for All Americans	Benchmarks for Science Literacy	National Science Education Standards	Project 2061 Atlas of Science Literacy
H1: Identify different forms of energy.	H (3-4)#1 p II-73	Energy Transformations pp 49-50	4E(3-5) Essay pp 83-84 4E(3-5)#1 8C(3-5)#1,2 4E(6-8) Essay p84 4E(6-8)#4 4E Research p338	K-4/B Essay p126 <u>K-4/B3a,b,c</u> ,p127	No Maps
H2: Explain ways different forms of energy can be produced.	H(3-4)#2,3 p II-73 Snapshot p II-73	Energy Transformations pp 49-52 Energy Sources pp 114-116 Energy Use p 117	4E(3-5) Essay pp 83-84 <u>4E(3-5)#1</u> 8C(3-5) Essay p193 <u>8C(3-5)#1,2</u> 4E Research p338	K-4/B Essay p126 <u>K-4/B3 b,c</u> p127 <u>K-4/B2d</u> p 127	Waves Map p65

Standard I: Motion

Maine's Learning Results	Maine's Curriculum Framework	Science for All Americans	Benchmarks for Science Literacy	National Science Education Standards	Project 2061 Atlas of Science Literacy
I1: Describe the effects of different types of forces on motion.	I(3-4)#1 p II-74 Snapshot p II-20	Motion p 53 Forces of Nature pp 55-57	4F Essay pp87-88 4G(3-5) Essay p94 <u>4B (3-5)#1</u> <u>4F(3-5)#1</u> <u>4G(3-5)#1,2,3</u> 4F Research p338-40	K-4/B Essay p 126 <u>K-4/B2c,3d</u> ,p127	Gravity Map p 43 Forces and Motion Strand p 63
I2: Draw conclusions about how the amount of force affects the motion of more massive and less massive objects.	I(3-4)#2 p II-74	Motion p 53	4F(3-5) Essay p89 <u>4F(3-5)#1</u> 4F Research p339	K-4/B Essay p 126 <u>K-4/ B2c</u> p127	Force and Motion Strand p 63

Standard I: Motion (continued)

I3: Generate examples illustrating that when something is pushed or pulled, it exerts a reaction force.	I(3-4)#3 p II-74	Motion p 53	4F Essay pp 87-88 4F(K-2)#2 4F(9-12)#4 4G(3-5)#2,3 Research 4F p339	K-4/B Essay p 126 K-4/B2c p127	Laws of Motion p 63
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Standard J: Inquiry and Problem Solving

Maine's Learning Results	Maine's Curriculum Framework	Science for All Americans	Benchmarks for Science Literacy	National Science Education Standards	Project 2061 Atlas of Science Literacy
J1: Make accurate observations using appropriate tools and units of measure	A(All Levels) #1,2,3 p II-22 Essay pp II-18-21	The Scientific World View pp 2-3 Scientific Inquiry pp 3-4 Manipulation and Observation pp 191-92	1B Essay p9 1B(3-5) Essay p 10 3A(3-5) Essay p45 1B(K-2)#1,2,3,4 1B(3-5)#1 3A(3-5)#3 9A(3-5) Essay p 212 9A(3-5)#3,4 12A(3-5)#1 12C Essay p292 12C(3-5)#2,3,4 12C Research p360	K-4/A Essay p121-22 K-4/A1a,c p122 K-4/A2c p 123 K-4/F2f p 138	Observation and Evidence Strand p 17
J2: Conduct scientific investigations: make observations, collect and analyze data, and do experiments	A(3-4)#1 p II-22 Essay pp II-18-21	Scientific Inquiry pp 3-4	1A(3-5) Essay p6 1B Essay p9 1B(3-5) Essay p10-11 1A(3-5)#1 1B(3-5)#1,2,3 9D(3-5) Essay p 227 9D(3-5)#1 12A(3-5) Essay p 286 12A(3-5)#1,2 Ch 1Research 331-33, 12E Research p 360	K-4/A Essay p121-22 K-4/A1a,b,c,d,e , p 122 K-4/A2a,b p 123	Evidence and Reasoning in Inquiry Map p 17 Scientific Investigations Map p 19 Control and Conditions Strand p 125

Standard J: Inquiry and Problem Solving (continued)

Maine's Learning Results	Maine's Curriculum Framework	Science for All Americans	Benchmarks for Science Literacy	National Science Education Standards	Project 2061 Atlas of Science Literacy
J3: Use results in a purposeful way: design fair tests, make predictions based on observed patterns, and interpret data to make further predictions.	A (All levels) #2 p II-39 Essay pp II-18-21	Scientific Inquiry pp 3-6	1B(3-5) Essay pp 10-11 1B(3-5)#1,2,3 Ch 1 Research 331-33 9D(3-5) Essay p 227 9D(3-5)#1 12A(3-5) Essay p 286 <u>12A(3-5)#2</u> <u>12D(3-5)#3</u> <u>12E(3-5)#2</u> 12E Research p361	K-4/A Essay p121-22 <u>K-4/A1a,b,c,d</u> p 122 K-4/A2b p 123 K-4 E Essay pp 135-137 K-4/E1d pp 137-138	Evidence and Reasoning in Inquiry Map p 17 Scientific Investigations Map p 19 Avoiding Bias in Science Map p 23 Control and Conditions Strand p 125
J4: Design and build an invention	Essay #8 pp II-12-13	Design and Systems pp 28-32	3B Essay p48 3B(3-5) Essay p49 3B(3-5)#1,2,3 3A Research p334	K-4/E Essay p135-37 <u>K-4/E1a,b,c,d,e</u> pp 137-138	Design Constraints Map p 33 Designed Systems Map p 35
J5: Explain how differences in time, place, or experimenter can lead to different data.	A(3-4)#2 p II-22	Scientific Inquiry pp 3-4 Scientists Try to Avoid Bias pp 6-7	1A(3-5) Essay p6 <u>1A(3-5)#1</u> 1B(3-5) Essay p 10 <u>1B(3-5)#2,3</u> 12A(3-5)#2 <u>12E(3-5)#2</u> Ch 1 Research 331-333	K-4 Essay pp 121-122 K-4/A1d p 122	Evidence and Reasoning in Inquiry Map p 17 Scientific Investigations Map p 19 Scientific Theories Map p 21 Avoiding Bias in Science Map p 23 Control and Conditions Strand p 125
J6: Explain how different conclusions can be derived from the same data.	A(3-4)#3 p II-22	Scientific Inquiry pp 3-4	1A(3-5) Essay p6 1A(3-5)#1 <u>1B(3-5)#2,3</u> 12A(3-5) Essay p286 <u>12A(3-5)#2</u> 12E(6-8)#4 Ch 1 Research 331-333	K-4/A Essay p121-22 K-4/A1d p 122 5-8/G2b p171	Evidence and Reasoning in Inquiry Map p 17 Scientific Investigations Map p 19 Avoiding Bias in Science Map p 23 Control and Conditions Strand p 125

Standard K: Scientific Reasoning

Maine's Learning Results	Maine's Curriculum Framework	Science for All Americans	Benchmarks for Science Literacy	National Science Education Standards	Project 2061 Atlas of Science Literacy
K1: Give alternative explanations for observed phenomena.	B (3-4)#2 p II-35 Essay p II-33-34	The Scientific World View pp 2-10	1B(3-5) Essay p11 <u>1B(3-5)#3</u> 12A(3-5) Essay p 286 <u>12A(3-5)#2</u>	K-4 Essay pp 121-122 K-4/A1d p122	Evidence and Reasoning in Inquiry Map p 17 Scientific Theories Map p 21
K2: Describe how feelings can distort reasoning.	C(3-4)#1 p II-36	The Scientific World View pp 2-10	<u>9E(3-5)#2</u>	No related NSES	Evidence and Reasoning in Inquiry Map p 17 Expectations and Explanations Strand p 23
K3: Draw conclusions about observations.	B(3-4)#1 p II-35 B(All levels) #2 p II-35 Essay p II-20	The Scientific World View pp 2-10	9E Essay p231 <u>12A(3-5)#2</u> 12C(3-5)#3 Ch 1Research 331-33, 12E Research p 361	K-4 Essay pp 121-122 <u>K-4 A1d</u> p 122	Lines of Reasoning Strand p 17 Making Sense of Evidence Strand p 21
K4: Use various types of evidence to support a claim.	A(All levels) #2,3 p II-34 Essay p II-20 Essay p II-33-34	Scientific Inquiry pp 3-6 Reasoning pp 140-143 Critical Response Skills pp 193-4	1B(3-5) Essaypp10-11 9E Essay p231 9E(3-5) Essay p232 <u>1B(3-5)#3,4</u> 12A(3-5) Essay p 286 <u>12A(3-5)#2</u> 12E Essay p 298 <u>12E(3-5)#1</u> Ch 1Research 331-3, 12E Research p 361	K-12/ Unifying Concepts and Principles p 117- (Evidence, Models, and Explanation) K-4 Essay pp 121-122 <u>K-4/A1d, 2d</u> p122-3 K-4/A2d p 123	Evidence and Reasoning in Inquiry Map p 17 Scientific Theories Map p 21
K5: Demonstrate an understanding that ideas are more believable when supported by good reasoning.	A(All levels)#4 p II-34 A(3-4)#1 p II-34 Essay p II-33-34	Scientific Inquiry pp 4-6 Reasoning pp 140-143 Critical Response Skills pp 193-4	9E Essay p231 9E(3-5) Essay p232 9E(K-2)#1 <u>1B(3-5)#4</u> Ch 1Research 331-3, 12E Research p 361 12A(3-5) Essay p286 12A(3-5)#2 <u>12E(3-5)#1,2,3</u>	K-12/ Unifying Concepts and Principles p 117- (Evidence, Models, and Explanation) K-4 Essay pp 121-122 K-4/A2d p123	Evidence and Reasoning in Inquiry Map p 17

Standard K: Scientific Reasoning (Continued)

K6: Practice and apply simple logic, intuitive thinking, and brainstorming.	B(All levels) #1 p II-35 Essay p II-33-34	Scientific Inquiry pp 4-6 Reasoning pp 140-143	Essay p231 3-5 Essay p232 9E(3-5)#1	K-12/2 p117 K-4/A1d p 122 K-4/A2a p 123	Evidence and Reasoning in Inquiry Map p 17
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Standard L: Communication

Maine's Learning Results	Maine's Curriculum Framework	Science for All Americans	Benchmarks for Science Literacy	National Science Education Standards	Project 2061 Atlas of Science Literacy
L1: Record results of experiments or activities and summarize and communicate what they have learned.	A (All levels) #1,2,3 p II-27 Snapshot p II-20 Essay pp II-25-26	The Scientific Enterprise pp 8-9 Communication pp 192-193	9E Essay p16 1C(3-5)#2 12A(3-5) Essay p286 <u>12A(3-5)#1</u> <u>12C(3-5)#3</u> 12D Essay p295 12D(3-5)#1,2,3	K-4/A Essay p121-22 <u>K-4/A1e, 2e</u> p122-123 K-4/E essay pp 135,137 <u>K-4/E1e</u> p138	Evidence and Reasoning in Inquiry Map p 17 Record Keeping Strand p 19 Making Sense of Evidence Strand p 21
L2: Ask clarifying and extending questions.	A(All levels) #6 p II-27 B(All levels)#2 p II-28	Communication pp 192-93	12A(K-2) Essay p285	K-4 Essay pp 121-122 K-4/A1a p 122 K-4/A2a p 123	No Maps
L3: Reflect on work in science and technology using such activities as discussions, journals, and self-assessment.	B(All levels) #1 p II-28 B(3-4)#1 II-28 Snapshot p II-26 Snapshot p II-64	Not in SFAA	12C(3-5)#3	K-4/A1e p122	No Maps
L4: Make and/or use sketches, tables, graphs, physical representations, and manipulatives to explain procedures and ideas.	C(3-4)#1,2,3,4,5 p II-29 Snapshot p II-20 Essay p II-20 Snapshot p II-35 Snapshot p II-46	Symbolic Representation pp 132-133 Physical Models pp 168-170 Communication pp 192-93	2A(3-5)#2 9B(3-5) Essay p 217 <u>9B(3-5)#2</u> 9C(3-5) Essay p 223 9C(3-5)#3,6 11B Essay p267 11B(3-5) Essay p 268 <u>11B(3-5)#1,2</u> <u>11C(3-5)#2</u> 12D Essay p295 <u>12D(3-5)#2,3</u> 11B Research p357	<u>K-4/A1e</u> p122 <u>K-4/E1e</u> p138	Representation and Modeling Strand p 29 Graphic Representation Strand p 115 Related Changes Strand pp 121 & 125

Standard L: Communication (continued)

L5: Gather and effectively present information, using a variety of media including computers.	A(All levels) #8 p II-27 D(3-4)#1 p II-30 Essay #8,9 pp II-12-13	Information Processing pp 120-122 Communication pp 192-93	8D(3-5) Essay p 197 8D(3-5)#3,4 8C(3-5) Essay p 201 8E(3-5)#2 12D Essay p295 12D(3-5)#1,2,3	<u>K-4/A1c</u> , p122	Communication Technology Map p 109 Computers Map p 111
L6: Cite examples of bias in information sources and question the validity of information from varied sources.	E(3-4)#1,2 p II-30 Snapshot p II-35	The Scientific Enterprise pp 6-7, 12 Critical Response Skills pp 193-194	9D(3-5) Essay p 227 <u>9D(3-5)#5</u> 12E Essay p298 <u>12E(3-5)#2,3</u> 12E(6-8)#3	k-4/A1e p 122	Avoiding Bias in Science Map p 23
L7: Function effectively in groups within various assigned roles	F(3-4)#1 p II-31 Snapshot p II-20 Snapshot p II-26 Essay #6 p II-11	Not in SFAA	No related Benchmarks	K-4/E2c p 138	No Maps

Standard M: Implications of Science and Technology

Maine's Learning Results	Maine's Curriculum Framework	Science for All Americans	Benchmarks for Science Literacy	National Science Education Standards	Project 2061 Atlas of Science Literacy
M1: Explore how cultures have found different technological solutions to deal with similar needs or problems.	D(3-4)#2 p II-50 Essay pp II-45-6	The Nature of Technology p 25	3A(3-5)#1 3C(3-5) Essay p54 3C(3-5)#1,3	K-4/E2a,b p138 K-4/G2a p 141	Interaction of Technology and Society Map p 37
M2: Investigate and describe the role of scientists and inventors.	A(All levels)# 5 p II-22 Essay ppII45-46 Essay #7 p II-11	The Scientific Enterprise pp 8-12 Technology and Science pp 26-27	1C(K-2)#1 1C(3-5) Essay p16 1C(3-5)#1,3 3A(3-5)#1,2	<u>K-4/E2a,b,c,d,e</u> p138 K-4/G Essay p 141 <u>K-4/G1a,b,c,d</u> p 141	No Maps
M3: Explore how technology has altered human settlement.	B(3-4)#1 p II-47 Essay pp II-45-46	Technological and Social Systems Interact p 34	3A(3-5)#4 8A(3-5)#4	K-4/F Essay p 138-139 K-4/F5b p 141	Agricultural Technology Map p 107
M4: Explain practices for conservation in daily life, based on recognition that renewable and non-renewable resources have limits.	A(3-4)#4 p II-41 B(3-4)#3-6 pII-43 C(3-4)#1,2pII-44 B(3-4)#2 p II-47 Essay on p II-40-41 Snapshot p II-46	The Human Presence p 33 The Earth p 44 Materials p 112	8B(3-5)#3 3-5 Essay p 193 <u>8C(3-5)#4</u>	<u>K-4?F Essay pp 138-139</u> <u>K-4/F3a,b,c</u> p 140	No Maps

* For an explanation of the codes used in this document, please refer to the coding guide.