

GLENCOE CORRELATION
THE NATURE OF MATTER (K)
CHEMISTRY (L)
MOTION, FORCES, AND ENERGY (M)
ELECTRICITY AND MAGNETISM (N)
WAVES, SOUND, AND LIGHT (O)
NEBRASKA
Science Standards Grades 5-8

OBJECTIVES	PAGE REFERENCES
8.1 Unifying Concepts and Processes	
8.1.1 By the end of eighth grade, students will develop an understanding of systems, order, and organization.	(K) 18-19, 21-23, 60-61, 98-103 <i>Explore Activity 97</i> <i>Problem-Solving Activity 103</i> UAA 19 (L) 10-13 <i>Problem-Solving Activity 13</i> <i>National Geographic 22</i> <i>Activity: Design Your Own Experiment 26-27</i> UAA 11 (M) 104-106, 109-112, 114-115, 141, 144-145 <i>Activity: Use the Internet 88-89</i> <i>Activity: Design Your Own Experiment 116-117</i> (N) 15-16, 73-80, 82-83 <i>Activity 27, 56-57</i>
8.1.2 By the end of eighth grade, students will develop an understanding of evidence, models, and explanation.	(K) <i>MiniLab 15</i> <i>Activity 30-31, 53</i> <i>Activity: Design Your Own Experiment 62-63, 88-89</i> (L) <i>MiniLab 19, 100</i> <i>Activity: Design Your Own Experiment 26-27, 54-55</i> <i>Activity 53, 107</i> (M) <i>Activity: Design Your Own Experiment 56-57, 116-117</i> <i>Explore Activity 65</i> <i>Activity: Use the Internet 88-89</i> <i>Activity 168</i> (N) <i>Activity 27, 28-29, 54-55</i> <i>Explore Activity 37</i> <i>MiniLab 46</i> (O) <i>Activity: Design Your Own Experiment 26-27, 86-87</i> <i>MiniLab 38, 50</i> <i>Activity 46</i> LD 38

OBJECTIVES	PAGE REFERENCES
<p>8.1.3 By the end of eighth grade, students will develop an understanding of change, constancy, and measurement.</p>	<p>(K) 59 <i>Explore Activity 39</i> <i>Activity 53, 77</i> <i>Math Skills Activity 59, 84</i> <i>Science Skill Handbook 141-142</i> EX 47</p> <p>(L) <i>Activity 53, 77, 107</i> <i>Activity: Design Your Own Experiment 54-55, 174-175</i> <i>Science Skill Handbook 139-140</i> AC 113</p> <p>(M) <i>Activity 55, 168</i> <i>Activity: Design Your Own Experiment 56-57, 116-117</i> <i>Activity: Use the Internet 88-89</i></p> <p>(N) <i>Math Skills Activity 21, 24, 73</i> <i>Problem-Solving Activity 41</i> <i>Skill Builder Activity 55</i> <i>Explore Activity 65</i></p> <p>(O) <i>Activity 18, 118-119</i> <i>Activity: Design Your Own Experiment 26-27</i> <i>Math Skills Activity 83</i> <i>Skill Builder Activity 112</i></p>
<p>8.1.4 By the end of eighth grade, students will develop an understanding of form and function.</p>	<p>(K) <i>Activity: Design Your Own Experiment 62-63</i> (M) <i>National Geographic 134</i> (N) <i>National Geographic 81</i> (O) 54-55, 113-116</p>
<p>8.2 Science as Inquiry</p>	
<p>8.2.1 By the end of eighth grade, students will develop the abilities needed to do scientific inquiry.</p>	<p>(K) <i>Explore Activity 39</i> <i>Activity 30-31, 53, 77</i> <i>Activity: Design Your Own Experiment 88-89</i></p> <p>(L) <i>Problem-Solving Activity 13</i> <i>Activity: Design Your Own Experiment 26-27, 54-55, 116-117</i> <i>Activity 53, 107</i> <i>Explore Activity 63</i></p> <p>(M) <i>Activity: Design Your Own Experiment 26-27, 56-57, 116-117</i> <i>MiniLab 102, 133</i> <i>Activity 168</i></p> <p>(N) <i>Activity 27, 28-29, 54-55</i> <i>Explore Activity 37</i> <i>MiniLab 42, 46</i></p> <p>(O) <i>Activity 18, 46, 118</i> <i>Activity: Design Your Own Experiment 26-27, 56-57, 86-87</i> <i>MiniLab 69</i> <i>Skill Builder Activity 106</i></p>

OBJECTIVES	PAGE REFERENCES
8.3 Physical Science	
<p>8.3.1 By the end of eighth grade, students will develop an understanding of properties and changes of properties in matter.</p>	<p>(K) 8, 18, 25-29, 40-44, 45-47, 49-52, 55-61, 72-76 <i>National Geographic</i> 48 <i>Activity</i> 53</p> <p>(L) 36, 38, 40, 42-45, 73-75 <i>National Geographic</i> 37 <i>MiniLab</i> 38 <i>Activity: Design Your Own Experiment</i> 54-55 <i>Activity</i> 77</p> <p>(M) 162-165</p>
<p>8.3.2 By the end of eighth grade, students will develop an understanding of motion and forces.</p>	<p>(K) 54-59 <i>MiniLab</i> 57 SJ 55 EX 58</p> <p>(M) 8-13, 14-18, 19-22, 36-41, 42-48, 49-54, 66-71 <i>Explore Activity</i> 7, 35 <i>MiniLab</i> 11 <i>National Geographic</i> 23</p> <p>(N) 16, 39-40, 48-49 <i>Explore Activity</i> 7, 37 <i>MiniLab</i> 16, 42</p> <p>(O) 8-12, 13-17, 67-68 <i>Activity</i> 18 <i>National Geographic</i> 24</p>
<p>8.3.3 By the end of eighth grade, students will develop an understanding of the transfer of energy.</p>	<p>(K) 45-47, 49-52 <i>Physics Integration</i> 46 <i>National Geographic</i> 48 SJ 46</p> <p>(L) 42-45, 46-47 <i>Activity: Design Your Own Experiment</i> 54-55 USW 43 EX 47</p> <p>(M) 131-133, 135-136 <i>MiniLab</i> 133 <i>National Geographic</i> 134 LD 132 DI 135</p> <p>(N) 8-14, 15-19, 20-26, 38-43, 45-46, 48-55 <i>The Nature of Science</i> 2-4</p> <p>(O) 8-12, 13, 36, 66, 70, 75</p>

OBJECTIVES	PAGE REFERENCES
8.6 Science and Technology	
<p>8.6.1 By the end of eighth grade, students will develop an understanding of technological design.</p>	<p>(K) <i>Activity: Design Your Own Experiment</i> 62-63 (M) <i>Activity: Design Your Own Experiment</i> 26-27 <i>Time: Science and Society</i> 118-119 <i>National Geographic</i> 171 <i>MiniLab</i> 143 <i>Activity: Use the Internet</i> 148-149 (N) <i>Activity</i> 44, 54, 70 <i>National Geographic</i> 79 (O) 45, 85, 113-117 <i>Problem-Solving Activity</i> 42 <i>Time: Science and History</i> 88-89</p>
<p>8.6.2 By the end of eighth grade, students will develop an understanding of science and technology.</p>	<p>(K) 8, 9-10, 11, 12-13, 116 <i>The Nature of Science</i> 2-5 <i>Oops! Accidents in Science</i> 64-65 <i>National Geographic</i> 115 (L) 108 <i>The Nature of Science</i> 2-5 <i>Time: Science and History</i> 56-57 <i>Time: Science and Society</i> 118-119 (M) 136-137, 141-147 <i>Time: Science and Society</i> 58-59, 118-119 <i>Activity: Design Your Own Experiment</i> 26-27 (N) 22-23, 50-55, 69-71, 80-77 <i>National Geographic</i> 79 (O) 45, 75, 76-77, 79, 113-117</p>
8.7 Science in Personal and Social Perspectives	
<p>8.7.1 By the end of eighth grade, students will develop an understanding of personal health.</p>	<p>(K) 111, 113 <i>Life Science Integration</i> 109 <i>Activity: Use the Internet</i> 118-119 AS 119 (L) <i>MiniLab</i> 109 <i>Problem-Solving Lab</i> 112 <i>Activity</i> 116-117 (M) 141 (N) 25-26 TFYI 25 (O) 75 EX 75 SJ 75</p>
<p>8.7.2 By the end of eighth grade, students will develop an understanding of populations, resources, and environments.</p>	<p>See Glencoe's Science Modules <i>Earth Materials and Processes F</i> <i>The Changing Surface of Earth G</i> <i>The Water Planet H</i> <i>The Air Around You I</i></p>
<p>8.7.3 By the end of eighth grade, students will develop an understanding of natural hazards.</p>	<p>(K) <i>Activity: Use the Internet</i> 118-119 AS 119</p>

OBJECTIVES	PAGE REFERENCES
<p>8.7.4 By the end of eighth grade, students will develop an understanding of risks and benefits.</p>	<p>(K) 116 <i>Activity: Use the Internet</i> 118-119 AS 119</p> <p>(L) <i>The Nature of Science</i> 2-5 <i>Time: Science and History</i> 56-57 <i>Time: Science and Society</i> 118-119</p> <p>(M) 140-147 <i>Time: Science and Society</i> 58-59, 118-119 <i>Activity: Use the Internet</i> 148-149</p> <p>(N) 25-26, 54-55</p> <p>(O) 75, 76-77 SJ 75</p>
<p>8.7.5 By the end of eighth grade, students will develop an understanding of science and technology in society.</p>	<p>(K) 114, 116 <i>The Nature of Science</i> 2-5 <i>Oops! Accidents in Science</i> 64-65 <i>National Geographic</i> 86, 115</p> <p>(L) 76 <i>The Nature of Science</i> 2-3 <i>Time: Science and History</i> 56-57 <i>Time: Science and Society</i> 118-119</p> <p>(M) 136-137, 141-147 <i>Time: Science and Society</i> 58-59, 118-119 <i>Activity: Use the Internet</i> 148-149</p> <p>(N) 50-51, 52-53, 53-55, 73, 88 <i>Time: Science and History</i> 30-31 <i>Time: Science and Society</i> 84-85</p> <p>(O) 45, 47-52, 76-77 <i>Oops! Accidents in Science</i> 120-121</p>
8.8 History and Nature of Science	
<p>8.8.1 By the end of eighth grade, students will develop an understanding of science as a human endeavor.</p>	<p>(K) 9-16 <i>The Nature of Science</i> 2-5 <i>National Geographic</i> 20 <i>Career Connection</i> 121 CDIV 10</p> <p>(L) <i>The Nature of Science</i> 2-5 <i>Career Connection</i> 29 <i>Time: Science and Society</i> 118-119 CC 43</p> <p>(M) TFYI 38 CC 43, 67, 79 CDIV 52</p> <p>(N) <i>The Nature of Science</i> 2-5 <i>Time: Science and History</i> 30-31 <i>Career Connection</i> 59 CDIV 16, 53</p> <p>(O) <i>The Nature of Science</i> 2-5 <i>Time: Science in History</i> 88-89 <i>Oops! Accidents in Science</i> 120-121 CDIV 109</p>

OBJECTIVES	PAGE REFERENCES
<p>8.8.2 By the end of eighth grade, students will develop an understanding of the nature of science.</p>	<p>(K) <i>The Nature of Science</i> 2-5 <i>Activity</i> 30-31, 53, 77 <i>Activity: Design Your Own Experiment</i> 88-89</p> <p>(L) <i>Problem-Solving Activity</i> 13 <i>Activity: Design Your Own Experiment</i> 26-27, 54-55, 116-117 <i>Activity</i> 53, 107 <i>Explore Activity</i> 63</p> <p>(M) <i>The Nature of Science</i> 2-5 <i>Activity: Design Your Own Experiment</i> 26-27, 56-57, 116-117 <i>Time: Science and Society</i> 118-119</p> <p>(N) <i>The Nature of Science</i> 2-5 <i>Time: Science and History</i> 30-31 <i>Activity</i> 54-55, 70</p> <p>(O) <i>The Nature of Science</i> 2-5 <i>Activity: Design Your Own Experiment</i> 26-27, 86-87 <i>Time: Science in History</i> 88-89 <i>Oops! Accidents in Science</i> 120-121</p>
<p>8.8.3 By the end of eighth grade, students will develop an understanding of the history of science.</p>	<p>(K) 8-17, 98-99 <i>Time: Science and History</i> 32-33 TFYI 12</p> <p>(L) <i>The Nature of Science</i> 2-3 <i>Time: Science and History</i> 56 CC 43</p> <p>(M) TFYI 38 CC 43, 67, 79 CDIV 52</p> <p>(N) 73 <i>The Nature of Science</i> 2-5 <i>Time: Science and History</i> 30-31 CC 21</p> <p>(O) <i>The Nature of Science</i> 2-4 <i>Time: Science in History</i> 88-89 <i>Oops! Accidents in Science</i> 120-121 CDIV 109</p>

Codes Used for TWE Pages

AC	Activity
AS	Assessment
CC	Curriculum Connection
CDIV	Cultural Diversity
DI	Discussion
EX	Extension
LD	Lab Demonstration
SJ	Science Journal
TFYI	Teacher FYI
UAA	Using an Analogy
USW	Use Science Words