

Revised 2009-2010

Grade 5
Science

**SCOPE
&
SEQUENCE**



Redlands Unified School District



REDLANDS UNIFIED SCHOOL DISTRICT

Science

Scope & Sequence

INTRODUCTION:

The Science *Scope & Sequence* Committees have worked to develop pacing guides for grades Kindergarten through fifth that ensure RUSD curriculum addresses the Content Standards for California Public Schools. MacMillian/McGraw-Hill's *California Science*, are the adopted materials. With this in mind, teachers are to use this *Scope & Sequence* as the core of their Science instruction. Lessons listed in **bold** under "Instructional Support" are "core" lessons and have been selected to ensure that all students have access to the Content Standards for California Public Schools. Lessons listed in *italics* are suggested lessons. Due to the nature of the grade level, the Kindergarten curriculum does not indicate specific lessons for Extra Support or Challenge. Lessons to address the specific needs of English Learners are contained within a double box.

A WORD ABOUT THE DEVELOPMENT OF THE *SCOPE & SEQUENCE*:

The *Scope & Sequence* was developed by grade level groups of teachers from traditional and year-round schools. It is divided into trimesters. The Science committees used the 2004 Edition of the Science Framework for California Public Schools as a guide.

PACING:

Pacing for lessons is not specifically defined and should be planned trimester to trimester. Science lessons listed in the *Scope and Sequence* are considered the minimum of what should be covered in each grade level. Not all lessons in the Macmillian/McGraw-Hill textbook are listed in the *Scope and Sequence*. Only those lessons that adequately address the grade level standards are designated as "core" in this *Scope and Sequence*. Therefore, each trimester may be planned utilizing the following table that lists the number of lessons per trimester:

Lessons by Trimester

	Trimester 1	Trimester 2	Trimester 3
Grade 5			
Unit	Life Science	Earth Science	Physical Science
Chapters	1, 2, 3	4, 5, 6	7, 8
Lessons	11	12	8



ACKNOWLEDGEMENTS

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The Science Scope and Sequence Development Committee Grade 5:

- | | |
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| Kathleen Peterson | Laurie Sauvage |
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**RUSD Science
Scope and Sequence Distribution by Standard
Grade 5**

	First Trimester	Second Trimester	Third Trimester
Life Science			
2a	I		
2b			
2c	I		
2d	I		
2e	+		
2f	I		
2g			
Earth Science			
3a		I	
3b		I	
3c		I	
3d			
3e			
Earth Science			
4a		I	
4b			
4c		I	
4d		I	
4e			
Earth Science			
5a		I	
5b		I	
5c		I	
Physical Science			
1a			I
1b			
1c			I
1d			
1e			I
1f			
1g			I
1h			I
1i			I
Investigation & Experimentation			
6a			
6b			I
6c			
6d			I
6e			I
6f	I		
6g		I	
6h			
6i		I	

STANDARD	OBJECTIVE	TEXT SUPPORT
<p>Life Science</p>	<p>5 LS 2.a Students know many multi cellular organisms have specialized structures to support the transport of materials.</p> <p>5 IE 6.c Plan and conduct a simple investigation based on a student-developed question and write instructions others can follow to carry out the procedure.</p> <p>5 IE 6.f Select appropriate tools (e.g., thermometers, meter sticks, balances, and graduated cylinders) and make quantitative observations.</p> <p>5 IE 6.i Write a report of an investigation that includes conducting tests, collecting data or examining evidence, and drawing conclusions.</p>	<p>Life Science Unit</p> <p>Chapter 1 – Structure of Living Things</p> <p>Lesson 1 - Cells TE pp. 24-33</p> <p><i>Reading and Writing in Science pp. 1 -6</i> <i>Reading and Writing in Science p. 2</i></p> <hr/> <p><i>English Learners TE p. 30</i></p> <hr/> <p><i>Extra Support TE p. 31</i></p> <hr/> <p><i>Challenge TE p. 31</i></p> <p>Interactive Text pp. 2-5 <i>Explore – What Are plants and animals made of? TE p. 25</i> <i>Activity Lab Book pp. 1-2</i> <i>Visual Literacy pp. 1-2</i></p>
<p>Life Science</p>	<p>5 LS 2.a Students know many multi cellular organisms have specialized structures to support the transport of materials.</p> <p>5 IE 6.b Develop a testable question.</p> <p>5 IE 6.c Plan and conduct a simple investigation based on a student-developed question and write instructions others can follow to carry out the procedure.</p> <p>5 IE 6.g Record data by using appropriate graphic representations (Including charts, graphs, and labeled diagrams) and make inferences based on those data.</p>	<p>Lesson 2 – From Cells to Organisms TE pp. 36-43</p> <p><i>Reading and Writing in Science pp. 7-10</i></p> <p>Interactive Text pp. 6-9 <i>Visual Literacy pp. 3-4</i> <i>Explore – What are the levels of organization of living things? TE p. 37</i> <i>Activity Lab Book p. 9-10</i></p> <hr/> <p><i>English Learners TE p. 40</i></p> <hr/> <p><i>Extra Support TE p. 39</i></p> <hr/> <p><i>Challenge TE p. 39</i></p>

STANDARD	OBJECTIVE	TEXT SUPPORT
<p>Life Science</p>	<p>5 LS 2.a Students know many multi cellular organisms have specialized structures to support the transport of materials.</p> <p>5 IE 6.a Classify objects (e.g., rocks, plants, leaves) in accordance with appropriate criteria.</p>	<p>Lesson 3 – Diversity of Organisms TE p. 46-57</p> <p><i>Reading and Writing in Science</i> <i>pp. 11-14, 19, 20</i></p> <p><i>Reading and Writing in Science</i> <i>pp. 15-18</i></p> <p>Interactive Text pp. 10-17 Interactive Text – Vocabulary Review pp 18-19</p> <hr/> <p><i>English Learners – EL Strategies TE p. 54</i></p> <hr/> <p><i>Extra Support – Leveled Questions</i> <i>TE p. 51</i></p> <hr/> <p><i>Challenge – Leveled Questions TE p. 51</i> <i>Explore – How would you classify a new plant? TE p. 47</i> <i>Activity Lab Book pp. 17-18</i> <i>Visual Literacy pp. 5-6</i></p> <p>Assessment pp. 1 - 6 Chapter Review TE pp. 62-63 Test Practice TE pp. 64-65</p>
<p>Life Science</p>	<p>5 LS 2.a Students know many multi cellular organisms have specialized structures to support the transport of materials.</p> <p>5 IE 6.a Classify objects (e.g., rocks, plants, leaves) in accordance with appropriate criteria.</p> <p>5 IE 6.g Record data by using appropriate graphic representations (Including charts, graphs, and labeled diagrams) and make inferences based on those data.</p>	<p>Chapter 2 – Plant Structures and Functions</p> <p>Lesson 1 – Vascular Plants TE pp. 66-77</p> <p><i>Reading and Writing in Science</i> <i>pp. 21, 23 – 26</i></p> <p><i>Reading and Writing in Science p. 22</i></p> <hr/> <p><i>English Learners – EL Strategies TE p. 73</i></p> <hr/> <p><i>Extra Support – Leveled Activities</i> <i>TE p. 74</i></p> <hr/> <p><i>Challenge – Leveled Activities TE p. 74</i> <i>Explore – What are the parts of a vascular plant? TE p. 71</i> <i>Activity Lab Book pp. 21-22</i></p>

STANDARD	OBJECTIVE	TEXT SUPPORT
<p>Life Science</p>	<p>5 LS 2.a Students know many multi cellular organisms have specialized structures to support the transport of materials.</p> <p>5 LS 2.e Students know how sugar, water, and minerals are transported in a vascular plant.</p> <p>5 IE 6.b Develop a testable question.</p> <p>5 IE 6.c Plan and conduct a simple investigation based on a student-developed question and write instructions others can follow to carry out the procedure.</p> <p>5 IE 6.e Identify a single independent variable in a scientific investigation and explain how this variable can be used to collect information to answer a question about the results of the experiment.</p> <p>5 IE 6.i Write a report of an investigation that includes conducting tests, collecting data or examining evidence, and drawing conclusions.</p>	<p>Lesson 2 – Plant Transport Systems TE pp. 80-87</p> <p><i>Reading and Writing in Science</i> <i>pp. 27-30</i></p> <p>Interactive Text pp. 28-31 <i>Visual Literacy pp. 9-10</i> <i>Explore – How does water move in a plant? TE p. 81</i> <i>Activity Lab Book pp. 29-30</i></p>
<p>Life Science</p>	<p>5 LS 2.f Students know plants use carbon dioxide (CO₂) and energy from sunlight to build molecules of sugar and release oxygen.</p> <p>5 LS 2.g Students know plant and animal cells break down sugar to obtain energy, a process resulting in carbon dioxide (CO₂) and water (respiration).</p> <p>5 IE 6.e Identify a single independent variable in a scientific investigation and explain how this variable can be used to collect information to answer a question about the results of the experiment.</p>	<p>Lesson 3 – Photosynthesis and Respiration TE p. 90-97</p> <p><i>Reading and Writing in Science</i> <i>pp. 31 – 34, 39, 40</i></p> <p><i>Reading and Writing in Science</i> <i>p. 35 – 38</i></p> <p>Interactive Text pp. 32-35 Interactive Text – Vocabulary Review pp. 36-37 <i>Visual Literacy pp. 11-12</i> <i>Explore – What do plants produce? TE p. 91</i></p>

STANDARD	OBJECTIVE	TEXT SUPPORT
<p>Life Science</p>		<p><i>Activity Lab Book pp. 37-38</i></p> <hr/> <p><i>English Learners – EL Strategies TE p. 93</i></p> <hr/> <p><i>Extra Support – Leveled Activities TE p. 95</i></p> <hr/> <p><i>Challenge – Leveled Activities TE p. 95</i></p> <hr/> <p>Assessment pp. 7-12</p>
<p>Life Science</p>	<p>5 LS 2.a Students know many multi cellular organisms have specialized structures to support the transport of materials.</p> <p>5 IE 6.b Develop a testable question.</p> <p>5 IE 6.e Identify a single independent variable in a scientific investigation and explain how this variable can be used to collect information to answer a question about the results of the experiment.</p> <p>5 IE 6.i Write a report of an investigation that includes conducting tests, collecting data or examining evidence, and drawing conclusions.</p>	<p>Chapter 3 – Human Body Systems</p> <p>Lesson 1 – The Human Body TE p. 106-117</p> <p><i>Reading and Writing in Science pp. 41, 43-46</i></p> <p><i>Reading and Writing in Science p. 42</i></p> <p>Interactive Text pp. 38-43</p> <p><i>Visual Literacy pp. 13-14</i></p> <p><i>Explore – What parts of your body are you using? TE p. 111</i></p> <p><i>Activity Lab Book pp. 41-42</i></p> <hr/> <p><i>English Learners – EL Strategies TE p. 113</i></p> <hr/> <p><i>Extra Support – Leveled Activities TE p. 115</i></p> <hr/> <p><i>Challenge – Leveled Activities TE p. 115</i></p>
<p>Life Science</p>	<p>5 LS 2.c Students know the sequential steps of digestion and the roles of teeth and the mouth, esophagus, stomach, small intestine, large intestine, and colon in the function of the digestive system.</p> <p>5 IE 6.i Write a report of an investigation that includes conducting tests, collecting data or examining evidence, and drawing conclusions.</p>	<p>Lesson 2 – Digestive System TE pp.</p> <p><i>Reading and Writing in Science pp. 47-50</i></p> <p><i>Reading and Writing in Science pp. 51-52</i></p> <p>Interactive Text pp. 44-49</p> <p><i>Visual Literacy pp. 15-16</i></p> <p><i>Explore – Why is the small intestine full of folds? TE p. 121</i></p> <p><i>Activity Lab Book pp. 49-50</i></p>

STANDARD	OBJECTIVE	TEXT SUPPORT
<p>Life Science</p>		<p><i>English Learners – EL Strategies</i> TE p. 123</p> <hr/> <p><i>Extra Support – Leveled Activities</i> TE p. 124</p> <hr/> <p><i>Challenge – Leveled Activities</i> TE p. 124</p>
<p>Life Science</p>	<p>5 LS 2.b Students know how blood circulates through the heart chambers, lungs, and body and how carbon dioxide (CO₂) and oxygen (O₂) are exchanged in the lungs and tissues.</p> <p>5 LS 2.g Students know plant and animal cells break down sugar to obtain energy, a process resulting in carbon dioxide (CO₂) and water(respiration).</p> <p>5 IE 6.b Develop a testable question.</p> <p>5 IE 6.e Identify a single independent variable in a scientific investigation and explain how this variable can be used to collect information to answer a question about the results of the experiment.</p> <p>5 IE 6.i Write a report of an investigation that includes conducting tests, collecting data or examining evidence, and drawing conclusions.</p>	<p>Lesson 3 – Respiratory System TE p. 132-139</p> <p><i>Reading and Writing in Science</i> TE pp. 53- 56</p> <p>Interactive Text pp. 50-53 <i>Visual Literacy pp. 17-18</i> <i>Explore – How much air do you breathe?</i> TE p. 133 <i>Activity Lab Book pp. 53-54</i></p> <hr/> <p><i>English Learners – EL Strategies</i> TE p. 135</p> <hr/> <p><i>Extra Support – Leveled Activities</i> TE p. 136</p> <hr/> <p><i>Challenge – Leveled Activities</i> TE p. 136</p>

STANDARD	OBJECTIVE	TEXT SUPPORT
<p>Life Science</p>	<p>5 LS 2.b Students know how blood circulates through the heart chambers, lungs, and body and how carbon dioxide (CO₂) and oxygen (O₂) are exchanged in the lungs and tissues.</p> <p>5 IE 6.e Identify a single independent variable in a scientific investigation and explain how this variable can be used to collect information to answer a question about the results of the experiment.</p>	<p>Lesson 4 – Circulatory System TE p. 142-159</p> <p><i>Reading and Writing in Science</i> pp. 57-60</p> <p><i>Reading and Writing in Science</i> pp. 61-62</p> <p>Interactive Text pp. 54-59</p> <p><i>Visual Literacy</i> pp. 19-20</p> <p><i>Explore – When does your heart work the hardest?</i> TE p. 143</p> <p><i>Activity Lab Book</i> pp. 61-62</p> <hr/> <p><i>English Learners – EL Strategies</i> TE pp. 145, 147</p> <hr/> <p><i>Extra Support – Leveled Activities</i> TE p. 146</p> <hr/> <p><i>Challenge – Leveled Activities</i> TE p. 146</p>
<p>Life Science</p>	<p>5 LS 2.d Students know the role of the kidney in removing cellular waste from blood and converting it into urine, which is stored in the bladder.</p>	<p>Lesson 5 – Excretory System TE pp.</p> <p><i>Reading and Writing in Science</i> pp. 63 - 66, 69, 70</p> <p><i>Reading and Writing in Science</i> pp. 67, 68</p> <p>Interactive Text pp. 60-65</p> <p>Interactive Text – Vocabulary Review pp. 66-67</p> <p><i>Visual Literacy</i> pp. 21-22</p> <p><i>Explore – How do your kidneys filter out waste?</i> TE p. 155</p> <p><i>Activity Lab Book</i> pp. 65-66</p> <hr/> <p><i>English Learners – EL Strategies</i> TE p. 157</p> <hr/> <p><i>Extra Support – Leveled Activities</i> TE pp. 158, 161</p> <hr/> <p><i>Challenge – Leveled Activities</i> TE p. 158, 161</p> <p>Assessment pp. 13 – 16</p> <p>Chapter 3 Review TE p. 166, 167</p> <p>Test Practice TE pp. 168-169</p>

STANDARD	OBJECTIVE	TEXT SUPPORT
<p>Earth Science</p>	<p>5 ES 3.a Students know most of Earth's water is present as salt water in the oceans, which cover most of Earth's surface.</p> <p>5 IE 6.f Select appropriate tools (e.g., thermometers, meter sticks, balances, and graduated cylinders) and make quantitative observations.</p>	<p>Chapter 4 – Earth’s Water</p> <p>Lesson 1 – Earth: The Blue Planet TE pp. 174-185</p> <p><i>Reading and Writing in Science</i> pp. 71, 73 - 76</p> <p><i>Reading and Writing in Science</i> TE pp. 72</p> <p><i>Visual Literacy</i> pp. 23-24</p> <p><i>Explore – How much of Earth’s water is salty and how much is fresh?</i> TE p. 179</p> <p><i>Activity Lab Book</i> p. 69-70</p> <hr/> <p><i>English Learners – EL Strategies</i> TE p. 182</p> <p><i>EL Teacher’s Guide</i> p. 3</p> <hr/> <p><i>Extra Support – Leveled Activities</i> TE p. 181</p> <hr/> <p><i>Challenge – Leveled Activities</i> TE p. 181</p> <p>Interactive Text pp. 68-73</p>
<p>Earth Science</p>	<p>5 ES 3.b Students know when liquid water evaporates, it turns into water vapor in the air and can reappear as a liquid when cooled or as a solid if cooled below the freezing point of water.</p> <p>5 ES 3.c Students know water vapor in the air moves from one place to another and can form fog or clouds, which are tiny droplets of water or ice, and can fall to Earth as rain, hail, sleet, or snow.</p> <p>5 IE 6.c Plan and conduct a simple investigation based on a student-developed question and write instructions others can follow to carry out the procedure.</p> <p>5 IE 6.d Identify the dependent and controlled variables in an investigation.</p>	<p>Lesson 2 – Water Cycle TE pp. 188-199</p> <p><i>Reading and Writing in Science</i> pp. 77-80</p> <p>Interactive text pp. 74-83</p> <p><i>Visual Literacy</i> pp. 25-26</p> <p><i>Explore – How do water droplets form?</i> TE p. 189</p> <p><i>Activity Lab book</i> pp. 77-78</p> <hr/> <p><i>English Learners – EL Strategies</i> TE p. 191</p> <hr/> <p><i>Extra Support – Leveled Activities</i> TE pp. 192, 194</p> <hr/> <p><i>Challenge – Leveled Activities</i> TE pp. 192, 194</p>

STANDARD	OBJECTIVE	TEXT SUPPORT
<p>Earth Science</p>	<p>5 ES 3.d Students know that the amount of fresh water located in rivers, lakes, under-ground sources, and glaciers is limited and that its availability can be extended by recycling and decreasing the use of water.</p> <p>5 ES 3.e Students know the origin of the water used by their local communities.</p> <p>5 IE 6.g Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data.</p>	<p>Lesson 3 – Fresh Water Resources TE pp. 202-211</p> <p><i>Reading and Writing in Science</i> pp. 81 - 84</p> <p><i>Reading and Writing in Science</i> pp. 85-86</p> <p>Interactive Text pp. 84-89 <i>Visual Literacy</i> pp. 27-28</p> <p><i>Explore – How much fresh water do you use?</i> TE p. 203</p> <p><i>Activity Lab Book</i> pp. 85-86</p> <hr/> <p><i>English Learners – EL Strategies</i> TE p. 206, 209</p> <hr/> <p><i>Extra Support – Leveled Activities</i> TE p. 205</p> <hr/> <p><i>Challenge – Leveled Activities</i> TE p. 205</p>
<p>Earth Science</p>	<p>5 ES 3.d Students know that the amount of fresh water located in rivers, lakes, under-ground sources, and glaciers is limited and that its availability can be extended by recycling and decreasing the use of water.</p> <p>5 ES 3.e Students know the origin of the water used by their local communities.</p> <p>5 IE 6.g Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data.</p>	<p>Lesson 4 - California's Water Supply? TE pp. 214-221</p> <p><i>Reading and Writing in Science</i> pp. 87-90, 93, 94</p> <p><i>Reading and Writing in Science</i> pp. 91-92</p> <p>Interactive Text pp. 90-93 <i>Visual Literacy</i> pp. 29-30</p> <p><i>Interactive Text – Vocabulary Review</i> pp. 94-95</p> <p><i>Explore – How much precipitation falls in your community?</i> TE p. 215</p> <p><i>Activity Lab Book</i> pp. 89-90</p> <hr/> <p><i>English Learners – EL Strategies</i> TE pp. 217, 222</p> <hr/> <p><i>Extra Support – Leveled Activities</i> TE p. 218</p> <hr/> <p><i>Challenge – Leveled Activities</i> TE p. 218</p> <p>Assessment pp. 19-22 Chapter 4 Review TE pp. 224-225 Test Practice TE pp. 226-227</p>

STANDARD	OBJECTIVE	TEXT SUPPORT
<p>Earth Science</p>	<p>5 ES 4.b Students know the influence that the ocean has on the weather and the role that the water cycle plays in weather patterns.</p> <p>5 IE 6.i Write a report of an investigation that includes conducting tests, collecting data or examining evidence, and drawing conclusions.</p>	<p>Chapter 5 – Earth’s Weather</p> <p>Lesson 1 – Earth’s Atmosphere TE pp. 228-239</p> <p><i>Reading and Writing in Science</i> <i>pp. 95, 97 - 100</i></p> <p><i>Reading and Writing in Science</i> <i>pp. 96</i></p> <p>Interactive Text pp. 96-101</p> <p><i>Visual Literacy pp. 31-32</i></p> <p><i>Explore – How does air density change if the volume is changed? TE p. 233</i></p> <p><i>Activity Lab Book pp. 93-94</i></p> <hr/> <p><i>English Learners TE p. 236</i></p> <hr style="border-top: 1px dashed black;"/> <p><i>Extra Support TE p. 238</i></p> <hr style="border-top: 1px dashed black;"/> <p><i>Challenge TE p. 238</i></p>
<p>Earth Science</p>	<p>5 ES 4.a Students know uneven heating of Earth causes air movements(convection currents).</p> <p>5 IE 6.c Plan and conduct a simple investigation based on a student-developed question and write instructions others can follow to carry out the procedure.</p> <p>5 IE 6.d Identify the dependent and controlled variables in an investigation.</p> <p>5 IE 6.g Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data.</p>	<p>Lesson 2 – Air Currents and Wind TE pp. 242-249</p> <p><i>Reading and Writing in Science</i> <i>pp. 101-104</i></p> <p>Interactive Text pp. 102-107</p> <p><i>Visual Literacy pp. 33-34</i></p> <p><i>Explore – How does the angle of sunlight affect temperature? TE p. 243</i></p> <p><i>Activity Lab Book p. 101</i></p> <hr/> <p><i>English Learners TE p. 247</i></p> <hr style="border-top: 1px dashed black;"/> <p><i>Extra Support TE p. 246</i></p> <hr style="border-top: 1px dashed black;"/> <p><i>Challenge TE p. 246</i></p>

STANDARD	OBJECTIVE	TEXT SUPPORT
<p>Earth Science</p>	<p>5 ES 4.b Students know the influence that the ocean has on the weather and the role that the water cycle plays in weather patterns.</p> <p>5 IE 6.c Plan and conduct a simple investigation based on a student-developed question and write instructions others can follow to carry out the procedure.</p> <p>5 IE 6.h Draw conclusions from scientific evidence and indicate whether further information is needed to support a specific conclusion.</p>	<p>Lesson 3 – Oceans and Air Temperature TE p. 252-259</p> <p><i>Reading and Writing in Science pp. 105-108</i></p> <p>Interactive Text pp. 108-111</p> <p><i>Visual Literacy pp. 35-36</i></p> <p><i>Explore – What can cause two places to have different temperatures? TE p. 253</i></p> <p><i>Activity Lab Book p. 109</i></p> <hr/> <p><i>English Learners TE p. 256</i></p> <hr/> <p><i>Extra Support TE p. 257</i></p> <hr/> <p><i>Challenge – Leveled Activities TE p. 257</i></p>
<p>Earth Science</p>	<p>5 ES 4.c Students know the causes and effects of different types of severe weather.</p> <p>5 IE 6.d Identify the dependent and controlled variables in an investigation.</p>	<p>Lesson 4 – Severe Weather TE pp. 262-273</p> <p><i>Reading and Writing in Science pp. 109-112</i></p> <p><i>Reading and Writing in Science pp. 113-114</i></p> <p>Interactive Text pp. 112-119</p> <p><i>Visual Literacy pp. 37-38</i></p> <p><i>Explore – What happens when masses of air meet? TE p. 263</i></p> <p><i>Activity Lab Book p. 117</i></p> <hr/> <p><i>English Learners TE pp. 266, 268</i></p> <hr/> <p><i>Extra Support – Leveled Activities TE pp. 265, 267</i></p> <hr/> <p><i>Challenge – Leveled Activities TE pp. 265, 267</i></p>

STANDARD	OBJECTIVE	TEXT SUPPORT
<p>Earth Science</p>	<p>5 ES 4.d Students know how to use weather maps and data to predict local weather and know that weather forecasts depend on many variables.</p> <p>5 IE 6.g Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data.</p>	<p>Lesson 5 – Predicting the Weather TE pp. 276-285</p> <p><i>Reading and Writing in Science</i> pp. 115-118, 121, 122</p> <p><i>Reading and Writing in Science</i> pp. 119, 120</p> <p>Interactive Text pp. 120-125 Interactive Text – Vocabulary Review TE pp. 126-127</p> <p><i>Visual Literacy</i> pp. 39-40</p> <p><i>Explore – Can you tell the direction that wind is blowing?</i> TE p. 277</p> <p><i>Activity Lab Book</i> p. 121</p> <hr/> <p><i>English Learners – EL Strategies</i> TE pp. 279, 283</p> <hr style="border-top: 1px dashed black;"/> <p><i>Extra Support</i> TE p. 281</p> <hr style="border-top: 1px dashed black;"/> <p><i>Challenge</i> TE p. 281</p> <p>Assessment p. 25-28 Chapter 5 Review TE p. 288-289 Test Practice TE p. 290-291</p>
<p>Earth Science</p>	<p>5 ES 5.a Students know the Sun, an average star, is the central and largest body in the solar system and is composed primarily of hydrogen and helium.</p> <p>5 IE 6.f Select appropriate tools (e.g., thermometers, meter sticks, balances, and graduated cylinders) and make quantitative observations.</p> <p>5 IE 6.h Draw conclusions from scientific evidence and indicate whether further information is needed to support a specific conclusion.</p>	<p>Chapter 6 – Solar System</p> <p>Lesson 1 – The Sun TE p. 292-303</p> <p><i>Reading and Writing in Science</i> pp. 123, 125 - 128</p> <p><i>Reading and Writing in Science</i> pp. 124</p> <p>Interactive Text pp. 128-133 <i>Visual Literacy</i> p. 41-42</p> <p><i>Explore – How do the sizes of Earth and the sun compare?</i> TE p. 297</p> <p><i>Activity Lab Book</i> p. 125</p> <hr/> <p><i>English Learners</i> TE p. 300</p> <hr style="border-top: 1px dashed black;"/> <p><i>Extra Support – Leveled Activities</i> TE p. 299</p> <hr style="border-top: 1px dashed black;"/> <p><i>Challenge</i> TE p. 299</p>

STANDARD	OBJECTIVE	TEXT SUPPORT
<p>Earth Science</p>	<p>5 ES 5.b Students know the solar system includes the planet Earth, the Moon, the Sun, eight other planets and their satellites, and smaller objects, such as asteroids and comets.</p> <p>5 IE 6.c Plan and conduct a simple investigation based on a student-developed question and write instructions others can follow to carry out the procedure.</p> <p>5 IE 6.g Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data.</p>	<p>Lesson 2 – Structure of the Solar System TE pp. 306-313</p> <p><i>Reading and Writing in Science pp. 129-132</i></p> <p>Interactive Text pp. 134-137</p> <p><i>Visual Literacy pp. 43-44</i></p> <p><i>Explore – How far apart are the planets? TE p. 307</i></p> <p><i>Activity Lab Book p. 133</i></p> <hr/> <p><i>English Learners – EL Strategies TE p. 310</i></p> <hr/> <p><i>Extra Support – Leveled Activities TE p. 309</i></p> <hr/> <p><i>Challenge – Leveled Activities TE p. 309</i></p>
<p>Earth Science</p>	<p>5 ES 5.c Students know the path of a planet around the Sun is due to the gravitational attraction between the Sun and the planet.</p> <p>5 IE 6.g Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data.</p>	<p>Lesson 3 – Gravity and Orbits TE p. 316-323</p> <p><i>Reading And Writing in Science pp. 133-136, 141, 142</i></p> <p><i>Reading and Writing in Science pp. 137-140</i></p> <p>Interactive Text pp. 138-143</p> <p>Interactive Text – Vocabulary Review pp. 144-145</p> <p><i>Visual Literacy pp. 45-46</i></p> <p><i>Explore - What keeps the moon moving around? TE p. 317</i></p> <p><i>Activity Lab Book p. 141</i></p> <hr/> <p><i>English Learners TE pp. 320, 324</i></p> <hr/> <p><i>Extra Support TE p. 321</i></p> <hr/> <p><i>Challenge TE p. 321</i></p> <p>Assessment pp. 31-34</p> <p>Chapter 6 Review TE pp. 328-329</p> <p>Test Practice TE pp. 330-331</p>

STANDARD	OBJECTIVE	TEXT SUPPORT
<p>Physical Science</p>	<p>5 PS 1.g Students know properties of solid, liquid, and gaseous substances, such as sugar (C₆H₁₂O₆), water (H₂O), helium (He), oxygen (O₂), nitrogen (N₂), and carbon dioxide (CO₂).</p> <p>5 IE 6.g Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data.</p> <p>5 IE 6.i Write a report of an investigation that includes conducting tests, collecting data or examining evidence, and drawing conclusions.</p>	<p>Chapter 7 – Types of Matter</p> <p>Lesson 1– Properties of Matter TE pp. 336-349</p> <p><i>Reading and Writing in Science</i> <i>pp. 143-148</i></p> <p>Interactive Text pp. 146-153 <i>Visual Literacy pp. 47-48</i> <i>Explore – What makes a large object light? TE p. 341</i> <i>Activity Lab Book p. 145</i></p> <hr/> <p><i>English Learners – EL Strategies</i> <i>TE p. 343</i></p> <hr/> <p><i>Extra Support – Leveled Activities</i> <i>TE pp. 344, 346</i></p> <hr/> <p><i>Challenge TE pp. 344, 346</i></p>
<p>Physical Science</p>	<p>5 PS 1.d Students know that each element is made of one kind of atom and that the elements are organized in the periodic table by their chemical properties.</p> <p>5 PS 1.h Students know living organisms and most materials are composed of just a few elements.</p> <p>5 IE 6.c Plan and conduct a simple investigation based on a student-developed question and write instructions others can follow to carry out the procedure.</p>	<p>Lesson 2 – Elements TE pp. 352-359</p> <p><i>Reading And Writing in Science</i> <i>pp. 149 -152</i></p> <p>Interactive Text pp. 154-157 <i>Visual Literacy pp. 49-50</i> <i>Explore – Do living things contain carbon? TE p. 353</i> <i>Activity Lab Book p. 153</i></p> <hr/> <p><i>English Learners – EL Strategies</i> <i>TE p. 355</i></p> <hr/> <p><i>Extra Support – Leveled Activities</i> <i>TE p. 356</i></p> <hr/> <p><i>Challenge TE p. 356</i></p>

STANDARD	OBJECTIVE	TEXT SUPPORT
<p>Physical Science</p>	<p>5 PS 1.b Students know all matter is made of atoms, which may combine to form molecules.</p> <p>5 PS 1.d Students know that each element is made of one kind of atom and that the elements are organized in the periodic table by their chemical properties.</p> <p>5 PS 1.e Students know scientists have developed instruments that can create discrete images of atoms and molecules that show that the atoms and molecules often occur in well-ordered arrays.</p> <p>5 IE 6.a Classify objects (e.g., rocks, plants, leaves) in accordance with appropriate criteria.</p>	<p>Lesson 3 – Classifying Elements TE pp. 362-373</p> <p><i>Reading and Writing in Science</i> pp. 153-156</p> <p><i>Reading and Writing in Science</i> pp. 157, 158</p> <p>Interactive Text pp. 158-163 <i>Visual Literacy</i> pp. 51-52</p> <p><i>Explore – What patterns can you find?</i> TE p. 363</p> <p><i>Activity Lab Book</i> p. 161</p> <hr/> <p><i>English Learners – EL Strategies</i> TE pp. 365, 367</p> <hr/> <p><i>Extra Support – Leveled Activities</i> TE pp. 363, 368, 371</p> <hr/> <p><i>Challenge</i> TE pp. 363, 368, 371</p>
<p>Physical Science</p>	<p>5 PS 1.f Students know differences in chemical and physical properties of substances are used to separate mixtures and identify compounds.</p> <p>5 IE 6.i Write a report of an investigation that includes conducting tests, collecting data or examining evidence, and drawing conclusions.</p>	<p>Lesson 4 – Mixtures TE pp. 376-385</p> <p><i>Reading and Writing in Science</i> pp. 159-162</p> <p><i>Reading and Writing in Science</i> pp. 163-164</p> <p>Interactive Text pp. 164-169 <i>Visual Literacy</i> pp. 53-54</p> <p><i>Explore – How can you separate mixed substances?</i> TE p. 377</p> <p><i>Activity Lab Book</i> p. 165</p> <hr/> <p><i>English Learners – EL Strategies</i> TE p. 379</p> <hr/> <p><i>Extra Support – Leveled Activities</i> TE p. 382</p> <hr/> <p><i>Challenge</i> TE p. 382</p>

STANDARD	OBJECTIVE	TEXT SUPPORT
<p>Physical Science</p>	<p>5 PS 1.a Students know that during chemical reactions the atoms in the reactants rearrange to form products with different properties.</p> <p>5 PS 1.f Students know differences in chemical and physical properties of substances are used to separate mixtures and identify compounds.</p> <p>5 IE 6.c Plan and conduct a simple investigation based on a student-developed question and write instructions others can follow to carry out the procedure.</p> <p>5 IE 6.h Draw conclusions from scientific evidence and indicate whether further information is needed to support a specific conclusion.</p>	<p>Lesson 5 – Compounds TE p. 388-397</p> <p><i>Reading and Writing in Science</i> <i>pp. 165-170</i></p> <p><i>Reading and Writing in Science</i> <i>pp. 13-16</i></p> <p>Interactive Text pp. 170-175 Interactive Text – Vocabulary Review pp. 176-177</p> <p><i>Visual Literacy pp. 55-56</i> <i>Explore – What is Rust? TE p. 389</i> <i>Activity Lab Book p. 169</i></p> <hr/> <p><i>English Learners – EL Strategies</i> <i>TE p. 391, 395</i></p> <hr/> <p><i>Extra Support – Leveled Activities</i> <i>TE p. 394</i></p> <hr/> <p><i>Challenge – Leveled Activities TE p. 394</i></p> <p>Assessment pp. 37-40 Chapter 7 Review TE p. 400-401 Test Practice TE p. 402-403</p>
<p>Physical Science</p>	<p>5 PS 1.a Students know that during chemical reactions the atoms in the reactants rearrange to form products with different properties.</p> <p>5 IE 6.d Identify the dependent and controlled variables in an investigation.</p>	<p>Chapter 8 – Changes in Matter</p> <p>Lesson 1 – Chemical Reactions TE p. 404-417</p> <p><i>Reading and Writing in Science</i> <i>pp. 171-176</i></p> <p>Interactive Text pp. 178-185 <i>Visual Literacy p. 57-58</i> <i>Explore – What happens when substances change? TE p. 409</i> <i>Activity Lab Book p. 177</i></p>

STANDARD	OBJECTIVE	TEXT SUPPORT
<p>Physical Science</p>	<p>5 IE 6.e Identify a single independent variable in a scientific investigation and explain how this variable can be used to collect information to answer a question about the results of the experiment.</p> <p>5 IE 6.h Draw conclusions from scientific evidence and indicate whether further information is needed to support a specific conclusion.</p>	<p><i>English Learners – EL Strategies</i> <i>TE p. 411</i></p> <hr/> <p><i>Extra Support – Leveled Activities</i> <i>TE pp. 413, 415</i></p> <hr/> <p><i>Challenge – Leveled Activities</i> <i>TE pp. 413, 415</i></p>
<p>Physical Science</p>	<p>5 PS 1.c Students know metals have properties in common, such as high electrical and thermal conductivity. Some metals, such as aluminum (Al), iron (Fe), nickel (Ni), copper (Cu), silver (Ag), and gold (Au), are pure elements; others, such as steel and brass, are composed of a combination of elemental metals.</p> <p>5 IE 6.a Classify objects (e.g., rocks, plants, leaves) in accordance with appropriate criteria.</p> <p>5 IE 6.b Develop a testable question.</p> <p>5 IE 6.g Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data.</p>	<p>Lesson 2 – Metals and Alloys TE pp. 420-431</p> <p><i>Reading and Writing in Science</i> <i>pp. 177-180</i></p> <p>Interactive Text pp. 186-189 <i>Visual Literacy pp. 59-60</i> <i>Explore - How can you tell if it's a metal?</i> <i>TE p. 421</i> <i>Activity Lab Book p. 185</i></p> <hr/> <p><i>English Learners – EL Strategies</i> <i>TE pp. 423, 429</i></p> <hr/> <p><i>Extra Support – Leveled Activities</i> <i>TE pp. 425, 428</i></p> <hr/> <p><i>Challenge – Leveled Activities</i> <i>TE p. 425, 428</i></p>
<p>Physical Science</p>	<p>5 PS 1.i Students know the common properties of salts, such as sodium chloride (NaCl).</p>	<p>Lesson 3 – Salts TE p. 434-445</p> <p><i>Reading and Writing in Science</i> <i>pp. 181-184, 189, 190</i></p> <p><i>Reading and Writing in Science</i> <i>pp. 185-188</i></p> <p>Interactive Text pp. 192-199</p>

STANDARD	OBJECTIVE	TEXT SUPPORT
<p>Physical Science</p>	<p>5 IE 6.g Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data.</p>	<p>Interactive Text – Vocabulary Review pp. 200-201 <i>Visual Literacy pp. 61-62</i> <i>Explore – What are salts made of? TE p. 435</i> <i>Activity Lab Book p. 193</i></p> <hr/> <p><i>English Learners – EL Strategies TE pp. 437, 443</i></p> <hr/> <p><i>Extra Support – Leveled Activities TE pp. 441, 442</i></p> <hr/> <p><i>Challenge – Leveled Activities TE pp. 441, 442</i></p> <p>Assessment pp. 43-46 Chapter 8 Review TE p. 450-451 Test Practice TE p. 452-453</p>