

Garriga and Derry Elementary
1st Grade Science Curriculum Map 2016-2017

(This timeline is subject to change in order to meet the needs of students.)

Week	Dates	Topic(s)/Student Expectation (SE)/Focus Skill	Student Expectation (SE)/Scientific Investigation and Reasoning Skills
1	8/22-8/26 Lesson 1.1: Senses Lesson 1.2: Using Our Senses	Scientific investigation and reasoning./ 1.2 / The student develops abilities to ask questions and seek answers in classroom and outdoor investigations.	2(B) plan and conduct simple descriptive investigations such as ways objects move 2(D) record and organize data using pictures, numbers, and words 2(E) communicate observations and provide reasons for explanations using student-generated data from simple descriptive investigations.
2	8/29-9/2 Lesson 1.3: Inquiry	Scientific investigation and reasoning./ 1.2 / The student develops abilities to ask questions and seek answers in classroom and outdoor investigations. Scientific investigation and reasoning. /1.3/The student knows that information and critical thinking are used in scientific problem solving.	2(A) ask questions about organisms, objects, and events observed in the natural world; 2(B) plan and conduct simple descriptive investigations such as ways objects move; 2(C) collect data and make observations using simple equipment such as hand lenses, primary balances, and non-standard measurement tools 2(D) record and organize data using pictures, numbers, and words 2(E) communicate observations and provide reasons for explanations using student-generated data from simple descriptive investigations 3(C) describe what scientists do
3	9/6-9/10 4 day week Labor Day Lesson 1.3 Inquiry skills Lesson 1.4: Science Tools	Scientific investigation and reasoning/1.2/ The student develops abilities to ask questions and seek answers in classroom and outdoor investigations Scientific investigation and reasoning./ 1.3 / The student knows that information and critical thinking are used in scientific problem solving	2(A) ask questions about organisms, objects, and events observed in the natural world; 2 (B) plan and conduct simple descriptive investigations such as ways objects move 2 (C) collect data and make observations using simple equipment such as hand lenses, primary balances, and non-standard measurement tools; 2 (D) record and organize data using pictures, numbers, and words 2 (E) communicate observations and provide reasons for explanations using student-generated data from simple descriptive investigations 3(C) describe what scientists do

<p>4</p>	<p>9/12-9/17 Lesson 1.5: science Tools</p>	<p>Scientific investigation and reasoning./ 1.2 / The student develops abilities to ask questions and seek answers in classroom and outdoor investigations</p> <p>Scientific investigation and reasoning./1.4/ The student uses age-appropriate tools and models to investigate the natural world.</p>	<p>2(B)plan and conduct simple descriptive investigations such as ways objects move 2 (C) collect data and make observations using simple equipment such as hand lenses, primary balances, and non-standard measurement tools; 2(D) record and organize data using pictures, numbers, and words 4(A) collect, record, and compare information using tools, including computers, hand lenses, primary balances, cups, bowls, magnets, collecting nets, notebooks, and safety goggles; timing devices, including clocks and timers; non-standard measuring items such as paper clips and clothespins; weather instruments such as classroom demonstration thermometers and wind socks; and materials to support observations of habitats of organisms such as aquariums and terrariums; 4(B) measure and compare organisms and objects using non-standard units.</p>
<p>5</p>	<p>9/19-9/23 Lesson 1.6: How do Scientists work</p>	<p>Scientific investigation and reasoning./1.2/ The student develops abilities to ask questions and seek answers in classroom and outdoor investigations.</p> <p>Scientific investigation and reasoning/1.3/ The student knows that information and critical thinking are used in scientific problem solving.</p> <p>Scientific investigation and reasoning./1.4/ The student uses age-appropriate tools and models to investigate the natural world.</p>	<p>2(A) ask questions about organisms, objects, and events observed in the natural world; 2(B) plan and conduct simple descriptive investigations such as ways objects move; 2(C) collect data and make observations using simple equipment such as hand lenses, primary balances, and non-standard measurement tools 2(D) record and organize data using pictures, numbers, and words 2(E) communicate observations and provide reasons for explanations using student-generated data from simple descriptive investigations 3(A) identify and explain a problem such as finding a home for a classroom pet and propose a solution in his/her own words 4(A) collect, record, and compare information using tools, including computers, hand lenses, primary balances, cups, bowls, magnets, collecting nets, notebooks, and safety goggles; timing devices, including clocks and timers; non-standard measuring items such as paper clips and clothespins; weather instruments such as classroom demonstration thermometers and wind socks; and materials to support observations of habitats of organisms such as aquariums and terrariums;</p>

<p>6</p>	<p>9/26-9/30 Review and Assess Unit 1</p>	<p>Scientific investigation and reasoning./1.2/ The student develops abilities to ask questions and seek answers in classroom and outdoor investigations.</p> <p>Scientific investigation and reasoning/1.3/ The student knows that information and critical thinking are used in scientific problem solving.</p> <p>Scientific investigation and reasoning./1.4/ The student uses age-appropriate tools and models to investigate the natural world.</p>	<p>2(A) ask questions about organisms, objects, and events observed in the natural world</p> <p>2(B) plan and conduct simple descriptive investigations such as ways objects move</p> <p>2 (C) collect data and make observations using simple equipment such as hand lenses, primary balances, and non-standard measurement tools;</p> <p>2(D) record and organize data using pictures, numbers, and words;</p> <p>2(E) communicate observations and provide reasons for explanations using student-generated data from simple descriptive investigations.</p> <p>3(C) describe what scientists do</p> <p>4(A) collect, record, and compare information using tools, including computers, hand lenses, primary balances, cups, bowls, magnets, collecting nets, notebooks, and safety goggles; timing devices, including clocks and timers; non-standard measuring items such as paper clips and clothespins; weather instruments such as classroom demonstration thermometers and wind socks; and materials to support observations of habitats of organisms such as aquariums and terrariums;</p>
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7	<p>10/3-10/7 Lesson 2.1: How do engineers work?</p> <p>Lesson 2.2: How can we solve a problem?</p>	<p>Scientific investigation and reasoning./1.2/ The student develops abilities to ask questions and seek answers in classroom and outdoor investigations.</p> <p>Scientific investigation and reasoning/1.3/ The student knows that information and critical thinking are used in scientific problem solving.</p>	<p>2(A) ask questions about organisms, objects, and events observed in the natural world 2(D) record and organize data using pictures, numbers, and words; 3(A) identify and explain a problem such as finding a home for a classroom pet and propose a solution in his/her own words</p>
8	<p>10/11-10/15</p> <p>Lesson 2.3 What materials make up objects?</p>	<p>Scientific investigation and reasoning./1.1/ The student conducts classroom and outdoor investigations following home and school safety procedures and uses environmentally appropriate and responsible practices.</p> <p>Matter and energy./1.5/ The student knows that objects have properties and patterns</p>	<p>1(C) identify and learn how to use natural resources and materials, including conservation and reuse or recycling of paper, plastic, and metals.</p> <p>5(A) classify objects by observable properties of the materials from which they are made such as larger and smaller, heavier and lighter, shape, color, and texture;</p>
9	<p>10/20-10/24</p> <p>Lesson 2.4: How can materials be sorted?</p> <p>Review and Assess</p>	<p>Scientific investigation and reasoning./1.2/ The student develops abilities to ask questions and seek answers in classroom and outdoor investigations</p> <p>Matter and energy./1.5/ The student knows that objects have properties and patterns</p>	<p>2(A) ask questions about organisms, objects, and events observed in the natural world; 2(B) plan and conduct simple descriptive investigations such as ways objects move; 2(D) record and organize data using pictures, numbers, and words; 5(A) classify objects by observable properties of the materials from which they are made such as larger and smaller, heavier and lighter, shape, color, and texture;</p>

10	<p>10/24-10/28 Lesson 3.1: What can we observe about objects?</p> <p>Lesson 3.2 How can we measure temperature?</p>	<p>Scientific investigation and reasoning./1.2/The student develops abilities to ask questions and seek answers in classroom and outdoor investigations.</p> <p>Matter and energy./1.5/ The student knows that objects have properties and patterns</p>	<p>2(A) ask questions about organisms, objects, and events observed in the natural world; 2(B) plan and conduct simple descriptive investigations such as ways objects move; 2(D) record and organize data using pictures, numbers, and words; 5 (A)classify objects by observable properties of the materials from which they are made such as larger and smaller, heavier and lighter, shape, color, and texture; 5(B) predict and identify changes in materials caused by heating and cooling such as ice melting, water freezing, and water evaporating.</p>
11	<p>10/31-11/4 Lesson 3.3: How does heating and cooling change matter?</p>	<p>Matter and energy./1.5/ The student knows that objects have properties and patterns</p>	<p>5(B) predict and identify changes in materials caused by heating and cooling such as ice melting, water freezing, and water evaporating.</p>
12	<p>11/7-11/11 Review and assess unit 3</p>	<p>Scientific investigation and reasoning. /1.2/The student develops abilities to ask questions and seek answers in classroom and outdoor investigations Matter and energy./1.5/ The student knows that objects have properties and patterns</p>	<p>2(A) ask questions about organisms, objects, and events observed in the natural world; 2(B) plan and conduct simple descriptive investigations such as ways objects move; 2(D) record and organize data using pictures, numbers, and words; 5 (A)classify objects by observable properties of the materials from which they are made such as larger and smaller, heavier and lighter, shape, color, and texture; 5(B) predict and identify changes in materials caused by heating and cooling such as ice melting, water freezing, and water evaporating.</p>

13	11/14-11/18 Lesson 4.1: How do we use energy?	Force, motion, and energy. /6/The student knows that force, motion, and energy are related and are a part of everyday life	6(A) identify and discuss how different forms of energy such as light, heat, and sound are important to everyday life;
H	11/21-11/25	Thanksgiving Break	
14	11/28-12/3 Lesson 4.2: How do magnets move objects?	Force, motion, and energy. /6/The student knows that force, motion, and energy are related and are a part of everyday life	6(B) predict and describe how a magnet can be used to push or pull an object;
15	12/5-12/9 Lesson 4.3: How do objects move Lesson 4.4: How can we move a ball?	Scientific investigation and reasoning. /1.2/The student develops abilities to ask questions and seek answers in classroom and outdoor investigations. Force, motion, and energy. /6/The student knows that force, motion, and energy are related and are a part of everyday life	2(A) ask questions about organisms, objects, and events observed in the natural world; 2(B) plan and conduct simple descriptive investigations such as ways objects move; 2(D) record and organize data using pictures, numbers, and words; 6(D) demonstrate and record the ways that objects can move such as in a straight line, zig zag, up and down, back and forth, round and round, and fast and slow.
16	12/12-12/16 Lesson 4.5: How can we change the way objects move? Review and assess	Force, motion, and energy. /6/The student knows that force, motion, and energy are related and are a part of everyday life	6(C) describe the change in the location of an object such as closer to, nearer to, and farther from;
17	12/19-12/20 2 day week Review		

Christmas Break

17/H	12/21-12/23 <i>Christmas Break</i>	
H	12/26-1/6 <i>Christmas Break and staff development</i>	

18	<p>1/9-1/13 Lesson 5.1: What can we find on Earth?</p> <p>Lesson 5.2: What is Soil?</p>	<p>Scientific investigation and reasoning/1.1/. The student conducts classroom and outdoor investigations following home and school safety procedures and uses environmentally appropriate and responsible practices.</p> <p>Earth and space./1.7/ The student knows that the natural world includes rocks, soil, and water that can be observed in cycles, patterns, and systems.</p>	<p>1(C) identify and learn how to use natural resources and materials, including conservation and reuse or recycling of paper, plastic, and metals.</p> <p>7(A) observe, compare, describe, and sort components of soil by size, texture, and color;</p> <p>7(C) gather evidence of how rocks, soil, and water help to make useful products.</p>
19	<p>1/16-1/20 Lesson 5.3: What do we find in soil?</p> <p>Lesson 5.4: How do soils differ?</p>	<p>Scientific investigation and reasoning/1.2/. The student develops abilities to ask questions and seek answers in classroom and outdoor investigations</p> <p>Earth and space./1.7/ The student knows that the natural world includes rocks, soil, and water that can be observed in cycles, patterns, and systems.</p>	<p>2(A) ask questions about organisms, objects, and events observed in the natural world;</p> <p>2(B) plan and conduct simple descriptive investigations such as ways objects move;</p> <p>2(D) record and organize data using pictures, numbers, and words;</p> <p>7(A) observe, compare, describe, and sort components of soil by size, texture, and color;</p>
20	<p>1/23-1/27</p> <p>Lesson 5.5 Where can we find water?</p>	<p>Earth and space./1.7/ The student knows that the natural world includes rocks, soil, and water that can be observed in cycles, patterns, and systems.</p>	<p>7(B) identify and describe a variety of natural sources of water, including streams, lakes, and oceans;</p>
21	<p>1/12-1/16 Lesson 5.6: How can we save resources?</p> <p>Review and assess</p>	<p>Scientific investigation and reasoning./1.1/ The student conducts classroom and outdoor investigations following home and school safety procedures and uses environmentally appropriate and responsible practices.</p>	<p>1(C) identify and learn how to use natural resources and materials, including conservation and reuse or recycling of paper, plastic, and metals.</p>

22	<p>2/6-2/10</p> <p>Lesson 6.1: What is weather?</p> <p>Lesson 6.2 What can we observe about weather?</p>	<p>Scientific investigation and reasoning./1.2/ The student develops abilities to ask questions and seek answers in classroom and outdoor investigations</p> <p>Scientific investigation and reasoning. /1.3/The student knows that information and critical thinking are used in scientific problem solving.</p> <p>Earth and space./1.8/The student knows that the natural world includes the air around us and objects in the sky.</p>	<p>2(A) ask questions about organisms, objects, and events observed in the natural world</p> <p>2(B) plan and conduct simple descriptive investigations such as ways objects move;</p> <p>2(D) record and organize data using pictures, numbers, and words;</p> <p>3(B) make predictions based on observable patterns;</p> <p>8(A) record weather information, including relative temperature, such as hot or cold, clear or cloudy, calm or windy, and rainy or icy;</p>
23	<p>2/13-2/17</p> <p>Lesson 6.3: What are seasons?</p>	<p>Scientific investigation and reasoning./1.3/ The student knows that information and critical thinking are used in scientific problem solving.</p> <p>Earth and space. /1.8/The student knows that the natural world includes the air around us and objects in the sky.</p>	<p>3(B) make predictions based on observable patterns;</p> <p>8(C) identify characteristics of the seasons of the year and day and night;</p>
24	<p>2/20-2/24</p> <p>Review and Assess Unit 6</p>	<p>Scientific investigation and reasoning./1.2/ The student develops abilities to ask questions and seek answers in classroom and outdoor investigations</p> <p>Scientific investigation and reasoning./1.3/ The student knows that information and critical thinking are used in scientific problem solving.</p> <p>Earth and space./1.8/ The student knows that the natural world includes the air around us and objects in the sky.</p>	<p>2(A) ask questions about organisms, objects, and events observed in the natural world</p> <p>2(B) plan and conduct simple descriptive investigations such as ways objects move;</p> <p>2(D) record and organize data using pictures, numbers, and words;</p> <p>3(B) make predictions based on observable patterns;</p> <p>8(A) record weather information, including relative temperature, such as hot or cold, clear or cloudy, calm or windy, and rainy or icy;</p> <p>8(C) identify characteristics of the seasons of the year and day and night;</p>

25	<p>2/27-2/3</p> <p>Lesson 7.1: What can we see in the sky?</p> <p>Lessons 7.2: How does the sky seem to change?</p>	<p>Scientific investigation and reasoning./1.3/ The student knows that information and critical thinking are used in scientific problem solving.</p> <p>Earth and space. /1.8/The student knows that the natural world includes the air around us and objects in the sky.</p>	<p>3(B) make predictions based on observable patterns;</p> <p>8(B) observe and record changes in the appearance of objects in the sky such as clouds, the Moon, and stars, including the Sun;</p> <p>8(C) identify characteristics of the seasons of the year and day and night;</p>
26	<p>3/6-3/10</p> <p>Lesson 7.3: How does the sun seem to move?</p> <p>Review and assess</p>	<p>Scientific investigation and reasoning./1.2/ The student develops abilities to ask questions and seek answers in classroom and outdoor investigations</p> <p>Scientific investigation and reasoning./1.3/ The student knows that information and critical thinking are used in scientific problem solving.</p> <p>Scientific investigation and reasoning./1.4/ The student uses age-appropriate tools and models to investigate the natural world</p> <p>Earth and space. /1.8/The student knows that the natural world includes the air around us and objects in the sky.</p>	<p>2(A) ask questions about organisms, objects, and events observed in the natural world;</p> <p>2(B) plan and conduct simple descriptive investigations such as ways objects move;</p> <p>2(D) record and organize data using pictures, numbers, and words;</p> <p>3(B) make predictions based on observable patterns;</p> <p>4(A) collect, record, and compare information using tools, including computers, hand lenses, primary balances, cups, bowls, magnets, collecting nets, notebooks, and safety goggles; timing devices, including clocks and timers; non-standard measuring items such as paper clips and clothespins; weather instruments such as classroom demonstration thermometers and wind socks; and materials to support observations of habitats of organisms such as aquariums and terrariums;</p> <p>4(B) measure and compare organisms and objects using non-standard units.</p> <p>8(A) record weather information, including relative temperature, such as hot or cold, clear or cloudy, calm or windy, and rainy or icy;</p> <p>8(B) observe and record changes in the appearance of objects in the sky such as clouds, the Moon, and stars, including the Sun;</p> <p>8(C) identify characteristics of the seasons of the year and day and night;</p>

Spring Break

H	3/13-3-17	Spring Break	
27	<p>3/20-3/24</p> <p>Lesson 8.1: What are living and nonliving things?</p>	<p>Organisms and environments. /9/ The student knows that the living environment is composed of relationships between organisms and the life cycles that occur.</p>	<p>9(A) sort and classify living and nonliving things based upon whether or not they have basic needs and produce offspring;</p>
<p>28</p> <p>STAAR 3-28</p>	<p>3/27-3/31</p> <p>Lesson 8.2: Where do plants and animals live?</p> <p>Lesson 8.3: What is a Terrarium?</p>	<p>Scientific investigation and reasoning. /2/The student develops abilities to ask questions and seek answers in classroom and outdoor investigations</p> <p>Scientific investigation and reasoning. /4/The student uses age-appropriate tools and models to investigate the natural world.</p> <p>Organisms and environments. /9/The student knows that the living environment is composed of relationships between organisms and the life cycles that occur.</p>	<p>2(A) ask questions about organisms, objects, and events observed in the natural world;</p> <p>2(B) plan and conduct simple descriptive investigations such as ways objects move;</p> <p>2(D) record and organize data using pictures, numbers, and words;</p> <p>4(A) collect, record, and compare information using tools, including computers, hand lenses, primary balances, cups, bowls, magnets, collecting nets, notebooks, and safety goggles; timing devices, including clocks and timers; non-standard measuring items such as paper clips and clothespins; weather instruments such as classroom demonstration thermometers and wind socks; and materials to support observations of habitats of organisms such as aquariums and terrariums;</p> <p>9(B) analyze and record examples of interdependence found in various situations such as terrariums and aquariums or pet and caregiver;</p> <p>9(C) gather evidence of interdependence among living organisms such as energy transfer through food chains and animals using plants for shelter.</p>

29	<p>4/3-4/7</p> <p>Review and Assess</p>	<p>Scientific investigation and reasoning. /2/The student develops abilities to ask questions and seek answers in classroom and outdoor investigations</p> <p>Scientific investigation and reasoning. /4/The student uses age-appropriate tools and models to investigate the natural world.</p> <p>Organisms and environments. /9/The student knows that the living environment is composed of relationships between organisms and the life cycles that occur.</p>	<p>2(A) ask questions about organisms, objects, and events observed in the natural world;</p> <p>2(B) plan and conduct simple descriptive investigations such as ways objects move;</p> <p>2(D) record and organize data using pictures, numbers, and words;</p> <p>4(A) collect, record, and compare information using tools, including computers, hand lenses, primary balances, cups, bowls, magnets, collecting nets, notebooks, and safety goggles; timing devices, including clocks and timers; non-standard measuring items such as paper clips and clothespins; weather instruments such as classroom demonstration thermometers and wind socks; and materials to support observations of habitats of organisms such as aquariums and terrariums;</p> <p>9(A) sort and classify living and nonliving things based upon whether or not they have basic needs and produce offspring;</p> <p>9(B) analyze and record examples of interdependence found in various situations such as terrariums and aquariums or pet and caregiver;</p> <p>9(C) gather evidence of interdependence among living organisms such as energy transfer through food chains and animals using plants for shelter.</p>
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<p>30</p> <p>4/10-4/13 4 day week</p> <p>Lesson 9.1: How do animals Differ?</p> <p>Lesson 9.2: How can we group animals?</p>	<p>Scientific investigation and reasoning. /2/The student develops abilities to ask questions and seek answers in classroom and outdoor investigations</p> <p>Organisms and environments./10/ The student knows that organisms resemble their parents and have structures and processes that help them survive within their environments.</p>	<p>2(A) ask questions about organisms, objects, and events observed in the natural world; 2(B) plan and conduct simple descriptive investigations such as ways objects move; 2(D) record and organize data using pictures, numbers, and words; 10(A) investigate how the external characteristics of an animal are related to where it lives, how it moves, and what it eats;</p>
<p>31</p> <p>4/18-4/21 4 day week</p> <p>Lesson 9.3: What are some animal life cycles?</p>	<p>Organisms and environments./10/ The student knows that organisms resemble their parents and have structures and processes that help them survive within their environments</p>	<p>10(C) compare ways that young animals resemble their parents; 10(D) observe and record life cycles of animals such as a chicken, frog, or fish.</p>
<p>32</p> <p>4/24-4/28</p> <p><i>Review and assess</i></p>	<p>Scientific investigation and reasoning. /2/The student develops abilities to ask questions and seek answers in classroom and outdoor investigations</p> <p>Organisms and environments./10/ The student knows that organisms resemble their parents and have structures and processes that help them survive within their environments.</p>	<p>2(A) ask questions about organisms, objects, and events observed in the natural world; 2(B) plan and conduct simple descriptive investigations such as ways objects move; 2(D) record and organize data using pictures, numbers, and words; 10(A) investigate how the external characteristics of an animal are related to where it lives, how it moves, and what it eats;10(C) compare ways that young animals resemble their parents; 10(D) observe and record life cycles of animals such as a chicken, frog, or fish.</p>
<p>33</p> <p>5/1-5/5</p> <p>Lesson 10.1: What are some parts of plants?</p> <p>Lesson 10.2:</p>	<p>Organisms and environments./10/ The student knows that organisms resemble their parents and have structures and processes that help them survive within their environments</p>	<p>10(B) identify and compare the parts of plants;</p>

	How are plants different?		
34 STAAR 5/8 5/9 5/10	5/8-5/12 <i>Lesson 10.3</i> <i>How can we compare leaves?</i>	<p>Scientific investigation and reasoning. /2/The student develops abilities to ask questions and seek answers in classroom and outdoor investigations</p> <p>Scientific investigation and reasoning. /4/The student uses age-appropriate tools and models to investigate the natural world.</p> <p>Organisms and environments./10/ The student knows that organisms resemble their parents and have structures and processes that help them survive within their environments</p>	<p>2(A) ask questions about organisms, objects, and events observed in the natural world;</p> <p>2(B) plan and conduct simple descriptive investigations such as ways objects move;</p> <p>2(D) record and organize data using pictures, numbers, and words;</p> <p>4(A) collect, record, and compare information using tools, including computers, hand lenses, primary balances, cups, bowls, magnets, collecting nets, notebooks, and safety goggles; timing devices, including clocks and timers; non-standard measuring items such as paper clips and clothespins; weather instruments such as classroom demonstration thermometers and wind socks; and materials to support observations of habitats of organisms</p> <p>4(B) measure and compare organisms and objects using non-standard units.</p> <p>10(B) identify and compare the parts of plants;</p>
35	5/15-5/18	<p>REVIEW ALL</p> <p>Last Day of Regular School year is 5/18</p>	