

GLENCOE CORRELATION
EARTH SCIENCE: GEOLOGY,
THE ENVIRONMENT, AND THE UNIVERSE
NEBRASKA
Science Standards Grades 9-12

STANDARDS	PAGE REFERENCES
12.1 Unifying Concepts and Processes	
12.1.1 By the end of twelfth grade, students will develop an understanding of systems, order, and organization.	SE: 153-157, 214-221, 369-374 <i>Discovery Lab</i> 153 <i>MiniLab</i> 163 TWE: IM 497, 603
12.1.2 By the end of twelfth grade, students will develop an understanding of evidence, models, and explanation.	SE: <i>GeoLab</i> 232-233, 406-407 <i>MiniLab</i> 471, 688, 718 <i>Discovery Lab</i> 495 <i>Design Your Own GeoLab</i> 676-677, 704-705
12.1.3 By the end of twelfth grade, students will develop an understanding of change, constancy, and measurement.	SE: 16, 158-161, 380 <i>GeoLab</i> 20-21 <i>MiniLab</i> 456 <i>Problem-Solving Lab</i> 637 TWE: CB 15 D 15 A 21
12.1.4 By the end of twelfth grade, students will develop an understanding of form and function.	SE: 632, 690-692, 722 <i>Internet GeoLab</i> 642-643 TWE: CD 630 ITI 631 M 640, 692
12.1.5 By the end of twelfth grade, students will develop an understanding of change over a period of time.	SE: 580-583, 609-611, 640-641 TWE: CB 522D, 576D, 581, 624D A 692
12.2 Science as Inquiry	
12.2.1 By the end of twelfth grade, students will develop the abilities needed to do scientific inquiry.	SE: <i>Design Your Own GeoLab</i> 92-93, 378-379, 676-677, 704-705 <i>GeoLab</i> 174-175 <i>Internet GeoLab</i> 352-353, 488-489, 852-853
12.5 Earth and Space Science	
12.5.1 By the end of twelfth grade, students will develop an understanding of energy in the earth system.	SE: 361-363, 369-374, 375-377, 460-463, 578-579 <i>MiniLab</i> 376 TWE: CFU 363 R 463
12.5.2 By the end of twelfth grade, students will develop an understanding of geochemical cycles.	SE: 211-212, 290-291, 585-588, 664-665, 686-689 TWE: R 291 AC 720

STANDARDS	PAGE REFERENCES
12.5.3 By the end of twelfth grade, students will develop a scientific understanding of the origin of the earth system.	SE: 553-556, 557-561, 562-565, 566-569 <i>MiniLab</i> 558 TWE: CB 552C-D CFU 565 EC 568
12.5.4 By the end of twelfth grade, students will develop a scientific understanding of the origin of the universe.	SE: 809-810, 821-825, 847-851, 859-860 TWE: DIS 822, 848 MIN 822 CFU 851
12.6 Science and Technology	
12.6.1 By the end of twelfth grade, students will develop an understanding of technological design.	SE: <i>Design Your Own GeoLab</i> 676-677, 704-705 TWE: TPK 11 R 257 M 695 PR 872
12.6.2 By the end of twelfth grade, students will develop an understanding about science and technology.	SE: 10, 11-13, 22, 72, 466 <i>Understanding Main Ideas</i> 25 TWE: CB 7 UAA 13
12.7 Science in Personal and Social Perspectives	
12.7.1 By the end of twelfth grade, students will develop an understanding of personal and community health.	SE: 142, 234, 260 TWE: A 735 P 873 ACT 873 TS 873
12.7.2 By the end of twelfth grade, students will develop an understanding of the effects of population change.	SE: 711-715 TWE: CB 710C ITP 713 MIN 713 M 714 CFU 715 A 715
12.7.3 By the end of twelfth grade, students will develop an understanding of natural resources.	SE: 655-658, 659-663, 669-675 <i>Discovery Lab</i> 655 TWE: CB 654C-D D 655 PR 657 A 658
12.7.4 By the end of twelfth grade, students will develop an understanding of environmental quality.	SE: 664-668, 716-723, 724-729, 730-733 <i>Problem-Solving Lab</i> 665 TWE: A 723, 729 MIN 732
12.7.5 By the end of twelfth grade, students will develop an understanding of natural and human-induced hazards.	SE: 334-340, 341-346, 518 <i>MiniLab</i> 348 <i>Internet GeoLab</i> 352-353 TWE: A 340 ESJ 345 AES 348

STANDARDS	PAGE REFERENCES
12.7.6 By the end of twelfth grade, students will develop an understanding of the role of science and technology in local, national, and global challenges.	SE: 718-720, 721-723, 728-729 <i>Science & Technology</i> 854
12.8 History and Nature of Science	
12.8.1 By the end of twelfth grade, students will develop an understanding of science as a human endeavor.	SE: 17-19 TWE: CB 4D
12.8.2 By the end of twelfth grade, students will develop an understanding of the nature of scientific knowledge.	SE: 11-16, 19 <i>MiniLab</i> 12 <i>GeoLab</i> 232-233 <i>Design Your Own GeoLab</i> 378-379, 798-799 TWE: MIN 13 PR 13
12.8.3 By the end of twelfth grade, students will develop an understanding of the history of science.	SE: 443-447, 448-454, 455-459, 460-463, 775-779 TWE: CB 442C MIN 848

Codes Used for TWE Pages

A	Assessment
AC	Across the Curriculum
ACT	Activity
AES	Applying Earth Science
CB	Content Background
CD	Concept Development
CFU	Check for Understanding
D	Demo
DIS	Discussion
EC	Environmental Connection
ESJ	Earth Science Journal
IM	Identifying Misconceptions
ITI	Interpreting the Illustration
ITP	Interpreting the Photo
M	Modeling
MIN	Meeting Individual Needs
P	Portfolio
PR	Project
R	Reteach
TS	Teaching Strategies
TPK	Tying to Previous Knowledge
UAA	Using an Analogy