Delta Education Science K~5

Correlation to

Louisiana Grade Level Expectations

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Kindergarten
Correlation to Louisiana Grade Level Expectations

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
Science as Inquiry *The Grade-Level Expectations (GLEs) from this strand should be interwoven with all content not just taught as a separate unit.*	
The Abilities Necessary to Do Scientific Inquiry	
1. Ask questions about objects and events in the environment (e.g., plants, rocks, storms) (SI-E-A1)	**Full Option Science System** *Animals 2X2* Investigation 1 pg 15,19, 22-25 Investigation 2 pg 11,17 *Wood & Paper* Investigation 1 pg 12-14 **Delta Science Module** *How Do We Learn* Activity 1 pg 13-22
2. Pose questions that can be answered by using students' own observations and scientific knowledge (SI-E-A1)	**Full Option Science System** *Animals 2X2* Investigation 3 pg 17-20 *Wood & Paper* Investigation 1 pg 26-27 **Delta Science Module** *How Do We Learn* Activity 6-12 pg 51-102 **DSM Student Reader** How do we Learn p 9
3. Predict and anticipate possible outcomes (SI-E-A2)	**Full Option Science System** *Wood & Paper* Investigation 3 pg 24-25 **Delta Science Module** *How Do We Learn* Activity 6 pg 51-58
4. Use the five senses to describe observations (SI-E-A3)	**Full Option Science System** *Wood & Paper* Investigation 1 pg 12-14,18-19,22-23, 30-32 Investigation 3 pg11-12, 15-17 **FOSS Science Stories** Wood And Paper pgs 9-12 **Delta Science Module** *How Do We Learn* Activity 1 pg 13-22 **Delta Science Reader** *How Do We Learn* Pgs 5,6,11

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
5. Measure and record length and temperature in both metric system and U.S. system units (SI-E-A4)	**Delta Science Module** *How Do We Learn* Activity 6-12 pg 51-102
6. Select and use developmentally appropriate equipment and tools and units of measurement to observe and collect data (SI-E-A4)	**Delta Science Module** *How Do We Learn* Activity 4-12 pg 37-102
7. Express data in a variety of ways by constructing illustrations, graphs, charts, tables, concept maps, and oral and written explanations as appropriate (SI-E-A5) (SI-E-B4)	**Full Option Science System** *Animals 2X2* Investigation 1 pg 10-16 *Wood & Paper* Investigation 1 pg3 0-32 **Delta Science Module** *How Do We Learn* Activity 11 pg 87-94 Activity 12 pg 95-102
8. Use a variety of appropriate formats to describe procedures and to express ideas about demonstrations or experiments (e.g., drawings, journals, reports, presentations, exhibitions, portfolios) (SI-E-A6)	**Full Option Science System** *Animals 2X2* Investigation 1 pg 10-16 *Wood & Paper* Investigation 1 28-32 **FOSS Science Stories** Wood & Paper – pg 9-12 **Delta Science Module** *How Do We Learn* Activity 11 pg 87-94 Activity 12 pg 95-102
9. Identify and use appropriate safety procedures and equipment when conducting investigations (e.g., gloves, goggles, hair ties) (SI-E-A7)	**Full Option Science System** *Animals 2X2* Overview pg 17 *Wood & Paper* Overview pg 17
Understanding Scientific Inquiry	
10. Recognize that a variety of tools can be used to examine objects at different degrees of magnification (e.g., hand lens, microscope) (SI-E-B3)	**Delta Science Module** How Do We Learn Activity4 & 5 **DSM Student Reader** How Do We Learn – pg 12 About Me – pg 4
Physical Science	
Properties of Objects and Materials	
11. Identify objects by using the senses (PS-E-A1)	**Full Option Science System** *Wood & Paper* Investigation 1 pg 8-14 Investigation 3 pg 8-12

12. Construct patterns by using color, size, and shape of objects (PS-E-A1)	**Full Option Science System** *Wood & Paper* Investigation 2 pg 20-23
13. Sort objects based on their properties (e.g., size, weight, texture) (PS-E-A1)	**Full Option Science System** *Wood & Paper* Investigation 1 pg 8-14 Investigation 3 pg 13-25 **Delta Science Module** *How Do We Learn* Activity 1 pg 13-22 Activity 2 pg 23-30 Activity 3 pg 31-36
14. Determine whether objects are magnetic or nonmagnetic (PS-E-A1)	**First Reader Big Book Collection** Sorting – Pg 16-17 **Delta First Science Readers Science & Literacy TG** pg 145
15. Create and separate mixtures (e.g., oil/water, rice/beans) (PS-E-A5)	**Full Option Science System** *Wood & Paper* Investigation 4 pg 16-18 **First Reader Big Book Collection** Matter – pg 16-19 **Delta First Science Readers Science & Literacy TG** pg 314-315
Position and Motion of Objects	
16. Follow directions using vocabulary such as *front/back*, *above/below*, *right/left*, and *next to* (PS-E-B1	**Full Option Science System** *Wood & Paper* Investigation 1 pg 20-27 Investigation 5 pg 8-17 **First Reader Big Book Collection** Where is it? Is it Moving? – pg 2-8 **Delta First Science Readers Science & Literacy TG** pg 251 - 253
17. Trace the motion of an object, such as a ball or toy car, as it rolls (PS-E-B3)	**First Reader Big Book Collection** Where is it? Is it Moving? – pg 10-11 **Delta First Science Readers Science & Literacy TG** –pg 254
18. Sequence the relative order of the speed of various objects (e.g., snails, turtles, tricycles, bicycles, cars, airplanes) (PS-E-B3)	**Full Option Science System** *Animals 2X2* Investigation 2 pg 14-17 Investigation 4 pg 16-19 **First Reader Big Book Collection** Where is it? Is it Moving? – pg 9 **Delta First Science Readers Science & Literacy TG** pg 253-254
Forms of Energy	
19. Demonstrate and identify sounds as *soft* or	**First Reader Big Book Collection** About Me – pg 4-6

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
loud (PS-E-C1)	Sorting – pg 13 **Delta First Science Readers Science & Literacy TG** pg 144 Activity 1 –pg 236, 239 & 244 Science Extension
20. Identify objects that give off heat, such as people, animals, and the Sun (PS-E-C3)	**First Reader Big Book Collection** Earth –pg15 **Delta First Science Readers Science & Literacy TG** pg 200
Life Science	
Characteristics of Organisms	
21. Record observations on the growth of plant seeds (LS-E-A1)	**First Reader Big Book Collection** Plants – pg 8-15 **Delta First Science Readers Science & Literacy TG** Activity1 pg 129-133
22. Classify objects in a variety of settings as *living (biotic)* or *nonliving (abiotic)* (LS-E-A2)	**Full Option Science System** *Animals 2X2* Investigation 1 pg 10-16 **First Reader Big Book Collection** Animals- pg 2 About Me - p17 **Delta First Science Readers Science & Literacy TG** pg 87 & 226 Activity 1 pg100-109
23. Compare the human body at various stages of development (LS-E-A3)	**First Reader Big Book Collection** About Me –pg16-18 **Delta First Science Readers Science & Literacy TG** pg 225-226
24. Compare the human body with plants and animals (LS-E-A3)	**Full Option Science System** *Animals 2X2* Investigation 1 pg 12-14, 18-19 **First Reader Big Book Collection** About Me – Pg 16 **Delta First Science Readers Science & Literacy TG** pg 225
25. Identify easily observable variations within types of plants and animals (e.g., features of classmates, varieties of trees, breeds of dogs) (LS-E-A4)	**Full Option Science System** *Animals 2X2* Investigation 1 pg 26-29 Investigation 3 pg 17-20 Investigation 5 pg 20-24 **First Reader Big Book Collection** Animals – Pg 10-11 **Delta First Science Readers Science & Literacy TG** pg 87-88
26. Classify various foods into the major groups (e.g., bread, meat, vegetable, fruit) (LS-E-A6)	**First Reader Big Book Collection** About Me – Pg 10-11 **Delta First Science Readers Science & Literacy TG**

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
	pg 224
27. Determine which foods are superior for developing a healthy body (LS-E-A6)	**First Reader Big Book Collection** About Me – Pg 10-11 **Delta First Science Readers Science & Literacy TG** pg 224
Life Cycles of Organisms	
28. Observe life cycles and describe changes (e.g., humans, dogs, insects) (LS-E-B1)	**Full Option Science System** *Animals 2X2* Investigation 4 **First Reader Big Book Collection** Animals– pg 15 **Delta First Science Readers Science & Literacy TG** pg - 92
29. Match models of baby animals with their parents (LS-E-B3)	**Full Option Science System** *Animals 2X2* Investigation 1-4 **First Reader Big Book Collection** Animals– pg 16 **Delta First Science Readers Science & Literacy TG** pg 93
Earth and Space Science	
Properties of Earth Materials	
30. Distinguish between areas of Earth covered by land and water (ESS-E-A2)	**First Reader Big Book Collection** Earth pg4-13 **Delta First Science Readers Science & Literacy TG** pg 197-200 & 205-206
31. Identify the patterns in information recorded on a weather calendar (ESS-E-A4)	**First Reader Big Book Collection** 0Weather – pg 3-15 **Delta First Science Readers Science & Literacy TG** Activity1 pg 181-190
Objects in the Sky	
32. Discuss and differentiate objects seen in the day and/or night sky (e.g., clouds, Sun, stars, Moon) (ESS-E-B1)	**First Reader Big Book Collection** Sky– pg 2-15 **Delta First Science Readers Science & Literacy TG** Activity1 pg 295-301

Grade One
Correlation to Louisiana Grade Level Expectations

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
Science as Inquiry *The Grade-Level Expectations (GLEs) from this strand should be interwoven with all content not just taught as a separate unit.*	
The Abilities Necessary to Do Scientific Inquiry	
1. Ask questions about objects and events in the environment (e.g., plants, rocks, storms) (SI-E-A1)	**Full Option Science System** *Pebble, Sand & Silt* Investigation 1 pg 8-17, 18-21 Investigation 2 pg 18-23 Investigation 3 pg 12-19 Investigation 4 pg 8-14, 15-20 **Delta Science Module** *From Seed to Plant* Activity 5 pg 45-52 Activity 6 pg 53-58 *Observing Aquariums* Activities 2-5 pg 2 3-56
2. Pose questions that can be answered by using students' own observations and scientific knowledge (SI-E-A1)	**Full Option Science System** Pebble, Sand & Silt Investigation 3 pg 12-19 **Delta Science Module** *From Seed to Plant* Activities 9-13 pg 73-104 *Observing Aquariums* Activities 8-10 pg 79-108
3. Predict and anticipate possible outcomes (SI-E-A2)	**Full Option Science System** *Pebble, Sand & Silt* Investigation 2 pg 18-23 **Delta Science Module** *From Seed to Plant* Activity 7 pg 59-66 Activity 8 pg 67-72 Activity11 pg85-90 *Observing Aquariums* Activity 11 pg 109-116
4. Use a variety of methods and materials and multiple trials to investigate ideas (observe, measure, accurately record data) (SI-E-A2)	**Full Option Science System** *Pebble, Sand & Silt* Investigation 3 pg 12-19 Investigation 4 pg 8-14, 15-20 **Delta Science Module** *From Seed to Plant* Activity 5 pg 45-52 Activity 8 pg 67-72
5. Use the five senses to describe	**Full Option Science System** *Pebble, Sand & Silt*

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
observations (SI-E-A3)	Investigation 1 pg 8-17, 18-21 Investigation 2 pg 18-23 **Delta Science Module** *From Seed to Plant* Activities 12 pg 91-96 Activity 14 pg 105-110 *Observing Aquariums* Activities 4-6 pg 39-68
6. Measure and record length and temperature in both metric system and U.S. system units (SI-E-A4)	**Full Option Science System** *Pebble, Sand & Silt* Investigation 2 pg 18-23 Investigation 3 pg 12-19 Investigation 4 pg 8-14, 15-20 **Delta Science Module** *From Seed to Plant* Activity 7 pg 59-66
7. Select and use developmentally appropriate equipment and tools and units of measurement to observe and collect data (SI-E-A4)	**Full Option Science System** *Pebble, Sand & Silt* Investigation 1 pg 8-17, 18-21 Investigation 2 pg 18-23 **Delta Science Module** *From Seed to Plant* Activity 7 pg 59-66
8. Express data in a variety of ways by constructing illustrations, graphs, charts, tables, concept maps, and oral and written explanations as appropriate (SI-E-A5) (SI-E-B4)	**Full Option Science System** *Pebble, Sand & Silt* Investigation 2 pg 18-23 **Delta Science Module** *From Seed to Plant* Activity 5 pg 45-52 Activity 7 pg 59-66 *Observing Aquariums* Activities 3-7 pg 31-78 **Grade 1 Physical Science Literacy Pack** How do we Learn? - pg14-16
9. Use a variety of appropriate formats to describe procedures and to express ideas about demonstrations or experiments (e.g., drawings, journals, reports, presentations, exhibitions, portfolios) (SI-E-A6)	**Full Option Science System** *Pebble, Sand & Silt* Investigation 2 pg 18-23 **Delta Science Module** *From Seed to Plant* Activity 5 pg45-52 Activity 7 pg 59-66 *Observing Aquariums* Activities 3-7 pg 31-78

10. Identify and use appropriate safety procedures and equipment when conducting investigations (e.g., gloves, goggles, hair ties) (SI-E-A7)	**Full Option Science System** *Pebble, Sand & Silt* Overview pg 17 **Delta Science Module** *From Seed to Plant* Teacher Resources pg 129 *Observing Aquariums* Teacher Resources pg 145
Understanding Scientific Inquiry	
11. Recognize that a variety of tools can be used to examine objects at different degrees of magnification (e.g., hand lens, microscope) (SI-E-B3)	**Full Option Science System** *Pebble, Sand & Silt* Investigation 1 pg 8-17, 18-21 Investigation 2 pg 18-23 **Delta Science Module** *Observing Aquariums* Activity 3- 12 pg 31-126 **Grade 1 Physical Science Literacy Pack** How do we Learn? - pg10 -13
12. Explain and give examples of how scientific discoveries have affected society (SI-E-B6)	**Full Option Science System** *Pebble, Sand & Silt* Investigation 3 pg 12-19 **FOSS Science Stories** Pebble, Sand & Silt pg14-17 **DSM Student Reader** From Seed to Plant p 13 Observing Aquariums p13
Physical Science	
Properties of Objects and Materials	
13. Sort a group of objects by using multiple characteristics (PS-E-A1)	**Full Option Science System** *Pebble, Sand & Silt* Investigation 1 pg 8-17, 18-21 Investigation 2 pg 18-23 **FOSS Science Stories** Pebble, Sand & Silt pg 2-7 **Delta Science Module** *Properties* Activities 1-6 pg 13-52 **DSM Student Reader** Properties pg 2-4 **Grade 1 Physical Science Literacy Pack** How do we Learn? pg 2-13
14. Order objects by weight/mass (PS-E-A1)	**Delta Science Module** *Properties* Activity 6 pg 47-52 **DSM Student Reader** Properties pg 3 – 4 & 6

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
15. Measure length and width of a variety of objects and materials by using nonstandard tools, such as a paper clip, cube, shoe, and hands (PS-E-A2)	**Delta Science Module** *Properties* Activities1-4 pg 13-40 **Grade 1 Physical Science Literacy Pack** How do we Learn? pg 13
16. Observe and describe common properties of solids, liquids, and gases (PS-E-A4)	**Delta Science Module** *Properties* Activities 7-10 pg 53-80 **DSM Student Reader** Properties pg 5-13
17. Sort and classify objects by their state of matter (PS-E-A4)	**Delta Science Module** *Properties* Activity 12 pg 87-94 Activity 13 pg 95-100 **DSM Student Reader** Properties pg 5-13
Forms of Energy	
18. Demonstrate how sound is made in a variety of ways (e.g., singing, whispering, striking an object) (PS-E-C1)	
19. Describe and demonstrate the volume of sound (e.g., soft, loud) (PS-E-C1)	
20. Use a flashlight and various objects and materials to determine if light is transmitted or reflected (PS-E-C2)	
21. Demonstrate that light can be reflected onto another object by using a mirror (PS-E-C2)	
22. Identify some examples where heat is released (e.g., burning candles, rubbing hands, running) (PS-E-C3)	
23. Identify materials attracted by magnets (PS-E-C5)	**Delta Science Module** *Properties* Activity 11 pg 81-94 **DSM Student Reader** Properties pg 8
24. Determine, through experimentation, which poles of magnets are attracted to each other and which poles repel each other (PS-E-C5)	**Delta Science Module** *Properties* Activity 11 pg 81-94 **DSM Student Reader** Properties pg 8
25. Discuss what type of energy makes objects	

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
work (e.g., car/gasoline, waterwheel/water, lamp/electricity) (PS-E-C6) (PS-E-C7)	
Life Science	
Characteristics of Organisms	
26. Describe the differences between plants and animals (LS-E-A1)	**Delta Science Module** *From Seed to Plant* Activity 9 pg 73-78 Activity 10 pg 79-84 Activity 13 pg 97-104 *Observing Aquariums* Activity 2-6 pg 23-78 **DSM Student Reader** From Seed to Plant pg 7-9 Observing Aquariums p8-9, 12
27. Identify what animals and plants need to grow and develop (LS-E-A1)	**Delta Science Module** *From Seed to Plant* Activity 14 pg 105-110 *Observing Aquariums* Activity 2 pg 23-30 **DSM Student Reader** From Seed to Plant pg 7-9 Observing Aquariums p12
28. Describe the characteristics of *living (biotic)* and *nonliving (abiotic)* things (LS-E-A2)	**Delta Science Module** *From Seed to Plant* Activity 1 pg 15-20 Activity 2 pg 21-32 *Observing Aquariums* Activity 2
29. Describe basic functions of parts of the body (e.g., lungs, heart, bones, muscles) (LS-E-A3)	**Delta Science Module** *Observing an Aquarium* Activity 3-5 pg 31-56 **DSM Student Reader** Observing Aquariums p 6-8
Life Cycles of Organisms	
30. Record and share observations of changes in developing plants (LS-E-B1)	**Delta Science Module** *From Seed to Plant* Activity 6 pg 53-58 Activity 7 pg 59-66 Activity 11 pg 85-90 **DSM Student Reader** From Seed to Plant pg10-11
31. Describe how animals and their offspring are similar and how they are different (LS-E-B3)	**Delta Science Module** *Observing Aquariums* Activity 10 pg 97-108 **DSM Student Reader**

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
	Observing Aquariums pg 10 -11
Organisms and Their Environment	
32. Describe features of some animals that benefit them in their environments (LS-E-C1)	**Delta Science Module** *Observing Aquariums* Activity 2-6 pg 23-78
33. Explain how pets' needs are met in their habitats (LS-E-C1)	**Delta Science Module** *Observing Aquariums* Activity 2-10 pg 23-108
34. Record evidence of plants and animals in the schoolyard or other environments (LS-E-C2)	**Delta Science Module** *Observing Aquariums* Activity 12 pg117-126
Earth and Space Science	
Properties of Earth Materials	
35. Examine soils to determine that they are often found in layers (ESS-E-A1)	**Full Option Science System** *Pebble, Sand & Silt* Investigation 4 pg 8-14, 15-20 **FOSS Science Stories** Pebble, Sand & Silt pg 2-7
36. Locate and compare the relative proportions of land and water found on Earth (ESS-E-A2)	**Delta Science Module** *Observing Aquariums* Activity 1 pg 15-22
37. Illustrate how water changes from one form to another (e.g., freezing, melting, evaporating) (ESS-E-A3)	**Delta Science Module** *Properties* Activity 7-9 pg53-66 **DSM Student Reader** Properties pg 15
38. Compare weather patterns as they relate to seasonal changes in students' immediate environment (ESS-E-A4)	**Grade 1 Earth Science Literacy Pack** Weather pg 4-8 & 14
39. Identify the characteristics of soil, according to color, texture, and components, including *living (biotic)* and *nonliving (abiotic)* substances (ESS-E-A6)	**Full Option Science System** *Pebble, Sand & Silt* Investigation 4 pg 8-14, 15-20 **FOSS Science Stories** Pebble, Sand & Silt pg 2-7

Grade Two
Correlation to Louisiana Grade Level Expectations

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
Science as Inquiry *The Grade-Level Expectations (GLEs) from this strand should be interwoven with all content not just taught as a separate unit.*	
The Abilities Necessary to Do Scientific Inquiry	
1. Ask questions about objects and events in the environment (e.g., plants, rocks, storms) (SI-E-A1)	**Full Option Science System** *Air & Weather* Investigation1pg 11-12, 15-16, 19-20, Investigation 2 pg 11-13, 17-19 Investigation 3 pg10-11, 19-21, 25-27, 30-33 *Insects & Plants* Investigation 1 pg 57-61, 64-67, 73-75 Investigation 2 pg 93-94,100-104, 107-111 Investigation 3 pg132-133.139-143, 147-151 Investigation 4 pg 168-169, 172-174,181-184,189-191 Investigation 5 pg 208-211, 215-218, 222-225 **Delta Science Module** *Soil Science* Activities 5 pg 45-50 Activities 8-11 pg 69-98 *States of Matter* Activity 4 pg 35-40 Activity 5 pg 41-50
2. Pose questions that can be answered by using students' own observations, scientific knowledge, and testable scientific investigations (SI-E-A1)	**Full Option Science System** *Air & Weather* Investigation1pg 11-12, 15-16, 19-20, 23-26 *Insects & Plants* Investigation 1 pg 57-61, 64-67, 73-75 Investigation 5 pg 208-211, 215-218, 222-225 **Delta Science Module** *Soil Science* Activities 5 pg 45-50 Activities 8-11 pg 69-98 *States of Matter* Activity 4 pg 35-40 Activity 5 pg 41-50
3. Use observations to design and conduct simple investigations or experiments to answer testable questions (SI-E-A2)	**Full Option Science System** *Air & Weather* Investigation1pg, 15-16, 23-26 Investigation 2 pg 11-13, 17-19, 22-23, 26-27 Investigation 3 pg10-11, 14-16, 19-21, 25-27, 30-33 Investigation 4 pg10-11, 16-18,22-24 *Insects & Plants*

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
	Investigation 3 pg132-133. 139-143, 147-151 **Delta Science Module** *Soil Science* Activities 5 pg 45-50 Activities 8-11 pg 69-98 *States of Matter* Activity 12 pg 97-102
4. Predict and anticipate possible outcomes (SI-E-A2)	**Full Option Science System** *Air & Weather* Investigation 2 pg 11-13, 17-19 Investigation 3 pg10-11, 14-16, 19-21 Investigation 4 pg10-11 *Insects & Plants* Investigation 2 pg 93-94,100-104, 107-111 **Delta Science Module** *Soil Science* Activity 3 pg29-36 *States of Matter* Activity 4 pg 35-40
5. Use a variety of methods and materials and multiple trials to investigate ideas (observe, measure, accurately record data) (SI-E-A2)	**Full Option Science System** *Air & Weather* Investigation1 pg 11-12, 15-16, 19-20, 23-26 *Insects & Plants* Investigation 2 pg 93-94,100-104, 107-111 **Delta Science Module** *Soil Science* Activity 10 pg 91-98 *States of Matter* Activity 5 pg 41-50
6. Use the five senses to describe observations (SI-E-A3)	**Full Option Science System** *Air & Weather* Investigation1pg 11-12, 23-26 *Insects & Plants* Investigation 2 pg 93-94,100-104, 107-111 Investigation 4 pg 168-169, 172-174, 177-178, 181-184 **Delta Science Module** *Soil Science* Activity 12 pg 107-114 *States of Matter* Activity 12 pg 97-102
7. Measure and record length, temperature, mass, volume, and area in both metric system and U.S. system units (SI-E-A4)	**Full Option Science System** *Air & Weather* Investigation 2 pg 17-19, 26-27 *Volume:* Duplication master #13 *Temperature* : Duplication masters #10 -11 *Length*: Duplication masters #27-28 *Insects & Plants* Investigation 2 pg 93-94,100-104, 107-111

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
	Delta Science Module *States of Matter* Activities 6 pg 51-56 Activities 7-11 pg 57-98 **Delta Science Reader** States of Matter p 2 (mass)
8. Select and use developmentally appropriate equipment and tools (e.g., magnifying lenses, microscopes, graduated cylinders) and units of measurement to observe and collect data (SI-E-A4)	**Full Option Science System** *Air & Weather* Investigation 2 pg 17-19, 26-27 *Insects & Plants* Investigation 1 pg 57-61, 64-67, 73-75 **Delta Science Module** *Soil Science* Activity 1 pg 15-20 *States of Matter* Activities 2 pg 19-26 Activities 4-7 pg 35-56 Activity 11 pg 89-96
9. Express data in a variety of ways by constructing illustrations, graphs, charts, tables, concept maps, and oral and written explanations as appropriate (SI-E-A5) (SI-E-B4)	**Full Option Science System** *Air & Weather* Investigation 2 pg 11-13 Investigation 4 pg10-11 *Insects & Plants* Investigation 1 pg 57-61, 64-67, 73-75 Investigation 2 pg 93-94,100-104, 107-111 Investigation 3 pg132-133. 139-143, 147-151 **Delta Science Module** *Soil Science* Activities 12 pg107-114 *States of Matter* Activity 12 pg97-102
10. Use a variety of appropriate formats to describe procedures and to express ideas about demonstrations or experiments (e.g., drawings, journals, reports, presentations, exhibitions, portfolios) (SI-E-A6)	**Full Option Science System** *Air & Weather* Investigation1pg 11-12, 15-16, 19-20, 23-26 *Insects & Plants* Investigation 2 pg 93-94,100-104, 107-111 **Delta Science Module** *Soil Science* Activities 1 pg15-20 Activity 3 pg 39-36 Activity 6 pg 51-58 Activity 12 pg 107-114 *States of Matter* Activities 4-9 pg 35-80

11. Identify and use appropriate safety procedures and equipment when conducting investigations (e.g., gloves, goggles, hair ties) (SI-E-A7)	**Full Option Science System** *Air & Weather* Overview p 17 *Insects & Plants* Overview p 24 **Delta Science Module** *Soil Science* Teacher Resources pg137 *States of Matter* Teacher Resources pg125
Understanding Scientific Inquiry	
12. Recognize that a variety of tools can be used to examine objects at different degrees of magnification (e.g., hand lens, microscope) (SI-E-B3)	**Full Option Science System** *Insects & Plants* Investigation 1 pg 57-61, 64-67, 73-75 Investigation 2 pg 93-94,100-104, 107-111 **Delta Science Module** *Soil Science* Activities 1 pg 15-20
13. Explain and give examples of how scientific discoveries have affected society (SI-E-B6)	**FOSS Science Stories** Air & Weather pg 14-17 **DSM Student Reader** Soil Science pg 13-15 States of Matter pg 13-15 **Grade 2 Life Science Literacy pack** Plants & Animals Population pg 13-15 **Grade 2 Earth Science Literacy pack** Watching Weather pg 13-15 **Grade 2 Physical Science Literacy pack** Using Our Senses pg 13-15
Physical Science	
Properties of Objects and Materials	
14. Classify objects as *bendable* or *rigid* (PS-E-A1)	**Delta Science Module** States of Matter Activities 1-3 pg 13-34 Activity 7 pg 57-64 Activity 11 pg 89-96
15. Record the temperature of objects (Celsius and Fahrenheit) (PS-E-A1)	**Full Option Science System** *Air & Weather* Investigation 2 pg 17-19 **Delta Science Module** *States of Matter* Activities 2 pg 19-26 Activities 4-7 pg 35-56 Activity 11 pg 89-96
16. Measure weight/mass and volume of a variety of objects and materials by using a pan balance and various containers (PS-E-A2)	**Delta Science Module** *States of Matter* Activity 1 pg 13-18 **DSM Student Reader**

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
	States of Matter pg 2
17. Use standard tools to measure objects or materials (e.g., ruler, meter stick, measuring tape, pan balance, thermometer, graduated cylinder) (PS-E-A2)	**Full Option Science System** *Air & Weather* Investigation 2 pg 17-19 *Insects* Investigation 2 pg 93-94,100-104, 107-111 **Delta Science Module** *States of Matter* Activity 6 pg 51-56 Activity 7 pg 57-64 **DSM Student Reader** States of Matter pg 2 & 13 **Grade 2 Earth Science Literacy pack** Watching Weather pg 6
18. Observe, describe, and record the characteristics of materials that make up different objects (e.g., metal, nonmetal, plastic, rock, wood, paper) (PS-E-A3)	**Delta Science Module** States of Matter 12 pg 97-102 **DSM Student Reader** States of Matter pg11-12
19. Describe and illustrate what remains after water evaporates from a salt or sugar solution (PS-E-A5)	**Delta Science Module** *States of Matter* Activity 10 pg 81-87 **DSM Student Reader** States of Matter pg 11
Position and Motion of Objects	
20. Observe and describe differences in motion between objects (e.g., toward/away, cardinal directions) (PS-E-B3)	**Full Option Science System** *Air & Weather* Investigation1 pg 19-20 Investigation 3 pg10-11, 19-21
Forms of Energy	
21. Use students' own voices to demonstrate pitch (e.g., low, high) (PS-E-C1)	**Delta Science Reader** Using Your Senses pg 6 & 7 (refer to teacher guide for further extensions)
22. Give examples of objects that vibrate to produce sound (e.g., drum, stringed instrument, end of a ruler, cymbal) (PS-E-C1)	**Delta Science Reader** Using Your Senses pg 6 & 7 (refer to teacher guide for further extensions)
23. Change the direction of light by using a mirror and/or lens (PS-E-C2)	
24. Describe how light behaves when it strikes objects and materials (e.g., transparent, translucent, opaque) (PS-E-C2)	
25. Investigate ways of producing static electricity	

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
and describe its effects (PS-E-C4)	
26. Identify and describe sources of energy used at school, home, and play (PS-E-C7)	**Full Option Science System** *Air & Weather* Investigation 1 pg 23-26 Investigation 3 pg19-21 **Grade 2 Physical Science Literacy pack** Forces pg 4-9
Life Science	
Characteristics of Organisms	
27. Match the appropriate food source and habitat for a variety of animals (e.g., cows/grass/field, fish/tadpoles/water) (LS-E-A1)	**Full Option Science System** *Insects & Plants* Investigation 1 pg 57-61 Investigation 4 pg 172-174 **Grade 2 Life Science Literacy pack** Plants & Animals Population pg 2-3,8-9,12-13
28. Describe structures of plants (e.g., roots, leaves, stems, flowers, seeds) (LS-E-A3)	**Full Option Science System** *Insects & Plants* Investigation 2 pg 93-94,100-104, 107-111 **FOSS Science Stories** Insects & Plants pg15-19
29. Compare differences and similarities among a variety of seed plants (LS-E-A3)	**Full Option Science System** *Insects & Plants* Investigation 2 pg 93-94,100-104, 107-111 **Grade 2 Life Science Literacy pack** Plants & Animals Population pg 4-5
. 30. Identify physical characteristics of organisms (e.g., worms, amphibians, plants) (LS-E-A4)	**Full Option Science System** *Insects & Plants* Investigation 1 pg 57-61, 64-67, 73-75 Investigation 2 pg 93-94,100-104, 107-111 Investigation 3 pg132-133. 139-143, 147-151 Investigation 4 pg 168-169, 172-174, 177-178, 181-184, **FOSS Science Stories** Insects & Plants pg30-36, 44-57
31. Identify and discuss the arrangement of the food pyramid (LS-E-A6)	**FOSSWEB.com** http://www.fossweb.com/modules3-6/FoodandNutrition/activities/whatsfordinner.html (Activity)
32. Analyze selected menus to determine whether they include representatives of all the required food groups (LS-E-A6)	**FOSSWEB.com** http://www.fossweb.com/modules3-6/FoodandNutrition/activities/whatsfordinner.html (Activity)
Life Cycles of Organisms	
33. Compare the life cycles of selected organisms	**Full Option Science System** *Insects & Plants*

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
(e.g., mealworm, caterpillar, tadpole) (LS-E-B1)	Investigation 1 pg 57-61, 64-67, 73-75 Investigation 3 pg132-133. 139-143, 147-151 Investigation 4 pg 168-169, 172-174, 177-178, 181-184, Investigation 5 pg 208-211, 215-218, 222-225 **FOSS Science Stories** Insects & Plants pg 37-56
34. Describe inherited characteristics of living things (LS-E-B3)	**Full Option Science System** *Insects & Plants* Investigation 1 pg 57-61, 64-67, 73-75 Investigation 3 pg132-133. 139-143, 147-151 Investigation 4 pg 168-169, 172-174, 177-178, 181-184 Investigation 5 pg 208-211, 215-218, 222-225 **FOSS Science Stories** Insects & Plants pg 8-14, 20-25
Organisms and Their Environment	
35. Identify the components of a variety of habitats and describe how organisms in those habitats depend on each other (LS-E-C1)	**Full Option Science System** *Insects & Plants* Investigation 3 pg132-133. 139-143, 147-151 **Grade 2 Life Science Literacy pack** Plants & Animals Population pg 2-13
Earth and Space Science	
Properties of Earth Materials	
36. Observe and record the properties of rocks, minerals, and soils gathered from their surroundings (e.g., color, texture, odor) (ESS-E-A1)	**Delta Science Module** *Soil Science* Activities 1-3 pg 15-36 **DSM Student Reader** Soil Science pg 7
37. Compare bodies of water found on Earth (e.g., oceans, seas, lakes, rivers, glaciers) (ESS-E-A2)	**Full Option Science System** *Air & Weather* Investigation 2 p27 (Natural Sources of Water Poster) **FOSS Science Stories** Air & Weather pg 14-17
38. Explain why most of the water on Earth cannot be used as drinking (potable) water (ESS-E-A2)	
39. Design an experiment involving evaporation (ESS-E-A3)	**Delta Science Module** *States of Matter* Activity 8 pg 65-72 **DSM Student Reader** States of Matter pg 9 **Grade 2 Earth Science Literacy pack**

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
	Watching Weather pg 4&5
40. Gather, record, and graph weather data (e.g., precipitation, wind speed, wind direction, temperature) using appropriate instruments (ESS-E-A4)	**Full Option Science System** *Air & Weather* Investigation 2 pg 11-13, 17-19, 22-23, 26-27 Investigation 3 pg14-16, 25-27 **FOSS Science Stories** Air & Weather pg 14-17 **Grade 2 Earth Science Literacy pack** Watching Weather pg 6& 7
41. Analyze recorded daily temperatures and weather conditions from newspapers, television, the Internet, and home/outdoor thermometers (ESS-E-A4)	**Full Option Science System** *Air & Weather* Investigation 4 pg10-11 **FOSS Science Stories** Air & Weather pg 7-17 **Grade 2 Earth Science Literacy pack** Watching Weather pg 2 - 3, 6-7
42. Identify and use appropriate tools to gather and study rocks, minerals, and fossils (ESS-E-A5)	**Delta Science Module** Soil Science Activity 1 pg 15-20 Activity 4 pg 37-44
Objects in the Sky	
43. Describe characteristics of the Sun, stars, and Earth's moon (e.g., relative size, shape, color, production of light/heat) (ESS-E-B1)	**Full Option Science System** *Air & Weather* Investigation 4 pg16-18
44. Give examples of how the Sun affects Earth's processes (e.g., weather, water cycle) (ESS-E-B5)	**Grade 2 Earth Science Literacy pack** Watching Weather pg 4-5
Science and the Environment	
45. Locate and identify plants and animals within an ecosystem (SE-E-A2)	**FOSS Science Stories** Insects & Plants pg 2-14 **Grade 2 Life Science Literacy pack** Plants & Animals Population pg 2-13
46. Illustrate and describe a simple food chain located within an ecosystem (SE-E-A2)	**Grade 2 Life Science Literacy pack** Plants & Animals Population pg 10-13
47. Identify the Sun as the primary energy source in a food chain (SE-E-A2)	**Grade 2 Life Science Literacy pack** Plants & Animals Population pg 12_13
48. Describe a variety of activities related to preserving the environment (SE-E-A3)	**Delta Science Module** *Soil Science* Activities 9-11 pg 81-106 **DSM Student Reader** Soil Science pg 10-15

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
	Grade 2 Life Science Literacy pack Plants & Animals Population pg 14
49. Describe how consumption of resources can be reduced by recycling, reusing, and conserving (SE-E-A4)	**Delta Science Module** *Soil Science* Activities 9-11 pg 81-106 **DSM Student Reader** Soil Science pg 10-15 **Grade 2 Life Science Literacy pack** Plants & Animals Population pg 14
50. Describe ways in which habitat loss or change can occur as a result of natural events or human impact (SE-E-A5)	**Delta Science Module** *Soil Science* Activities 9-11 pg 81-106 **DSM Student Reader** Soil Science pg 10-15 **Grade 2 Life Science Literacy pack** Plants & Animals Population pg 14
51. Describe and give examples of threatened or endangered species (SE-E-A5)	**Grade 2 Life Science Literacy pack** Plants & Animals Population pg 15 (refer to teacher guide for further extensions)

Grade Three
Correlation to Louisiana Grade Level Expectations

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
Science as Inquiry *The Grade-Level Expectations (GLEs) from this strand should be interwoven with all content not just taught as a separate unit.*	
The Abilities Necessary to Do Scientific Inquiry	
1. Ask questions about objects and events in the environment (e.g., plants, rocks, storms) (SI-E-A1)	**Full Option Science System** *Earth Materials* Investigation 1 pg 19-23, 26-29 Investigation 4 pg 10-13, 17-18 *Structures of Life* Investigation 1 pg 13-17, 22-27, 30-33 Investigation 2 pg 11-13, 16-17, 20-22 Investigation 3 pg 12-15, 18-21, 22-23,27-30 Investigation 4 pg 10-13, 17-19, 22-24, 26-29
2. Pose questions that can be answered by using students' own observations, scientific knowledge, and testable scientific investigations (SI-E-A1)	**Full Option Science System** *Earth Materials* Investigation 2 pg 10-13, 16-21 Investigation 3 pg 10-13, 16-19 Investigation 4 pg 10-13, 17-18 *Measurement* Investigation 1 pg 11-15, 18-19, 22-24 Investigation 2 pg 10-13, 16-17, 20-21 Investigation 3 pg 11-13,16-17, 20-21 Investigation 4 pg 11-13, 16-17, 20-21 *Structures of Life* Investigation 1 pg 13-17, 22-27, 30-33 Investigation 2 pg 11-13, 16-17, 20-22 **Delta Science Module** *Force & Motion* Activities 3-5 pg 31-56
3. Use observations to design and conduct simple investigations or experiments to answer testable questions (SI-E-A2)	**Full Option Science System** *Earth Materials* Investigation 1 pg 11-15, 19-23, 26-29 Investigation 4 pg 10-13, 17-18 *Structures of Life* Investigation 4 pg 22-24, 26-29 Investigation 5 pg 21-24, 26-29
4. Predict and anticipate possible outcomes (SI-E-A2)	**Full Option Science System** *Earth Materials* Investigation 2 pg 10-13, 16-21 Investigation 3 pg 10-13, 16-19 Investigation 4 pg 10-13, 17-18 *Measurement* Investigation 1 pg 11-15, 18-19, 22-24

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
	Investigation 2 pg 10-13, 16-17, 20-21 Investigation 3 pg 11-13,16-17, 20-21 Investigation 4 pg 11-13, 16-17, 20-21 *Structures of Life* Investigation 1 pg 13-17, 22-27, 30-33 Investigation 2 pg 11-13, 16-17, 20-22 **Delta Science Module** *Force & Motion* Activity 5 pg 49-56 Activity 8 pg 73-82
5. Use a variety of methods and materials and multiple trials to investigate ideas (observe, measure, accurately record data) (SI-E-A2)	**Full Option Science System** *Measurement* Investigation 1 pg 11-15, 18-19, 22-24 Investigation 2 pg 10-13, 16-17, 20-21 Investigation 3 pg 11-13,16-17, 20-21 Investigation 4 pg 11-13, 16-17, 20-21 **Delta Science Module** *Force & Motion* Activities 1-4 pg 13-48
6. Use the five senses to describe observations (SI-E-A3)	**Full Option Science System** *Earth Materials* Investigation 1 pg 11-15, 19-23, *Measurement* Investigation 1 pg 11-15, 18-19, 22-24 Investigation 2 pg 10-13, 16-17, 20-21 Investigation 3 pg 11-13, 16-17, 20-21 Investigation 4 pg 11-13, 16-17, 20-21 *Structures of Life* Investigation 3 pg 12-15, 18-21, 22-23,27-30 Investigation 4 pg 10-13, 17-19, 22-24, 26-29
7. Measure and record length, temperature, mass, volume, and area in both metric system and U.S. system units (SI-E-A4)	**Full Option Science System** *Measurement* Investigation 1 pg 18-19, 22-24 Investigation 2 pg 10-13,16-17, 20-21 Investigation 3 pg 11-13,16-17, 20-21 Investigation 4 pg 11-13,16-17, 20-21 **Delta Science Module** *Force & Motion* Activities 1-5 pg 13-56
8. Select and use developmentally appropriate equipment and tools (e.g., magnifying lenses, microscopes, graduated cylinders) and units of measurement to observe and collect data (SI-E-A4)	**Full Option Science System** *Earth Materials* Investigation 1 pg 11-15, 19-23, 26-29 *Measurement* Investigation 1 pg 11-15,18-19, 22-24 Investigation 2 pg 10-13,16-17, 20-21 Investigation 3 pg 11-13,16-17, 20-21 Investigation 4 pg 11-13,16-17, 20-21 *Structures of Life* Investigation 1 pg 22-27, 30-33

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
	Delta Science Module *Force & Motion* Activity 1 pg 13-22 Activity 8 pg 73-82 Activity 9 pg 83-90 Activity 12 pg 111-118
9. Express data in a variety of ways by constructing illustrations, graphs, charts, tables, concept maps, and oral and written explanations as appropriate (SI-E-A5) (SI-E-B4)	**Full Option Science System** *Earth Materials* Investigation 2 pg 10-13, 16-21 Investigation 3 pg 10-13, 16-19 *Measurement* Investigation 1 pg 11-15,18-19, 22-24 Investigation 2 pg 10-13,16-17, 20-21 Investigation 3 pg 11-13,16-17, 20-21 Investigation 4 pg 16-17 *Structures of Life* Investigation 1 pg 13-17, 22-27, 30-33 Investigation 2 pg 11-13, 16-17, 20-22 **Delta Science Module** *Force & Motion* Activities 3-5 pg 31-56
10. Combine information, data, and knowledge from one or more of the science content areas to reach a conclusion or make a prediction (SI-E-A5)	**Full Option Science System** *Earth Materials* Investigation 1 pg 26-29 *Measurement* Investigation 1 pg 11-15,18-19, 22-24 Investigation 2 pg 10-13,16-17, 20-21 Investigation 3 pg 11-13,16-17, 20-21 Investigation 4 pg 11-13,16-17, 20-21 *Structures of Life* Investigation 4 pg 10-13, 17-19, **Delta Science Module** *Force & Motion* Activity 1 pg 13-22 Activity 8 pg 73-82 Activity 9 pg 83-90 Activity 12 pg 111-118
11. Use a variety of appropriate formats to describe procedures and to express ideas about demonstrations or experiments (e.g., drawings, journals, reports, presentations, exhibitions, portfolios) (SI-E-A6)	**Full Option Science System** *Earth Materials* Investigation 1 pg 11-15, 19-23, 26-29 *Measurement* Investigation 1 pg 11-15,18-19, 22-24 Investigation 2 pg 10-13,16-17, 20-21 Investigation 4 pg 11-13,16-17, 20-21 *Structures of Life* Investigation 1 pg 13-17, 22-27, 30-33 Investigation 2 pg 11-13, 16-17, 20-22 **Delta Science Module** *Force & Motion*

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
	Activities 3-5 pg 31-56
12. Identify and use appropriate safety procedures and equipment when conducting investigations (e.g., gloves, goggles, hair ties) (SI-E-A7)	**All FOSS kits include safety in the classroom as well as point of use safety instructions. See for example:** **Full Option Science System** *Earth Materials* Overview pg 17 *Investigation 3 pg 9,11& 12* *Measurement* Overview pg 17 *Structures of Life* Overview pg 17 Investigation 1 pg 13 & 35 **All DSM Kits have green safety boxes at point of us. See for example:** *Force & Motion* pg15,17,25,43 & 51
Understanding Scientific Inquiry	
13. Identify questions that need to be explained through further inquiry (SI-E-B1)	**Full Option Science System** *Earth Materials* Investigation 3 pg 10-13, 16-19 *Structures of Life* Investigation 4 pg 26-29 Investigation 5 pg 26-29 **Delta Science Module** *Force & Motion* Activities 3-5 pg 31-56
14. Distinguish between what is known and what is unknown in scientific investigations (SI-E-B1)	**Full Option Science System** *Earth Materials* Investigation 4 pg 10-13, 17-18 *Structures of Life* Investigation 3 pg 12-15, 18-21, 22-23,27-30 **Delta Science Module** *Force & Motion* Activity 1 pg 13-22 Activity 8 pg 73-82 Activity 9 pg 83-90
15. Recognize that a variety of tools can be used to examine objects at different degrees of magnification (e.g., hand lens, microscope) (SI-E-B3)	**Full Option Science System** *Earth Materials* Investigation 1 pg 11-15, 19-23, 26-29 Investigation 2 pg 10-13, *Structures of Life* Investigation 1 pg 30-33
16. Describe procedures and communicate data in a manner that allows others to understand and repeat an investigation or experiment (SI-E-B5)	**Full Option Science System** *Earth Materials* Investigation 2 pg 10-13, 16-21 Investigation 4 pg 10-13, 17-18 *Measurement*

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
	Investigation 1 pg 11-15,18-19, 22-24 Investigation 2 pg 10-13,16-17, 20-21 Investigation 3 pg 11-13,16-17, 20-21 Investigation 4 pg 11-13,16-17, 20-21 *Structures of Life* Investigation 4 pg 26-29 Investigation 5 pg 26-29 **Delta Science Module** *Force & Motion* Activities 3-5 pg 31-56
17. Explain and give examples of how scientific discoveries have affected society (SI-E-B6)	**FOSS Science Stories** Earth Materials pg 10-11 Measurement pg 8-9, 21-26 **DSM Student Reader** Force & Motion pg 1-15 Plant & Animal Life Cycles pg 14 & 15 **Grade 3 Earth Science Literacy Pack** Weather & Climate pg 16,17 & 19
Physical Science	
Properties of Objects and Materials	
18. Compare and classify objects on properties determined through experimentation (e.g., ability to conduct electricity, tendency to float or sink in water) (PS-E-A1)	**Full Option Science System** *Earth Materials* Investigation 2 pg 16-21 Investigation 3 pg 10-13
19. Select the appropriate metric system and U.S. system tools for measuring length, width, temperature, volume, and mass (PS-E-A2)	**Full Option Science System** *Measurement* Investigation 1 pg 11-15,18-19, 22-24 Investigation 2 pg 10-13,16-17, 20-21 Investigation 3 pg 11-13,16-17, 20-21 Investigation 4 pg 11-13,16-17, 20-21 **Grade 3 Earth Science Literacy Pack** Weather & Climate pg 16-17
20. Measure temperature by using Fahrenheit and Celsius thermometers and compare results (PS-E-A2)	**Full Option Science System** *Measurement* Investigation 4 pg 11-13,16-17, 20-21
21. Compare common objects and identify the original material from which they are made (e.g., paper, pencil, comb) (PS-E-A3)	**Full Option Science System** *Earth Materials* Investigation 1 pg 11-15, 19-23, 26-29 Investigation 3 pg 10-13 Investigation 4 pg 10-13 **FOSS Science Stories** Earth Materials pg 24 -29
22. Investigate and explain conditions under which	**Full Option Science System** *Measurement*

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
matter changes physical states: heating, freezing, evaporating, condensing, boiling (PS-E-A4)	Investigation 4 pg 11-13,16-17, 20-21
Position and Motion of Objects	
23. Demonstrate how force is a *push* or a *pull* by using students' bodies, toy cars, or balls (PS-E-B2)	**Full Option Science System** *Structures of Life* Investigation 4 pg 22-24, 26-29 Investigation 5 pg 21-24, 26-29 **Delta Science Module** *Force & Motion* Activity 1pg 13-22 **DSM Student Reader** Force & Motion pg 2-3
24. Explain how the amount and direction of force exerted on an object (e.g., push, pull, friction, gravity) determine how much the object will move (PS-E-B2)	**Delta Science Module** *Force & Motion* Activity 1-2 pg 13-30 **DSM Student Reader** Force & Motion pg 2-3
25. Observe and analyze motion and position of objects over time (e.g., shadows, apparent path of the Sun across the sky) (PS-E-B3)	**Delta Science Content Readers** Earth Moon & Sun pg 14-19
26. Explain the effect of varying amounts of force on the motion of an object (PS-E-B4)	**Delta Science Module** *Force & Motion* Activity 1-2 pg 13-30 **DSM Student Reader** Force & Motion pg 2-3
Forms of Energy	
27. Use the words *high/low* to compare the pitch of sound and the words *loud/soft* to compare the volume (amplitude) of sound (PS-E-C1)	**Grade 3 Physical Science Literacy Pack** Sound pg 9-13
28. Describe the reflection/absorption properties of various colored objects (PS-E-C2)	**Grade 3 Physical Science Literacy Pack** Heat & Light pg 11-15
29. Determine which materials insulate best by using experimental data (PS-E-C3)	**Grade 3 Physical Science Literacy Pack** Heat & Light pg 7 Sound pg 14
30. Demonstrate and explain the movement of electricity in closed and open circuits (PS-E-C4)	**FOSSWEB.com** http://www.fossweb.com/modules3-6/MagnetismandElectricity/index.html (Media)
31. Compare and describe the common forms of energy and explain how they are used in	**Grade 3 Physical Science Literacy Pack** Energy pg 9-15

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
everyday life (e.g., light, electricity, heat, mechanical) (PS-E-C6)	
32. Give examples of how energy can be used to move or lift objects (PS-E-C6)	**Delta Science Module** *Force & Motion* Activities1-3 pg 13-40 **DSM Student Reader** Force & Motion pg 2-4
33. Identify simple machines and the tasks they make possible (PS-E-C6)	**Delta Science Module** *Force & Motion* Activities 6-12 pg 57-118 **DSM Student Reader** Force & Motion pg 5-11
Life Science	
Characteristics of Organisms	
34. Describe what the human body needs to grow and be healthy (LS-E-A1)	**Grade 3 Life Science Literacy Pack** Human Body Systems p12-13, 22 **FOSSWEB.com** http://www.fossweb.com/modules3-6/FoodandNutrition/activities/whatsfordinner.html (Activity)
35. Compare structures (parts of the body) in a variety of animals (e.g., fish, mammals, reptiles, amphibians, birds, insects) (LS-E-A3)	**Full Option Science System** *Structures of Life* Investigation 3 pg 12-15, 18-21, 22-23,27-30 Investigation 4 pg 10-13, 17-19, 22-24, 26-29 **FOSS Science Stories** Structures of Life pg 26-27 **Grade 3 Life Science Literacy Pack** Plant & Animal Life Cycles 7-12
36. Compare structures (e.g., roots, leaves, stems, flowers, seeds) and their functions in a variety of plants (LS-E-A3)	**Full Option Science System** *Structures of Life* Investigation 1 pg 13-17, 22-27, 30-33 Investigation 2 pg 11-13, 20-22 **FOSS Science Stories** Structures of Life pg 10-11 **Grade 3 Life Science Literacy Pack** Plant Needs pg 7-15
37. Describe how plant structures enable the plant to meet its basic needs (LS-E-A3)	**Full Option Science System** *Structures of Life* Investigation 2 pg 11-13, 20-22 **Science Stories** Structures of Life pg 10-11 **Grade 3 Life Science Literacy Pack** Plant Needs pg 2-7
38. Classify groups of organisms based on common characteristics (LS-E-A4)	**Full Option Science System** *Structures of Life* Investigation 4 pg 8-29

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
	FOSS Science Stories Structures of Life pg 26-27 **Grade 3 Life Science Literacy Pack** Plant & Animal Life Cycles 7-12
39. Compare organisms from different groups (e.g., birds with mammals, terrestrial plants with aquatic plants) (LS-E-A4)	**Full Option Science System** *Structures of Life* Investigation 4 pg 17-19 **FOSS Science Stories** Structures of Life pg 26-27 **Grade 3 Life Science Literacy Pack** Plant & Animal Life Cycles 7-12
40. Explain how the organs of the digestive system function (LS-E-A5)	**Grade 3 Life Science Literacy Pack** Human Body Systems pg 12-13
41. Describe how the components of the skeletal system function (LS-E-A5)	**Grade 3 Life Science Literacy Pack** Human Body Systems pg 14-15
42. Describe the relationship between eating habits and maintaining a healthy body (LS-E-A6)	**FOSSWEB.com** http://www.fossweb.com/modules3-6/FoodandNutrition/activities/whatsfordinner.html (Activity)
43. Identify a meal that includes representatives from each group of the food pyramid (LS-E-A6)	**FOSSWEB.com** http://www.fossweb.com/modules3-6/FoodandNutrition/index.html (Media)
Life Cycles of Organisms	
44. Graph, analyze, and interpret personal and class data (LS-E-B4)	**Full Option Science System** *Structures of Life* Investigation 3 pg 12-15, 18-21, 22-23,27-30 Investigation 4 pg 10-13, 17-19, 22-24, 26-29
Earth and Space Science	
Properties of Earth Materials	
45. Recognize and describe that rock is composed of different combinations of minerals (ESS-E-A1) (ESS-E-A5)	**Full Option Science System** *Earth Materials* Investigation 1 pg 19-23 Investigation 4 pg 10-13
46. Describe earth processes that have affected selected physical features in students' neighborhoods (e.g., rusting, weathering, erosion) (ESS-E-A1)	**Full Option Science System** *Earth Materials* Investigation 1 pg 11-15, 19-23, 26-29 Investigation 4 pg 10-13, 17-18 **FOSS Science Stories** Earth Materials pg 1-7 **Grade 3 Earth Science Literacy Pack** Soils pg 6-9

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
47. Describe the difference between weather and climate (ESS-E-A2)	**Grade 3 Earth Science Literacy Pack** Weather & Climate pg 3-12 & 20-23
48. Identify examples of the processes of a water cycle (e.g., evaporation, condensation, precipitation, collection of runoff) (ESS-E-A3)	**Grade 3 Earth Science Literacy Pack** Weather & Climate pg 8-9
49. Describe climate patterns from recorded weather conditions over a period of time (ESS-E-A4)	**Grade 3 Earth Science Literacy Pack** Weather & Climate pg15-23
50. Compare and group common rocks according to their characteristics (i.e., igneous, metamorphic, sedimentary) (ESS-E-A5)	**Full Option Science System** *Earth Materials* Investigation 1 pg 31 **FOSSWEB.com** **http://www.fossweb.com/modules3-6/EarthMaterials/activities/rockdatabase/index.html** **(Activity)**
51. Identify and compare the components found in soil (ESS-E-A6) (ESS-E-A1)	**Full Option Science System** *Earth Materials* Investigation 1 pg 8-33 **Grade 3 Earth Science Literacy Pack** Soils pg 3-5 7 11-17
52. Identify characteristics of selected fossils and explain how fossil records are used to learn about the past (ESS-E-A7)	**Grade 3 Earth Science Literacy Pack** Evidence of the Past **FOSSWEB.com** http://www.fossweb.com/modules3-6/EarthMaterials/index.html (Images)
Objects in the Sky	
53. Identify, in order, the planets of the solar system (ESS-E-B1)	**Grade 3 Earth Science Literacy Pack** Earth Moon & Star g 10-11
54. Describe the patterns of apparent change in the position of the Sun (ESS-E-B2)	**Grade 3 Earth Science Literacy Pack** Earth Moon & Star pg 14-19
55. Explain the results of the rotation and revolution of Earth (e.g., day and night, year) (ESS-E-B4)	**Grade 3 Earth Science Literacy Pack** Earth Moon & Star pg13-17
56. Compare shadow direction and length at different times of day and year (ESS-E-B4)	**Grade 3 Earth Science Literacy Pack** Earth Moon & Star pg 14

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
Science and the Environment	
57. Describe the interrelationships of *living (biotic)* and *nonliving (abiotic)* components within various ecosystems (e.g., terrarium, swamp, backyard) (SE-E-A1)	**Full Option Science System** *Structures of Life* Investigation 2 pg 11-13, 16-17, 20-22 Investigation 3 pg 12-15, 18-21, 22-23,27-30 Investigation 4 pg 10-13, 17-19, 22-24, 26-29
58. Describe how humans have had negative and positive effects on organisms and their environments (SE-E-A3) (SE-E-A5)	**Full Option Science System** *Structures of Life* Investigation 2 pg 11-13, 16-17, 20-22 Investigation 3 pg 12-15, 18-21, 22-23,27-30 Investigation 4 pg 10-13, 17-19, 22-24, 26-29 **Grade 3 Physical Science Literacy Pack** Energy pg 21-23 **Grade 3 Earth Science Literacy Pack** Soils pg 19-23
59. Classify manufactured products according to the natural resources from which they are made (e.g., copper wire from copper ore, plastic from petroleum) (SE-E-A4)	**FOSS Science Stories** Earth Materials pg 12-13
60. Explain how renewable and nonrenewable resources can be replenished or depleted (SE-E-A4)	**Grade 3 Physical Science Literacy Pack** Energy pg 21-23 **Grade 3 Earth Science Literacy Pack** Soils pg 19-23
61. Explain how selected animals once classified as endangered have recovered (SE-E-A5)	
62. Identify animals in Louisiana that have recovered and that are no longer considered endangered (SE-E-A5)	

Grade Four
Correlation to Louisiana Grade Level Expectations

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
Science as Inquiry *The Grade-Level Expectations (GLEs) from this strand should be interwoven with all content not just taught as a separate unit.*	
The Abilities Necessary to Do Scientific Inquiry	
1. Ask questions about objects and events in the environment (e.g., plants, rocks, storms) (SI-E-A1)	**Full Option Science System** *Matter & Energy* Investigation 1 pg 56-61, 66-69, 74-80 Investigation 4 pg177-180, 184-192,196-201 *Physics of Sound* Investigation 3 pg 11-14, 17-19 **Delta Science Module** *Food Chains & Webs* Activity 7-10 pg 59-88 *Plant & Animals Life Cycles* Activity 3 pg 33-42 Activity 5-7 pg 49-64
2. Pose questions that can be answered by using students' own observations, scientific knowledge, and testable scientific investigations (SI-E-A1)	**Full Option Science System** *Matter & Energy* Investigation 2 pg 96-102,106-114 Investigation 4 pg177-180, 184-192,196-201 *Physics of Sound* Investigation 1 pg 12-15, 18-20, 25-29 Investigation 4 pg 10-15, 19-20 **Delta Science Module** *Food Chains & Webs* Activity 9 -11 pg 73-96 *Plant & Animals Life Cycles* Activities 6-7 pg 57-74 Activity 12 pg 105-114
3. Use observations to design and conduct simple investigations or experiments to answer testable questions (SI-E-A2)	**Full Option Science System** *Matter & Energy* Investigation 2 pg 96-102,106-114 *Physics of Sound* Investigation 4 pg 10-15, 19-20
4. Predict and anticipate possible outcomes (SI-E-A2)	**Full Option Science System** *Matter & Energy* Investigation 2 pg 96-102,106-114 **Delta Science Module** *Food Chains & Webs* Activity 7-8 pg 59-72 *Plant & Animals Life Cycles* Activity 7 pg 65-74 Activity 12 pg 105-114

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
5. Identify variables to ensure that only one experimental variable is tested at a time (SI-E-A2)	**Full Option Science System** *Matter & Energy* Investigation 4 pg177-180, 184-192,196-201 *Physics of Sound* Investigation 4 pg 10-15, 19-20 **Delta Science Module** *Food Chains & Webs* Activity 2 pg 23-30
6. Use a variety of methods and materials and multiple trials to investigate ideas (observe, measure, accurately record data) (SI-E-A2)	**Full Option Science System** *Matter & Energy* Investigation 2 pg 93-114 Investigation 4 pg174-202 *Physics of Sound* Investigation 4 pg 10-15, 19-20
7. Use the five senses to describe observations (SI-E-A3)	**Full Option Science System** *Matter & Energy* Investigation 1 pg 56-61, 66-69, 74-80 Investigation 2 pg 96-102,106-114 Investigation 3 pg132-137,140-149,152-159 Investigation 4 pg177-180, 184-192,196-201 *Physics of Sound* Investigation 1 pg 12-15, 18-20, 25-29 Investigation 4 pg 10-15, 19-20 *Sun, Moon & Stars* Investigation 2 pg 82-88,90-98 **Delta Science Module** *Food Chains & Webs* Activity 1-12 pg 15-102 *Plant & Animals Life Cycles* Activity 1-12 pg 15-114
8. Measure and record length, temperature, mass, volume, and area in both metric system and U.S. system units (SI-E-A4)	**Full Option Science System** *Matter & Energy* Investigation 3 pg129-160 Investigation 4 pg174-202 **Delta Science Module** *Food Chains & Webs* Activity 6 pg 3-58 *Plant & Animals Life Cycles* Activity 3 pg 33-42 Activities 5-6 pg 49-64 Activity 9 pg 83-90
9. Select and use developmentally appropriate equipment and tools (e.g., magnifying lenses, microscopes, graduated cylinders) and units of measurement to observe and collect data (SI-E-A4)	**Full Option Science System** *Matter & Energy* Investigation 2 pg 96-102,106-114 Investigation 3 pg132-137,140-149,152-159 **Delta Science Module** *Food Chains & Webs* Activity 6 Activity 6 pg 3-58

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
	Plant & Animals Life Cycles Activity 3 pg 33-42 Activities 5-6 pg 49-64 Activity 9 pg 83-90
10. Express data in a variety of ways by constructing illustrations, graphs, charts, tables, concept maps, and oral and written explanations as appropriate (SI-E-A5) (SI-E-B4)	**Full Option Science System** *Matter & Energy* Investigation 3 pg132-137,140-149,152-159 Investigation 4 pg177-180, 184-192,196-201 **Delta Science Module** *Food Chains & Webs* Activity 6 pg 3-58 *Plant & Animals Life Cycles* Activity 3 pg 33-42 Activities 5-6 pg 49-64 Activity 9 pg 83-90
11. Combine information, data, and knowledge from one or more of the science content areas to reach a conclusion or make a prediction (SI-E-A5)	**Full Option Science System** *Matter & Energy* Investigation 2 pg 96-102,106-114 Investigation 4 pg177-180, 184-192,196-201 *Physics of Sound* Investigation 4 pg 10-15, 19-20
12. Use a variety of appropriate formats to describe procedures and to express ideas about demonstrations or experiments (e.g., drawings, journals, reports, presentations, exhibitions, portfolios) (SI-E-A6)	**Full Option Science System** *Matter & Energy* Investigation 2 pg 96-102,106-114 Investigation 3 pg132-137,140-149,152-159 *Physics of Sound* Investigation 4 pg 10-15, 19-20 **Delta Science Module** *Food Chains & Webs* Activity 11-12 pg 89-102 *Plant & Animals Life Cycles* Activity 2-9 pg 23-90
13. Identify and use appropriate safety procedures and equipment when conducting investigations (e.g., gloves, goggles, hair ties) (SI-E-A7)	*All FOSS kits include safety in the classroom as well as point of use safety instructions. See for example:* **Full Option Science System** *Matter & Energy* Overview pg 26, 53,58 & 185 *Sun, Moon & Stars* Overview pg 26 *All DSM Kits have safety information in Teacher resources section. See for example:* **Delta Science Module** *Food Chains & Webs* pg 125
Understanding Scientific Inquiry	
14. Identify questions that need to be explained	**Full Option Science System** *Matter & Energy*

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
through further inquiry (SI-E-B1)	Investigation 2 pg 96-102,106-114 Investigation 4 pg177-180, 184-192,196-201 *Physics of Sound* Investigation 4 pg 10-15, 19-20
15. Distinguish between what is known and what is unknown in scientific investigations (SI-E-B1)	**Full Option Science System** *Matter & Energy* Investigation 2 pg 96-102,106-114 Investigation 4 pg177-180, 184-192,196-201 *Physics of Sound* Investigation 1 pg 12-15, 18-20, 25-29 Investigation 4 pg 10-15, 19-20 **Delta Science Module** *Food Chains & Webs* Activity 9 -11 pg 73-102 *Plant & Animals Life Cycles* Activities 6-7 pg 57-74 Activity 12 pg 105-114
16. Select the best experimental design to answer a given testable question (SI-E-B2)	**Full Option Science System** *Matter & Energy* Investigation 2 pg 96-102,106-114 Investigation 4 pg177-180, 184-192,196-201 *Physics of Sound* Investigation 4 pg 10-15, 19-20
17. Recognize that a variety of tools can be used to examine objects at different degrees of magnification (e.g., hand lens, microscope) (SI-E-B3)	**Full Option Science System** *Sun, Moon & Stars* Investigation 3 pg 117-123, 128-131 **Delta Science Module** *Food Chains & Webs* Activity 6 pg 53-58 Activities 9-10 pg 73-88 *Plant & Animals Life Cycles* Activity 1-2 pg 15-32 Activity 6 pg 57-64
18. Base explanations and logical inferences on scientific knowledge, observations, and scientific evidence (SI-E-B4)	**Full Option Science System** *Matter & Energy* Investigation 2 pg 96-102,106-114 Investigation 4 pg177-180, 184-192,196-201 *Physics of Sound* Investigation 1 pg 12-15, 18-20, 25-29 Investigation 4 pg 10-15, 19-20 **Delta Science Module** *Food Chains & Webs* Activity 9 -11 pg 73-102 *Plant & Animals Life Cycles* Activities 6-7 pg 57-74 Activity 12 pg 105-114

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
19. Describe procedures and communicate data in a manner that allows others to understand and repeat an investigation or experiment (SI-E-B5)	**Full Option Science System** *Matter & Energy* Investigation 2 pg 96-102,106-114 Investigation 4 pg177-180, 184-192,196-201 *Physics of Sound* Investigation 1 pg 12-15, 18-20, 25-29 Investigation 4 pg 10-15, 19-20 **Delta Science Module** *Food Chains & Webs* Activity 9 -11 pg 73-102 *Plant & Animals Life Cycles* Activities 6-7 pg 57-74 Activity 12 pg 105-114
20. Determine whether further investigations are needed to draw valid conclusions (SI-E-B6)	**Full Option Science System** *Matter & Energy* Investigation 3 pg132-137,140-149,152-159 Investigation 4 pg177-180, 184-192,196-201 **Delta Science Module** *Food Chains & Webs* Activity 6 pg 53-58 *Plant & Animals Life Cycles* Activity 3 pg 33-42 Activity 5-6 pg 49-64 Activity 9 pg 83-90
21. Use evidence from previous investigations to ask additional questions and to initiate further explorations (SI-E-B6)	**Full Option Science System** *Matter & Energy* Investigation 3 pg132-137,140-149,152-159 Investigation 4 pg177-180, 184-192,196-201 **Delta Science Module** *Food Chains & Webs* Activity 6 pg 53-58 *Plant & Animals Life Cycles* Activity 3 pg 33-42 Activity 5-6 pg 49-64 Activity 9 pg 83-90
22. Explain and give examples of how scientific discoveries have affected society (SI-E-B6)	**FOSS Science Stories** Physics of Sound pg Sun, Moon & Stars pg 40-46 **DSM Student Readers** Food Chains & Webs pg 11-13 Plant & Animals Life Cycles pg 14 **Grade 4 Earth Science Literacy Pack** Minerals, Rocks & Fossils pg18-23 Weather & Climate pg 15-19 Inside Earth pg 21-22 **Grade 4 Physical Science Literacy Pack** Electricity & Magnetism pg 15-23

Physical Science	
Properties of Objects and Materials	
23. Determine linear, volume, and weight/mass measurements by using both metric system and U.S. system units to compare the results (PS-E-A2)	**Full Option Science System** *Matter & Energy* Investigation 3 pg132-137,140-149,152-159 **FOSS Science Stories** Matter & Energy pg 39-53
24. Illustrate how heating/cooling affects the motion of small particles in different phases of matter (PS-E-A4)	**Full Option Science System** *Matter & Energy* Investigation 4 pg177-180, 184-192,196-201 **FOSS Science Stories** Matter & Energy pg 54-67
25. Describe various methods to separate mixtures (e.g., evaporation, condensation, filtration, magnetism) (PS-E-A5)	**Full Option Science System** *Matter & Energy* Investigation 4 pg177-180, 184-192,196-201 **FOSS Science Stories** Matter & Energy pg 54-67
Position and Motion of Objects	
26. Measure, record, and graph changes in position over time (e.g., speed of cars, ball rolling down inclined plane) (PS-E-B3)	**Grade 4 Physical Science Literacy Pack** Force & Motion pg12-13
27. Describe how the amount of force needed to cause an object to change its motion depends on the mass of the object (PS-E-B4)	**Grade 4 Physical Science Literacy Pack** Force & Motion pg 4, 5, 8 & 22
Forms of Energy	
28. Explain the relationship between volume (amplitude) of sound and energy required to produce the sound (PS-E-C1)	**Full Option Science System** *Physics of Sound* Investigation 4 pg 10-15, 19-20 **FOSS Science Stories** Physics of Sound pg Pages 17-18
29. Compare the rates at which sound travels through solids, liquids, and gases (PS-E-C1)	**Full Option Science System** *Physics of Sound* Investigation 3 pg 11-14, 17-19 **FOSS Science Stories** Physics of Sound pg Pages 19-20
30. Explain the relationship between frequency (rate of vibration) and pitch (PS-E-C1)	**Full Option Science System** *Physics of Sound* Investigation 2 pg 10-12,16-18, 23-24 **FOSS Science Stories** Physics of Sound pg
31. Diagram what happens to white light as it	**Full Option Science System** *Matter & Energy*

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
passes through a prism (PS-E-C2)	Investigation 2 pg 96-102,106-114 **FOSS Science Stories** Matter & Energy pg 29-33 & 36
32. Describe how light bends or refracts when traveling through various materials (e.g., pencil in a glass of water) (PS-E-C2)	**Full Option Science System** *Matter & Energy* Investigation 2 pg 96-102,106-114 **FOSS Science Stories** Matter & Energy pg24 -28 & 35
33. Describe how heat energy moves through a material by conduction (PS-E-C3)	**Full Option Science System** *Matter & Energy* Investigation 1 pg 56-61, 66-69, 74-80 **FOSS Science Stories** Matter & Energy pg 1-23 **Grade 4 Physical Science Literacy Pack** Electricity and Magnetism pg 7
34. Give examples of ways heat can be generated through friction (e.g., rubbing hands) (PS-E-C3)	**Full Option Science System** *Matter & Energy* Investigation 1 pg 56-61,
35. Give examples of ways heat can be produced by conversion from other sources of energy (PS-E-C3)	**Full Option Science System** *Matter & Energy* Investigation 1 pg 66-69, 74-80 **FOSS Science Stories** Matter & Energy pg 1-23
36. Test and classify materials as *conductors* and *insulators* of electricity (PS-E-C4)	**Full Option Science System** *Matter & Energy* Investigation 1 pg 56-61, 66-69, 74-80 **Grade 4 Physical Science Literacy Pack** Electricity and Magnetism pg 7
37. Demonstrate how a complete circuit is needed for conducting electricity (PS-E-C4)	**Full Option Science System** *Matter & Energy* Investigation 1 pg 56-61, 66-69, 74-80 **Grade 4 Physical Science Literacy Pack** Electricity and Magnetism pg 3-9
38. Explain the effects of Earth's gravity on all objects at or near the surface of Earth (PS-E-C5)	**Grade 4 Physical Science Literacy Pack** Force & Motion pg 7 & 20-23
39. Describe energy transformations (e.g., electricity to light, friction to heat) (PS-E-C6)	**Full Option Science System** *Matter & Energy* Investigation 1 pg 56-61, 66-69, 74-80 **FOSS Science Stories** Matter & Energy pg 1-23

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
Life Science	
Characteristics of Organisms	
40. Explain the functions of plant structures in relation to their ability to make food through photosynthesis (e.g., roots, leaves, stems, flowers, seeds) (LS-E-A3)	**Delta Science Module** *Food Chains & Webs* Activity 2 -3 pg 23-38 *Plant & Animals Life Cycles* Activity 2 pg 23-32 Activity 6 pg 57-64 Activity 8-9 pg 75-90 **DSM Student Readers** Plant & Animal Life Cycles pg 3-6
41. Describe how parts of animals' bodies are related to their functions and survival (e.g., wings/flying, webbed feet/swimming) (LS-E-A3)	**Delta Science Module** *Food Chains & Webs* Activity 4-9 pg 39-72 *Plant & Animals Life Cycles* Activity 11 pg 97-104 **DSM Student Readers** Food Chains & Webs pg4-5 Plant & Animal Life Cycles pg 7-12
42. Describe how the organs of the circulatory and respiratory systems function (LS-E-A5)	**Grade 4 Life Science Literacy Pack** Human Body Systems pg 7-11
43. Explain the primary role of carbohydrates, fats, and proteins in the body (LS-E-A6)	**FOSSWEB.com** http://www.fossweb.com/modules3-6/FoodandNutrition/activities/whatsfordinner.html (Activity)
44. Analyze food labels to compare nutritional content of foods (e.g., amounts of carbohydrates, fats, proteins) (LS-E-A6)	**FOSSWEB.com** http://www.fossweb.com/modules3-6/FoodandNutrition/activities/whatsfordinner.html (Activity)
Life Cycles of Organisms	
45. Identify reproductive structures in plants and describe the functions of each (LS-E-B1)	**Delta Science Module** *Food Chains & Webs* Activity 2 -3 pg 23-38 *Plant & Animals Life Cycles* Activity 2 pg 23-32 Activity 6 pg 57-64 Activity 8-9 pg 75-90 **DSM Student Readers** Plant & Animal Life Cycles pg 3-6
46. Describe how some plants can be grown from a plant part instead of a seed (LS-E-B1)	**Delta Science Module** *Plant & Animals Life Cycles* Activity 2 pg 23-32 Activity 6 pg 57-64 Activity 8-9 pg 75-90

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
	DSM Student Readers Plant & Animal Life Cycles pg 3-6
47. Sequence stages in the life cycles of various organisms, including seed plants (LS-E-B1)	**Delta Science Module** *Plant & Animals Life Cycles* Activity 2-10 pg 23-96 **DSM Student Readers** Plant & Animal Life Cycles pg 3-12
48. Classify examples of plants and animals based on a variety of criteria (LS-E-B2)	**Delta Science Module** *Plant & Animals Life Cycles* Activity 2-10 pg 23-96 **DSM Student Readers** Plant & Animal Life Cycles pg 3-12
49. Compare similarities and differences between parents and offspring in plants and animals (LS-E-B3)	**Delta Science Module** *Plant & Animals Life Cycles* Activity 2-10 pg 23-96 **DSM Student Readers** Plant & Animal Life Cycles pg 3-12
Organisms and Their Environments	
50. Explain how some organisms in a given habitat compete for the same resources (LS-E-C1)	**Delta Science Module** *Food Chains & Webs* Activity 10-12 pg 81-102 **DSM Student Readers** Food Chains & Webs pg 4-10 **Grade 4 Life Science Literacy Pack** Changes in Ecosystems pg 4-7 & 18-19
51. Describe how organisms can modify their environment to meet their needs (e.g., beavers making dams) (LS-E-C1)	**Grade 4 Life Science Literacy Pack** Changes in Ecosystems pg 4-7 & 18-19
52. Describe how some plants and animals have adapted to their habitats (LS-E-C-E-C2)	**Grade 4 Life Science Literacy Pack** Changes in Ecosystems pg 4-7 & 18-19
53. Identify the habitat in which selected organisms would most likely live and explain how specific structures help organisms to survive (LS-E-C2)	**Delta Science Module** *Food Chains & Webs* Activity 10-12 pg 81-102 **DSM Student Readers** Food Chains & Webs pg 4-10 **Grade 4 Life Science Literacy Pack** Changes in Ecosystems pg 4-7 & 18-19
54. Describe the effect of sudden increases or decreases of one group of organisms upon other organisms in the environment (LS-E-C3)	**DSM Student Readers** Food Chains & Webs pg 14 **Grade 4 Life Science Literacy Pack** Changes in Ecosystems pg 6-7 & 11

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
Earth and Space Science	
Properties of Earth Materials	
55. Recognize that sedimentary rocks are composed of particles that result from weathering and erosion (e.g., sandstones, conglomerates) (ESS-E-A1)	**Grade 4 Earth Science Literacy Pack** Soils pg 4-9
56. Investigate the properties of soil (e.g., color, texture, capacity to retain water, ability to support plant growth) (ESS-E-A1)	**Delta Science Module** *Food Chains & Webs* Activity 2 pg 23-30 **Grade 4 Earth Science Literacy Pack** Soils pg 11-17
57. Explain how unequal heating of Earth's land and water affects climate and weather by using a model (ESS-E-A2)	**Grade 4 Earth Science Literacy Pack** Weather & Climate pg 3-7
58. Draw, label, and explain the components of a water cycle (ESS-E-A3)	**Grade 4 Earth Science Literacy Pack** Weather & Climate pg 8-10
59. Measure, chart, and predict the weather using various instruments (e.g., thermometer, barometer, anemometer) (ESS-E-A4)	**Grade 4 Earth Science Literacy Pack** Weather & Climate pg 15-17
60. Identify various types of weather-related natural hazards and effects (e.g., lightning, storms) (ESS-E-A4)	**Grade 4 Earth Science Literacy Pack** Weather & Climate pg 11-13
61. Identify safety measures applicable to natural hazards (ESS-E-A4)	**Grade 4 Earth Science Literacy Pack** Weather & Climate pg 11-13
62. Classify rocks and minerals according to texture, color, luster, hardness, and effervescence (ESS-E-A5)	**Grade 4 Earth Science Literacy Pack** Minerals, Rock and Fossils pg 2-12
63. Demonstrate and explain how Earth's surface is changed as a result of slow and rapid processes (e.g., sand dunes, canyons, volcanoes, earthquakes) (ESS-E-A5) (ESS-E-A1)	**Grade 4 Earth Science Literacy Pack** Inside Earth pg 9-23 Soils pg 6-9
Objects in the Sky	
64. Describe and sequence the phases of the	**Full Option Science System** *Sun, Moon & Stars*

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
Moon and eclipses (ESS-E-B2)	Investigation 2 pg 82-88,90-98 **FOSS Science Stories** Sun, Moon & Stars pg 14-34
65. Compare a solar and a lunar eclipse (ESS-E-B2)	**Full Option Science System** *Sun, Moon & Stars* Investigation 1 pg 47-54, 58-64 **FOSSWEB.com** http://www.fossweb.com/modules3-6/SunMoonandStars/index.html (Activity)
66. Diagram the movement of the Moon around Earth and the movement of Earth around the Sun (ESS-E-B2)	**Full Option Science System** *Sun, Moon & Stars* Investigation 1 pg 47-54, 58-64 Investigation 2 pg 82-88,90-98 **FOSS Science Stories** Sun, Moon & Stars pg 3, 16 20-23, 48-49
67. Explain the changing appearance of the Moon and its location in the sky over the course of a month (ESS-E-B3)	**Full Option Science System** *Sun, Moon & Stars* Investigation 2 pg 82-88,90-98 **FOSS Science Stories** Sun, Moon & Stars pg 14-34
68. Identify the relationship between Earth's tilt and revolution and the seasons (ESS-E-B4)	**FOSS Science Stories** Sun, Moon & Stars pg 3, 16 20-23, 48-49
69. Explain how technology has improved our knowledge of the universe (e.g., Hubble telescope, space stations, lunar exploration) (ESS-E-B6)	**Full Option Science System** *Sun, Moon & Stars* Investigation 3 pg 117-123, 128-131 **FOSS Science Stories** Sun, Moon & Stars pg 35-53
Science and the Environment	
70. Design an ecosystem that includes *living (biotic)* and *nonliving (abiotic)* components and illustrates interdependence (SE-E-A1)	**Delta Science Module** *Plant & Animals Life Cycles* Activity 1 pg 15-22 Activity 7 pg 65-74 **DSM Student Readers** Food Chains & Webs pg 2-5
71. Describe and explain food chains/webs and the directional flow of energy in various ecosystems (e.g., construct a model, drawing, diagram, graphic organizer) (SE-E-A2)	**Delta Science Module** *Food Chains & Webs* Activity 3-12 pg 31-102 **DSM Student Readers** Food Chains & Webs pg 6-10
72. Predict and describe consequences of the removal of one component in a balanced ecosystem (e.g., consumer, herbivores, nonliving component) (SE-E-A2)	**Delta Science Module** *Food Chains & Webs* Activity 3-12 pg 31-102 **DSM Student Readers** Food Chains & Webs pg 6-10

Grade Five
Correlation to Louisiana Grade Level Expectations

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
Science as Inquiry *The Grade-Level Expectations (GLEs) from this strand should be interwoven with all content not just taught as a separate unit*	
The Abilities To Do Scientific Inquiry	
1. Generate testable questions about objects, organisms, and events that can be answered through scientific investigation (SI-M-A1)	**Full Option Science System** *Environments* Investigation 2 pg 27-29 *Variables* Investigation 3 pg 14-19 Investigation 4 pg 18-23 *Water Planet* Investigation 3 pg 128132, 148-158
2. Identify problems, factors, and questions that must be considered in a scientific investigation (SI-M-A1)	**Full Option Science System** *Living Systems* Investigation 3 pg 129-135 *Mixtures & Solutions* Investigation 3 pg 15-24 *Water Planet* Investigation 2 pg 80-110
3. Use a variety of sources to answer questions (SI-M-A1)	**Full Option Science System** *Environments* Investigation 6 pg 16-17, 19-22 *Living Systems* Investigation 1 pg 51-70 *Mixtures & Solutions* Investigation 3 pg 8-24 **FOSS Science Stories** Living Systems pg 20 Water Planet pg 79, 92 **Delta Science Content Reader** Electricity & Magnetism pg 13,19 Properties of Matter pg 13, 23
4. Design, predict outcomes, and conduct experiments to answer guiding questions (SI-M-A2)	**Full Option Science System** *Environments* Investigation 2 pg 27-29 *Variables* Investigation 2 pg 14-33
5. Identify independent variables, dependent variables, and variables that should be controlled in designing an experiment (SI-M-A2)	**Full Option Science System** *Environments* Investigation 2 pg 10-29 *Variables* Investigation 1 pg 8-22 Investigation 2 pg 14-18

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
	Investigation 4 pg 12-33 **FOSS Science Stories** Variables pg 1-3
6. Select and use appropriate equipment, technology, tools, and metric system units of measurement to make observations (SI-M-A3)	**Full Option Science System** *Environments* Investigation 3 pg 11-19 *Living Systems* Investigation 3 pg 127-135, 138-141 *Mixtures & Solutions* Investigation 1 pg 8-24 *Variables* Investigation 1 pg 8-22 Investigation 2 pg 14-18 Investigation 4 pg 12-33
7. Record observations using methods that complement investigations (e.g., journals, tables, charts) (SI-M-A3)	**Full Option Science System** *Environments* Investigation 1 pg 9-19 Investigation 4 pg 9-18 *Living Systems* Investigation 2 pg 85-94 Investigation 3 pg 120-125, 136-141 *Mixtures & Solutions* Investigation 2 pg 8-28 Investigation 3 pg 8-24 *Water Planet* Investigation 1 pg 59-64 Investigation 4 pg 184-193 *Variables* Investigation 1 pg 12-15,18-22, 25-27 Investigation 2 pg 21-23 Investigation 3 pg 22-27 Investigation 4 pg 14-17, 18-23
8. Use consistency and precision in data collection, analysis, and reporting (SI-M-A3)	The inquiry approach advocated by FOSS encourages consistent and precise data collection and reporting. For Example **Full Option Science System** *Variables* Investigation 1 pg 12-15,18-22, 25-27 Investigation 2 pg 21-23 Investigation 4 pg 14-17, 18-23
9. Use computers and/or calculators to analyze and interpret quantitative data (SI-M-A3)	**Full Option Science System** *Living Systems* Investigation 1 pg 51-70 Investigation 3 pg 118-141 *Mixtures & Solutions* Investigation 2 pg 8-28 *Water Planet* Investigation 3 pg 125-158 *Variables*

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
	Investigation 1 pg 12-15,18-22, 25-27 Investigation 2 pg 21-23 Investigation 3 pg 22-27
10. Identify the difference between description and explanation (SI-M-A4)	FOSS investigations offer ample opportunity for students to observe and offer explanations of their observations. For example: **Full Option Science System** *Environments* Investigation 3 pg 11-19 Investigation 6 pg 15-22 *Mixtures & Solutions* Investigation 1 pg 8-29 Investigation 2 pg 8-28
11. Construct, use, and interpret appropriate graphical representations to collect, record, and report data (e.g., tables, charts, circle graphs, bar and line graphs, diagrams, scatter plots, symbols) (SI-M-A4)	**Full Option Science System** *Environments* Investigation 1 pg12-14 Investigation 3 pg 9-13,16-17,20-21 Investigation 5 pg 15-18 *Living Systems* Investigation 1 pg 51-70 Investigation 2 pg 86-94 *Mixtures & Solutions* Investigation 2 pg 8-28 Investigation 4 pg 8-28 *Variables* Investigation 1 pg 12-15,18-22, 25-27 Investigation 2 pg 21-23 Investigation 3 pg 22-27 Investigation 4 pg 14-17, 18-23 **FOSS Science Stories** Living Systems pg 27-30 Water Planet pg 24, 84-89 **Grade 5 Life Science Literacy Pack** Changes In Ecosystems pg 13 **Grade 5 Earth Science Literacy Pack** Inside Earth pg 4,6,11,18, 21 & 22 Soils pg 12 **Grade 5 Physical Science Literacy Pack** Electricity & Magnetism pg 19
12. Use data and information gathered to develop an explanation of experimental results (SI-M-A4)	**Full Option Science System** *Environments* Investigation 1 pg12-14 Investigation 3 pg 9-13,16-17,20-21 Investigation 5 pg 15-18 *Living Systems* Investigation 1 pg 51-70 Investigation 2 pg 86-94 *Mixtures & Solutions*

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
	Investigation 2 pg 8-28 Investigation 4 pg 8-28 *Variables* Investigation 1 pg 12-15,18-22, 25-27 Investigation 2 pg 21-23 Investigation 3 pg 22-27 Investigation 4 pg 14-17, 18-23 **FOSS Science Stories** Living Systems pg 27-30 Water Planet pg 24, 84-89 **Grade 5 Life Science Literacy Pack** Changes In Ecosystems pg 13 **Grade 5 Physical Science Literacy Pack** Electricity & Magnetism pg 19 **Grade 5 Earth Science Literacy Pack** Inside Earth pg 4,6,11,18, 21 & 22 Soils pg 12
13. Identify patterns in data to explain natural events (SI-M-A4)	**Full Option Science System** *Environments* Investigation 2 pg 27-29 *Variables* Investigation 1 pg 23-27
14. Develop models to illustrate or explain conclusions reached through investigation (SI-M-A5)	**Full Option Science System** *Environments* Investigation 1 pg 9-15 Investigation 4 pg 9-18 *Water Planet* Investigation 2 pg 88-91,102-109 Investigation 4 pg 193,205-211
15. Identify and explain the limitations of models used to represent the natural world (SI-M-A5)	**Full Option Science System** *Environments* Investigation 1 pg 9-15 Investigation 4 pg 9-18 *Water Planet* Investigation 2 pg 88-91,102-109 Investigation 4 pg 193,205-211
16. Use evidence to make inferences and predict trends (SI-M-A5)	**Full Option Science System** *Environments* Investigation 5 pg 15-22 *Mixtures & Solutions* Investigation 3 pg 8-24 *Variables* Investigation 1 pg 16-27
17. Recognize that there may be more than one way to interpret a given set of data, which can result in alternative scientific explanations and predictions (SI-M-A6)	**Full Option Science System** *Environments* Investigation 1 pg 9-15 Investigation 2 pg 27-29 Investigation 4 pg 9-18 Investigation 5 pg 15-22

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
	Living Systems Investigation 1 pg 51-70 Investigation 2 pg 86-94 *Mixtures & Solutions* Investigation 2 pg 8-28 Investigation 4 pg 8-28 *Variables* Investigation 1 pg 12-15,18-22, 25-27 Investigation 4 pg 14-17, 18-23
18. Identify faulty reasoning and statements that misinterpret or are not supported by the evidence (SI-M-A6)	**Full Option Science System** *Environments* Investigation 1 pg 8-19 Investigation 2 pg 10-29 Investigation 3 pg 11-19 Investigation 4 pg 8-22 *Living Systems* Investigation 2 pg 86-94 *Mixtures & Solutions* Investigation 2 pg 8-28 Investigation 4 pg 8-28 *Variables* Investigation 2 pg 21-23 Investigation 3 pg 22-27
19. Communicate ideas in a variety of ways (e.g., symbols, illustrations, graphs, charts, spreadsheets, concept maps, oral and written reports, equations) (SI-M-A7)	**Full Option Science System** *Environments* Investigation 1 pg 9-15 Investigation 2 pg 27-29 Investigation 3 pg 11-19 Investigation 4 pg 9-18 *Living Systems* Investigation 1 pg 51-70 Investigation 2 pg 86-94 *Mixtures & Solutions* Investigation 2 pg 8-28 Investigation 4 pg 8-28 *Variables* Investigation 1 pg 12-15,18-22, 25-27 Investigation 2 pg 21-23 Investigation 3 pg 22-27 Investigation 4 pg 14-17, 18-23
20. Write clear, step-by-step instructions that others can follow to carry out procedures or conduct investigations (SI-M-A7)	**Full Option Science System** *Environments* Investigation 2 pg 27-30 Investigation 6 pg 21-22 *Mixtures & Solutions* Investigation 1 pg 25-29 *Variables* Investigation 4 pg 18-23

21. Distinguish between *observations* and *inferences* (SI-M-A7)	*Environments* Investigation 2 pg 13-15,18-21 *Water Planet* Investigation 3 pg 125-158 *Variables* Investigation 3 pg 8-27 Investigation 4 pg 8-28
22. Use evidence and observations to explain and communicate the results of investigations (SI-M-A7)	**Full Option Science System** *Environments* Investigation 3 pg 9-13,16-17,20-21 Investigation 6 pg 11-13,19-22 *Living Systems* Investigation 3 pg 136-141 *Mixtures & Solutions* Investigation 2 pg 8-28 *Variables* Investigation 3 pg 14-19
23. Use relevant safety procedures and equipment to conduct scientific investigations (SI-M-A8)	*All FOSS kits include safety in the classroom as well as point of use safety instructions. See for example:* **Full Option Science System** *Environments* Overview pg 17 *Living Systems* Overview pg 30 *Mixtures & Solutions* Overview pg 17 Investigation 1 pg 11, 12 & 27 *Water Planet* Overview pg 30 *Variables* Overview pg 17
24. Provide appropriate care and utilize safe practices and ethical treatment when animals are involved in scientific field and laboratory research (SI-M-A8)	**Full Option Science System** *Environments* Overview pg 3-7 Materials Section pg 4 & 5 Investigation 2 pg 4-9
Understanding Scientific Inquiry	
25. Compare and critique scientific investigations (SI-M-B1)	FOSS lessons include a class discussion where students can compare and critique their own investigations and those of their classmates.
26. Use and describe alternate methods for investigating different types of testable questions (SI-M-B1)	FOSS investigations involve students in a variety of investigation methods. For example: **Full Option Science System** *Environments* Investigation 2 pg 17-20,27-30 *Variables* Investigation 2 pg 8-23

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
27. Recognize that science uses processes that involve a logical and empirical, but flexible, approach to problem solving (SI-M-B1)	**Full Option Science System** *Living Systems* Investigation 3 pg 119-125, 136-141 *Mixtures & Solutions* Investigation 4 pg 8-28 *Variables* Investigation 1 pg 25-27 Investigation 2 pg 21-23 Investigation 3 pg 22-27
28. Recognize that investigations generally begin with a review of the work of others (SI-M-B2)	**Full Option Science System** *Environments* Investigation 1 pg 18-19 Investigation 2 pg 18-21,24-25, 28-30 Investigation 5 pg 11-13, 16-18, 21-22 *Living Systems* Investigation 3 pg 119-125, 136-141 *Mixtures & Solutions* Investigation 1 pg 8-29 Investigation 4 pg 8-28 *Water Planet* Investigation 1 pg 50-66
29. Explain how technology can expand the senses and contribute to the increase and/or modification of scientific knowledge (SI-M-B3)	**FOSS Science Stories** Water Planet pg 18,19 & 80-89 **Grade 5 Physical Science Literacy Pack** Electricity & Magnetism pg 15-19 **Grade 5 Earth Science Literacy Pack** Inside Earth pg 21-22
30. Describe why all questions cannot be answered with present technologies (SI-M-B3)	**Grade 5 Earth Science Literacy Pack** Pollution pg,8, 12,15
31. Recognize that there is an acceptable range of variation in collected data (SI-M-B3) 32. Explain the use of statistical methods to confirm the significance of data (e.g., mean, median, mode, range) (SI-M-B3)	FOSS investigations include a discussion of collected data, and students are provided opportunities to discuss variations in data both in and out of an acceptable range.
33. Evaluate models, identify problems in design, and make recommendations for improvement (SI-M-B4)	**Full Option Science System** *Environments* Investigation 1 pg 9-15 Investigation 4 pg 9-18 *Water Planet* Investigation 4 pg 184-216 *Variables* Investigation 3 pg 20-23
34. Recognize the importance of communication among scientists about investigations in	**FOSS Science Stories** Variables pg 1-6,18-28

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
progress and the work of others (SI-M-B5)	
35. Explain how skepticism about accepted scientific explanations (i.e., hypotheses and theories) leads to new understanding (SI-M-B5)	**FOSS Science Stories** Variables pg 1-6,18-28
36. Explain why an experiment must be verified through multiple investigations and yield consistent results before the findings are accepted (SI-M-B5)	**FOSS Science Stories** Variables pg 1-6,18-28
37. Critique and analyze their own inquiries and the inquiries of others (SI-M-B5)	FOSS lessons include a class discussion where students can compare and critique their own investigations and those of their classmates: For example: **Full Option Science System** *Environments* Investigation 1 pg 9-15 Investigation 2 pg 27-29 Investigation 3 pg 11-19 Investigation 4 pg 9-18 *Living Systems* Investigation 2 pg 86-94 Investigation 3 pg 119-125, 136-141 *Mixtures & Solutions* Investigation 3 pg 2-24 Investigation 4 pg 26-28 *Variables* Investigation 4 pg 14-17, 18-23
38. Explain that, through the use of scientific processes and knowledge, people can solve problems, make decisions, and form new ideas (SI-M-B6)	**FOSS Science Stories** Variables pg 1-6,18-28
39. Identify areas in which technology has changed human lives (e.g., transportation, communication, geographic information systems, DNA fingerprinting) (SI-M-B7)	**FOSS Science Stories** Living Systems pg 43-46 Water Planet pg 15-19 Variables pg 18-28 **Grade 5 Earth Science Literacy Pack** Pollution pg 14-15 **Grade 5 Physical Science Literacy Pack** Electricity & Magnetism pg 15-19
40. Evaluate the impact of research on scientific thought, society, and the environment (SI-M-B7)	**FOSS Science Stories** Environments pg 39-42 Living Systems pg 43-46 Mixtures & Solutions pg 23-25 Water Planet pg 15-19 Variables pg 18-28

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
	Grade 5 Earth Science Literacy Pack Pollution pg 14-15 **Grade 5 Physical Science Literacy Pack** Electricity & Magnetism pg 15-19
Physical Science	
Properties and Changes of Properties in Matter	
41. Measure a variety of objects in metric system units (PS-M-A1)	**Full Option Science System** *Mixtures & Solutions* Investigation 1 pg 12-15 Investigation 2 pg 10-14,18-20, 23-25 Investigation 3 pg 11-14 *Water Planet* Investigation 2 pg 86-91, 94-97 Investigation 3 pg 148-153 *Variables* Investigation 3 pg 14-23 **FOSS Science Stories** Mixtures & Solutions **Grade 5 Physical Science Literacy Pack** Properties of Matter
42. Compare the physical properties of large and small quantities of the same type of matter (PS-M-A1)	**Full Option Science System** *Mixtures & Solutions* Investigation 1 pg 18-20, 26-29
43. Describe the structure of atoms and the electrical charge of protons, neutrons, and electrons (PS-M-A2)	**Grade 5 Physical Science Literacy Pack** Properties of Matter pg 15-23
44. Identify the physical and chemical properties of various substances and group substances according to their observable and measurable properties (e.g., conduction, magnetism, light transmission) (PS-M-A3)	**Full Option Science System** *Mixtures & Solutions* Investigation 1 pg 12-14, 18-20,26-29 Investigation 4 pg 9-15,18-19, 22-24 **FOSS Science Stories** Mixtures & Solutions pg 1-10 **Grade 5 Physical Science Literacy Pack** Properties of Matter pg 4-13
45. Describe the properties and behavior of water in its solid, liquid, and gaseous phases (states) (PS-M-A5)	**Full Option Science System** *Mixtures & Solutions* Investigation 4 pg 8-28 **FOSS Science Stories** Mixtures & Solutions pg 21-33 **Grade 5 Physical Science Literacy Pack** Properties of Matter pg 4-13
46. Describe new substances formed from common chemical reactions (e.g., burning paper produces ash) (PS-M-A6)	**Full Option Science System** *Mixtures & Solutions* Investigation 4 pg 9-15,18-19, 22-24 **FOSS Science Stories**

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
	Mixtures & Solutions pg 23-24, 26-28 **Grade 5 Physical Science Literacy Pack** Properties of Matter 4 -13
Motions and Forces	
47. Compare, calculate, and graph the average speeds of objects in motion using both metric system and U.S. system units (PS-M-B1)	**Full Option Science System** *Variables* Investigation 3 pg 8-23 Investigation 4 pg 8-23
48. Explain that gravity accelerates all falling objects at the same rate in the absence of air resistance (PS-M-B3)	**Full Option Science System** *Variables* Investigation 3 pg 8-27 Investigation 4 pg 8-28
49. Demonstrate a change in speed or direction of an object's motion with the use of unbalanced forces (PS-M-B5)	**Full Option Science System** *Variables* Investigation 3 pg 8-23 Investigation 4 pg 8-23
Transformations of Energy	
50. Compare potential and kinetic energy and give examples of each (PS-M-C1)	Potential/kinetic energy are not terms specifically used in the modules although many examples are found throughout. **Full Option Science System** *Variables* Investigation 1 pg 8-22 Investigation 3 pg 8-23 Investigation 4 pg 8-13
51. Classify energy resources as *renewable*, *non-renewable*, or *inexhaustible* (PS-M-C1)	**Grade 5 Earth Science Literacy Pack** Pollution pg 15 **Grade 5 Physical Science Literacy Pack** Electricity & Magnetism pg 16-19 **FOSSWEB.com** http://www.fossweb.com/modules3-6/SolarEnergy/activities/resourceid.html (Activity)
52. Identify the Sun as Earth's primary energy source and give examples (e.g., photosynthesis, water cycle) to support that conclusion (PS-M-C3)	**Full Option Science System** *Water planet* Investigation 4 pg 184-216 **FOSS Science Stories** Environments pg39 Living Systems pg 31-34 Water Planet pg 67-70
53. Investigate how changes in the position of a light source and an object alter the size and shape of the shadow (PS-M-C4)	
54. Identify other types of energy produced	**Grade 5 Physical Science Literacy Pack** Electricity & Magnetism pg 16-19, 22-23

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
through the use of electricity (e.g., heat, light, mechanical) (PS-M-C6)	
Life Science	
Structure and Function in Living Systems	
55. Identify the cell as the basic unit of living things (LS-M-A1)	**Full Option Science System** *Living Systems* Investigation 1 pg 54-56 **FOSS Science Stories** Living Systems pg 2
56. Observe, identify, and describe the basic components of cells and their functions (e.g., cell wall, cell membrane, cytoplasm, nucleus) (LS-M-A1)	**Full Option Science System** *Living Systems* *Investigation 1 p54-55* **FOSS Science Stories** Living Systems pg1
57. Compare plant and animal cells and label cell components (LS-M-A2)	**Full Option Science System** *Living Systems* *Investigation 1 p54-55* **FOSS Science Stories** Living Systems pg1,47-49
58. Describe the metamorphosis of an amphibian (e.g., frog) (LS-M-A3)	**FOSS Science Stories** Environments pg17 (The Spade Toad)
59. Describe the processes of photosynthesis and respiration in green plants (LS-M-A4)	**Full Option Science System** *Living Systems* Investigation 3 pg 120-125 **FOSS Science Stories** Environments pg 39 Living Systems pg 27-34
60. Describe the levels of structural organization in living things (e.g., cells, tissues, organs, organ systems) (LS-M-A5)	**Full Option Science System** *Living Systems* *Investigation 1 p54-55* **FOSS Science Stories** Living System pg 1-14
61. Identify diseases caused by germs and how they can be transmitted from person to person (LS-M-A7).	
Populations and Ecosystems	
62. Develop and use a simple dichotomous key to classify common plants and animals (LS-M-C1)	**Full Option Science System** *Living System* Investigation 2, Part 2 pg 101-104 **FOSS Science Stories** Living System pg 21-22,24
63. Construct food chains that could be found in ponds, marshes, oceans, forests, or	**FOSS Science Stories** Environments pg 40-41

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
meadows (LS-M-C2)	
64. Describe the roles of producers, consumers, and decomposers in a food chain (LS-M-C2)	**FOSS Science Stories** Environments pg 39-41 **Grade 5 Life Science Literacy Pack** Changes In Ecosystems pg 4-7
65. Compare food chains and food webs (LS-M-C2)	**FOSS Science Stories** Environments pg 40-41, 45
66. Identify and describe ecosystems of local importance (LS-M-C3)	**FOSS Science Stories** Environments pg 1-17 **Grade 5 Life Science Literacy Pack** Changes In Ecosystems pg 3-7
67. Compare common traits of organisms within major ecosystems (LS-M-C3)	**FOSS Science Stories** Environments pg 9-17
68. Explain and give examples of predator/prey relationships (LS-M-C4)	**FOSS Science Stories** Environments pg 40-41,43-44Living Systems
Adaptations of Organisms	
69. Describe adaptations of plants and animals that enable them to thrive in local and other natural environments (LS-M-D1)	**Full Option Science System** *Environments* Investigation 5 pg 14-18 **FOSS Science Stories** Environments pg 3-6.10-19,22,31-33 **Grade 5 Life Science Literacy Pack** Changes In Ecosystems pg 17-19
Earth and Space Science	
Structure of the Earth	
70. Identify organic and inorganic matter in soil samples with the aid of a hand lens or microscope (ESS-M-A4)	**Grade 5 Earth Science Literacy Pack** Soils pg 11-17
71. Identify common rocks and minerals and explain their uses and economic significance (ESS-M-A5)	**FOSSWEB.com** http://www.fossweb.com/modules3-6/EarthMaterials/activities/rockdatabase/index.html (Activity)
72. Demonstrate the results of constructive and destructive forces using models or illustrations (ESS-M-A7)	**Grade 5 Earth Science Literacy Pack** Inside Earth pg 17-23 Soils pg 12-17
73. Identify the processes that prevent or cause erosion (ESS-M-A7)	**Grade 5 Earth Science Literacy Pack** Soils pg 19-24
74. Identify the components of the hydrosphere	**FOSS Science Stories** Environments pg 27-35

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
(ESS-M-A11)	
75. Identify the atmosphere as a mixture of gases, water vapor, and particulate matter (ESS-M-A11)	**Full Option Science System** *Water Planet* Investigation 3 pg 125-158 **FOSS Science Stories** Water Planet pg 52-61 **Grade 5 Earth Science Literacy Pack** Inside Earth pg 17-23 Soils pg 12-17
76. Identify, describe, and compare climate zones (e.g., polar, temperate, tropical) (ESS-M-A11)	**Full Option Science System** *Water Planet* Investigation 4 pg 184-216 **FOSS Science Stories** Water Planet pg 80-93
77. Identify typical weather map symbols and the type of weather they represent (ESS-M-A12)	**Full Option Science System** *Water Planet* Investigation 4 pg 184-216 **FOSS Science Stories** Water Planet pg 80-93
Earth History	
78. Estimate the range of time over which natural events occur (e.g., lightning in seconds, mountain formation over millions of years) (ESS-M-B3)	**Full Option Science System** *Water Planet* Investigation 4 pg 184-216 **FOSS Science Stories** Water Planet pg 71-75 **Grade 5 Earth Science Literacy Pack** Inside Earth pg 9-23
Earth in the Solar System	
79. Identify the physical characteristics of the Sun (ESS-M-C1)	**Full Option Science System** *Water Planet* Investigation 1 pg 50-66 **FOSS Science Stories** Water Planet pg 1-3
80. Describe the significance of Polaris as the North Star (ESS-M-C1)	
81. Explain why the Moon, Sun, and stars appear to move from east to west across the sky (ESS-M-C1)	**Full Option Science System** *Water Planet* Investigation 1 pg 50-66
82. Differentiate among moons, asteroids, comets, meteoroids, meteors, and meteorites (ESS-M-C2)	**Full Option Science System** *Water Planet* Investigation 1 pg 50-66 **FOSS Science Stories** Water Planet pg 12-13
83. Describe the characteristics of the inner and	**Full Option Science System**

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
outer planets (ESS-M-C2)	*Water Planet* Investigation 1 pg 50-66 **FOSS Science Stories** Water Planet pg 4-11
84. Explain rotation and revolution by using models or illustrations (ESS-M-C4)	**Full Option Science System** *Water Planet* Investigation 1 pg 50-66 **FOSS Science Stories** Water Planet pg 15-17
85. Identify Earth's position in the solar system (ESS-M-C5)	**Full Option Science System** *Water Planet* Investigation 1 pg 50-66 **FOSS Science Stories** Water Planet pg 6
86. Identify and explain the interaction of the processes of the water cycle (ESS-M-C6) (ESS-M-A10)	**Full Option Science System** *Water Planet* Investigation 4 pg 184-216 **FOSS Science Stories** Water Planet pg 67-70
87. Identify and explain advances in technology that have enabled the exploration of space (ESS-M-C8)	**Full Option Science System** *Water Planet* Investigation 1 pg 50-66 **FOSS Science Stories** Water Planet pg 18-19
Science and the Environment	
88. Determine the ability of an ecosystem to support a population (carrying capacity) by identifying the resources needed by that population (SE-M-A2)	**Full Option Science System** *Environments* Investigation 3 pg 8-22 Investigation 5 pg 8-22 Investigation 6 pg 8-17 **FOSS Science Stories** Environments **Grade 5 Life Science Literacy Pack** Changes In Ecosystems
89. Identify and give examples of pollutants found in water, air, and soil (SE-M-A3)	**Full Option Science System** *Environments* Investigation 3 pg 8-22 Investigation 4 pg 8-22 **Grade 5 Earth Science Literacy Pack** Pollution pg 2-13
90. Describe the consequences of several types of human activities on local ecosystems (e.g., polluting streams, regulating hunting, introducing nonnative species) (SE-M-A4)	**Grade 5 Earth Science Literacy Pack** Pollution pg 2-13 Soil pg19-23 **Grade 5 Life Science Literacy Pack** Changes In Ecosystems pg 9-15 & 22-23
91. Describe naturally occurring cycles and	**Full Option Science System** *Water Planet*

GRADE LEVEL EXPECTATIONS	CORRELATION NOTATIONS
identify where they are found (e.g., carbon, nitrogen, water, oxygen) (SE-M-A7)	Investigation 4 pg 184-216 **FOSS Science Stories** Water Planet pg 67-70 **FOSSWEB.com** Pictures: Oxygen Cycle, Nitrogen Cycle, Carbon Cycle, Water Cycle