

GLENCOE CORRELATION
LIFE SCIENCE
EARTH SCIENCE
PHYSICAL SCIENCE
NEBRASKA
 Science Standards Grades 5-8

OBJECTIVES	PAGE REFERENCES		
	LIFE SCIENCE	EARTH SCIENCE	PHYSICAL SCIENCE
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.	SE: 22-26, 692-695, 704-708 <i>Activity 27, 263</i> <i>Model and Invent 232-233, 590-591</i> TWE: R 695, 708	SE: 64, 104-109, 244-250, 702-706 <i>Mini LAB 43, 63</i> TWE: VL 244 A 706	SE: 146, 273-275, 518-524, 554-557, 809 <i>Life Science Integration 9</i> <i>Activity 57</i> <i>Mini LAB 555</i>
8.1.2 By the end of eighth grade, students will develop an understanding of evidence, models, and explanation.	SE: 7-9, 837-845 <i>Mini LAB 9</i> <i>Design Your Own</i> <i>Experiment 422-423, 678-679</i>	SE: 36 <i>Activity 23, 142-143, 726-727</i> <i>Explore Activity 183, 367</i> <i>Mini LAB 589</i>	SE: 7-10, 547-549, 809-811 <i>Mini LAB 25, 229, 274, 547, 653</i> <i>Design Your Own</i> <i>Experiment 58-59</i>
8.1.3 By the end of eighth grade, students will develop an understanding of change, constancy, and measurement.	SE: 12, 839-840 <i>Design Your Own</i> <i>Experiment 28-29, 174-175</i> TWE: QD 12 TFYI 12	SE: 90-93, 470-477 <i>Explore Activity 5</i> <i>Activity 45, 482-483</i> <i>Mini LAB 479</i> TWE: AS 53 C 93	SE: 17-21, 40-43 <i>Mini LAB 19, 129</i> <i>Activity 27, 348, 496, 728-729</i> TWE: A 20 QD 128
8.1.4 By the end of eighth grade, students will develop an understanding of form and function.	SE: <i>Model and Invent 590-591, 800-801</i>	SE: 128, 402, 642 <i>Test Practice 31</i> <i>Activity 646</i> TWE: D 401 AS 405 VL 498	SE: 138-139, 370-371, 500 <i>National Geographic 85</i> <i>Explore Activity 125</i> <i>Model and Invent 148-149</i> <i>Design Your Own</i> <i>Experiment 380-381</i> <i>Activity 691</i> TWE: QD 84 CD 500

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	LIFE SCIENCE	EARTH SCIENCE	PHYSICAL SCIENCE
8.2 Science as Inquiry			
8.2.1 By the end of eighth grade, students will develop the abilities needed to do scientific inquiry.	SE: 7-13, 836-845 <i>Design Your Own Experiment 28-29</i> <i>Mini LAB 9</i> <i>Activity 86-87</i> TWE: A 11 QD 8	SE: 6-11, 20-22, 798-811, 812-815, 816-822 <i>Problem-Solving Activity 21</i> <i>Activity 23</i> TWE: A 7	SE: 7-10, 22-26, 802-811, 816-824 <i>Design Your Own Experiment 116-117, 534-535</i> <i>Communicating Your Data 663</i> TWE: A 9 CA 13, 565
8.3 Physical Science			
8.3.1 By the end of eighth grade, students will develop an understanding of properties and changes of properties in matter.	SE: 66-73 TWE: QD 68, 69, 72 MM 72	SE: 40-44, 46-51 <i>Explore Activity 33</i> <i>Chemistry Integration 44</i> <i>Math Skills Activity 47</i> TWE: R 44 TPK 46	SE: 488-492, 518-524, 526-527, 533 <i>Mini LAB 498, 643</i> <i>Activity 727</i> TWE: LD 528 CA 535
8.3.2 By the end of eighth grade, students will develop an understanding of motion and forces.		SE: 241, 647-648, 706 <i>Physics Integration 241</i> <i>Mini LAB 653</i> TWE: AS 25 CB 238E QD 648	SE: 38-44, 47-50, 68-74, 75-82, 83-88 <i>Mini LAB 40, 81</i> <i>Activity 89</i> TWE: A 41 SJ 73
8.3.3 By the end of eighth grade, students will develop an understanding of the transfer of energy.	SE: 81-85, 734	SE: 130-135, 443-446, 557-559 <i>Mini LAB 445</i> <i>Life Science Integration 558</i> <i>Activity 692-693</i> TWE: TPK 557 LSI 558	SE: 107-111, 138-145, 164-167, 209-215, 233-239, 358-360, 750-753 <i>Mini LAB 159</i> <i>Explore Activity 325</i> TWE: LD 142

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	LIFE SCIENCE	EARTH SCIENCE	PHYSICAL SCIENCE
8.4 Life Science			
8.4.1 By the end of eighth grade, students will develop an understanding of the structure and function in living systems.	SE: 38-45, 81-85, 490-495, 499, 553-554, 580-582 <i>Activity 46</i>	SE: 398, 497-498, 559-564 <i>Chemistry Integration 560</i> <i>Mini LAB 561</i> TWE: LSI 463 A 563	SE: 114-115, 360-362, 426-427, 463-465, 656-661 <i>Life Science Integration</i> 179, 230, 428 TWE: QD 464
8.4.2 By the end of eighth grade, students will develop an understanding of reproduction and heredity.	SE: 101-102, 104-109, 126-132, 134-140, 274-277, 634-635 <i>Mini LAB 275</i> TWE: C 277	SE: 559 <i>Activity 413</i> TWE: CD 402 TFYI 497	
8.4.3 By the end of eighth grade, students will develop an understanding of regulation and behavior.	SE: 157-159, 460-465, 600-608, 610-617, 628-629 <i>Activity 475</i> <i>National Geographic 602,</i> 630-631 TWE: A 158 D 606	SE: 498-499 TWE: QD 498 CI 560	
8.4.4 By the end of eighth grade, students will develop an understanding of populations and ecosystems.	SE: 692-695, 704-708, 720, 726, 734-737 <i>Design Your Own</i> <i>Experiment 710-711</i> TWE: R 695, 737 C 737	SE: 584-587 <i>Life Science Integration</i> 586 TWE: IS 562 D 584 TPK 584	
8.4.5 By the end of eighth grade, students will develop an understanding of diversity and adaptations of organisms.	SE: 154-155, 168, 828-831 <i>Mini LAB 414</i> TWE: D 829, 830	SE: 496-499 <i>Explore Activity 397</i> TWE: D 401 A 402, 563 MM 498 CC 562	SE: <i>Health Integration 84, 345</i> <i>National Geographic 376</i>

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	LIFE SCIENCE	EARTH SCIENCE	PHYSICAL SCIENCE
8.5 Earth and Space Science			
8.5.1 By the end of eighth grade, students will develop an understanding of the structure of the earth.	SE: 722, 728-729 <i>Mini LAB 722</i>	SE: 284-293, 313-315, 434-441 <i>Mini LAB 289</i> TWE: MM 314 R 441 CB 520E IS 523	SE: 45-46, 167, 229, 400, 615 <i>Earth Science Integration 79, 176</i> <i>National Geographic 166, 503</i> TWE: A 45
8.5.2 By the end of eighth grade, students will develop an understanding of the earth's history.		SE: 376-381, 398-399, 406-412, 414-419 <i>Mini LAB 418</i> <i>Activity 420-421</i> TWE: CB 396E R 419	SE: 266-267 <i>National Geographic 292</i> <i>Earth Science Integration 301</i>
8.5.3 By the end of eighth grade, students will develop an understanding of the earth in the solar system.		SE: 671-677, 680-682, 702-703 <i>Explore Activity 671</i> <i>Science Online 675</i> <i>Activity 687, 692-693</i> <i>Mini LAB 716</i>	SE: 76, 82, 86 <i>Astronomy Integration 367, 647</i>
8.6 Science and Technology			
8.6.1 By the end of eighth grade, students will develop an understanding of technological design.	SE: <i>Communicating Your Data 801</i> <i>Model and Invent 800-801</i> TWE: CYD 801	SE: 647-648, 655 <i>Activity 142-143, 646</i> TWE: SC 27 LD 132 QD 656 MM 657	SE: 132-133 <i>Model and Invent 148-149</i> <i>Skill Builder Activities 170</i> <i>Mini LAB 293</i> <i>Explore Activity 517</i> <i>Problem-Solving Activity 680</i> <i>Activity 691</i>

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	LIFE SCIENCE	EARTH SCIENCE	PHYSICAL SCIENCE
8.6.2 By the end of eighth grade, students will develop an understanding of science and technology.	Scientific inquiry is discussed in: SE: 6-11, 836-843 Technology is discussed in: SE: <i>Science and Society</i> 296-297 <i>Connections</i> 297 TWE: CO 297 D 297 II 297	SE: 655-661, 664-665, 688-691 TWE: D 12 UAA 12 C 661 CB 664 A 665	SE: 6-7, 13, 296-297 <i>Section Assessment 13 Science and History</i> 118-119, 350-351 TWE: A 296 C 661
8.7 Science in Personal and Social Perspectives			
8.7.1 By the end of eighth grade, students will develop an understanding of personal health.	SE: 518-527 <i>National Geographic</i> 523 <i>Science and Society</i> 538-539 TWE: D 519, 525 A 526, 527, 793 E 523 II 539		SE: 55-56, 272 <i>Performance Assessment</i> 65 <i>Health Integration</i> 115, 345, 661 <i>Problem-Solving Activity</i> 658 TWE: A 383 E 657, 660
8.7.2 By the end of eighth grade, students will develop an understanding of populations, resources, and environments.	SE: 696-703, 778-780, 786-794 <i>National Geographic</i> 702 <i>Mini LAB</i> 780 TWE: VPG 702 E 702 R 794	SE: 176-177, 584-587, 588-594, 596-599 <i>Explore Activity</i> 583 <i>Problem-Solving Activity</i> 591 <i>Activity</i> 600-601 TWE: CC 157	SE: 302-303 <i>Activity</i> 756-757 <i>Environmental Science Integration</i> 783
8.7.3 By the end of eighth grade, students will develop an understanding of natural hazards.	Waste disposal is discussed in: SE: <i>Science and Society</i> 770-771 TWE: QD 793 E 793 C 794 D 771 A 771 II 771 CO 771	SE: 213-216, 304-307, 308-315, 317-323, 334-339, 340-347, 473-477 TWE: CD 320	SE: 296-297, 302-303 <i>Environmental Science Integration</i> 242 <i>Activity</i> 756-757 <i>Science and Society</i> 788-789 TWE: D 789 A 789

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	LIFE SCIENCE	EARTH SCIENCE	PHYSICAL SCIENCE
8.7.4 By the end of eighth grade, students will develop an understanding of risks and benefits.	SE: <i>Science and Society</i> 295-296, 770-771 <i>Connections</i> 297 TWE: A 771 CO 297 II 297 D 297	SE: 602-603 TWE: CC 11 D 128 CO 265 II 603	SE: 296-297, 301-303 <i>Activity</i> 296 <i>Problem-Solving Activity</i> 303 <i>Science and Society</i> 314-315, 412-413, 788-789 TWE: A 302 E 302
8.7.5 By the end of eighth grade, students will develop an understanding of science and technology in society.	SE: <i>Science and Society</i> 296-297 <i>Science and History</i> 176-177 <i>Connections</i> 297 <i>Oops!</i> 510-511 TWE: E 297 CB 510	SE: 12-13, 126, 264-265, 484-485, 602-603, 661 TWE: E 13 II 485	SE: 12-13 <i>Science and History</i> 350-351 <i>Activity</i> 312-313, 756-757 TWE: CC 453 E 296 CO 633
8.8 History and Nature of Science			
8.8.1 By the end of eighth grade, students will develop an understanding of science as a human endeavor.	SE: <i>Science and History</i> 176-177, 566-567, 592-593 <i>Connections</i> 593 <i>Career Connection</i> 89, 323, 391, 803	SE: 20-22 <i>Health Integration</i> 20 <i>Problem-Solving Activity</i> 21 TWE: C 22	SE: 262 <i>Career Connection</i> 61 <i>Princeton Review</i> 482 TWE: AE 283 CD 8, 84, 104, 139, 500, 531
8.8.2 By the end of eighth grade, students will develop an understanding of the nature of science.	SE: 6-13, 836-845 <i>Mini LAB</i> 9 <i>Design Your Own Experiment</i> 28-29, 294-295 TWE: QD 8 A 11	SE: 6-14, 15-22 <i>Mini LAB</i> 11 <i>Activity</i> 23 TWE: VL 8 E 9 TFYI 20	SE: 6-12, 802-811 <i>Design Your Own Experiment</i> 116-117, 534-535, 630 <i>Skill Builder Activities</i> 395 TWE: E 10
8.8.3 By the end of eighth grade, students will develop an understanding of the history of science.	SE: <i>Science and History</i> 566-567, 592-593 <i>Connections</i> 567 TWE: HS 567, 593 D 507 CB 566, 592	SE: 16-17, 82-83, 276-279, 628-629, 702-703 TWE: E 126 IS 436 CD 648	SE: 262, 554-555, 738-739 <i>Oops!</i> 282-283, 664-665 <i>National Geographic</i> 484-485, 548 TWE: CC 134

Codes Used for TWE Pages

Life Science

A	Activity
C	Challenge
CB	Content Background
CO	Connections
CYD	Communicating Your Data
D	Discussion
E	Extension
HS	Historical Significance
II	Investigate the Issue
MM	Make a Model
QD	Quick Demo
R	Reteach
TFYI	Teacher FYI
VPG	Visualizing Population Growth

Earth Science

A	Activity
AS	Assessment
C	Challenge
CB	Content Background
CC	Curriculum Connection
CD	Cultural Diversity
CI	Chemistry Integration
CO	Connections
D	Discussion
E	Extension
II	Investigate the Issue
IS	Inclusion Strategies
LD	Lab Demonstration
LSI	Life Science Integration
QD	Quick Demo
MM	Make a Model
R	Reteach
SC	Science Connection
TFYI	Teacher FYI
TPK	Tie to Prior Knowledge
UAA	Use an Analogy
VL	Visual Learning

Physical Science

A	Activity
AE	Analyze the Event
C	Challenge
CA	Check Assessment
CC	Curriculum Connection
CD	Cultural Diversity
CO	Connections
D	Discussion
E	Extension
LD	Lab Demonstration
QD	Quick Demo
SJ	Science Journal