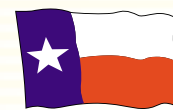


Correlation to Grade 7 Science TEKS and TAKS

Knowledge and Skills	Glencoe Texas Science Student Edition (by page)	TAKS Grade 10 and Grade 11 Exit Level Science
TEKS 7.1: Scientific processes The student conducts field and laboratory investigations using safe, environmentally appropriate, and ethical practices. The student is expected to:		
(A) demonstrate safe practices during field and laboratory investigations; and	5, 12, 14, 15, 96, 97, 140, 153, 178, 186, 187, 240, 249, 251, 253, 272, 275, 278, 313, 336, 337, 344, 345, 361, 391, 425, 428, 434, 459, 480, 486, 488, 489, 512, 542, 544, 545, 597, 605–607, 624, 628, 645, 646, 655, 663, 668, 681, 695, 700, 701, 709, 721, 728, 729, 759–761, 801, 810, 814	TAKS Objective 1 The student will demonstrate an understanding of the nature of science.
(B) make wise choices in the use and conservation of resources and the disposal or recycling of materials.	199, 249, 251–253, 313, 344, 345, 361, 391, 473, 480, 486, 488, 489, 605–607, 624, 645, 806–809	
TEKS 7.2: Scientific processes The student uses scientific inquiry methods during field and laboratory investigations. The student is expected to:		
(A) plan and implement investigative procedures including asking questions, formulating testable hypotheses, and selecting and using equipment and technology;	4, 5, 8, 12, 15–20, 22, 25, 27–29, 32, 33, 35, 48, 62, 69, 80, 94, 108, 115, 140, 149, 154, 155, 169, 170, 185–187, 199, 208, 239, 245, 252, 253, 255, 272, 278, 291, 297, 300, 312, 313–315, 335, 344, 345, 359–361, 374, 375, 391, 402, 403, 434, 435, 448, 455, 459, 467, 469, 472, 473, 480, 486, 488, 489, 512, 516, 517, 538, 542, 544, 545, 564, 580, 591, 594, 604–607, 615, 624, 627, 628, 630, 636, 637, 643, 663, 668, 669, 700, 701, 707, 711, 720, 728, 729, 735, 737, 739, 759–761, 818	TAKS Objective 1 The student will demonstrate an understanding of the nature of science.
(B) collect data by observing and measuring;	5, 9, 12, 17, 18–20, 28, 29, 31–35, 37, 46, 53, 58, 62, 75, 78, 92, 97, 105, 108, 111, 115, 122, 131, 140, 153–157, 161, 178, 187, 199, 208, 212, 214, 221, 240, 249, 251–253, 261, 272, 275, 278, 281, 282, 291, 299, 305, 313–315, 331, 336, 340, 344, 345, 353, 361, 369, 374, 375, 383, 391, 394, 403, 415, 417, 425, 428, 434, 435, 443, 448, 455, 459, 473, 480, 486, 488, 489, 497, 509, 512, 516, 517, 535, 540, 542, 544, 545, 553, 564, 568, 575, 587, 593, 594, 597, 605–607, 615, 624, 627, 628, 630, 632, 637, 655, 663, 681, 686, 690, 695, 700, 701, 709, 711, 721, 724, 728, 729, 737, 750, 759–761, 810, 822	



Knowledge and Skills	<i>Glencoe Texas Science Student Edition (by page)</i>	TAKS Grade 10 and Grade 11 Exit Level Science
(C) organize, analyze, make inferences, and predict trends from direct and indirect evidence;	9, 12, 18–20, 28, 29, 31–33, 35, 46, 52, 53, 58, 62, 75, 90, 97, 108, 115, 122, 129, 140, 149, 153, 156, 157, 161, 173, 178, 179, 187, 199, 212, 214, 219, 232, 240, 243, 249–253, 256, 261, 272, 275, 278, 282, 299, 313–315, 320, 321, 327, 331, 335, 336, 340, 343–345, 353, 359, 361, 369, 374, 375, 386–391, 394, 398, 403, 405, 414, 415, 425, 428, 431, 435, 443, 448, 455, 459, 466, 469, 473, 480, 486, 489, 497, 509, 512, 517, 525, 535, 540, 541, 542, 544, 545, 553, 558, 564, 568, 597, 599, 605–607, 613, 615, 624, 627, 628, 630, 637, 655, 669, 686, 700, 701, 714, 720, 721, 728, 729, 737, 750, 759–761, 818, 822	TAKS Objective 1 The student will demonstrate an understanding of the nature of science.
(D) communicate valid conclusions; and	5, 9, 11, 12, 19, 20, 28, 29, 31–33, 35, 37, 46, 53, 59, 63, 105, 108, 123, 131, 140, 149, 153, 187, 212, 214, 232, 237, 239, 240, 243, 245, 249, 250–253, 256–259, 261, 271, 272, 275, 299, 305, 313, 315, 336, 344, 345, 353, 361, 369, 374, 375, 391, 403, 417, 425, 428, 435, 443, 448, 452, 455, 459, 473, 480, 486, 489, 497, 517, 525, 535, 540, 542, 544, 545, 553, 562, 564, 568, 593, 597, 605, 607, 628, 630, 637, 645, 655, 662, 663, 669, 686, 690, 695, 700, 701, 709, 721, 724, 728, 729, 742, 759–761, 810, 814	
(E) construct graphs, tables, maps, and charts using tools including computers to organize, examine, and evaluate data.	12, 18–20, 23, 28, 29, 32, 33, 35, 52, 62, 63, 67–69, 90, 97, 108, 129, 137, 145, 153–157, 158, 159, 161, 171, 187, 193, 211, 212, 219, 225–227, 232, 266, 272, 276, 312, 320, 321, 344, 345, 361, 374, 375, 392–394, 424, 425, 429, 433, 435, 458, 467, 494, 503, 517, 534, 541, 543, 562–564, 568, 573, 580, 581, 590, 599, 604, 607, 627, 628, 635, 639, 643, 663, 667, 675, 687, 694, 700, 701, 707, 714, 721, 728, 729, 748, 758, 759–761, 810, 814, 818	

Correlation to Grade 7 Science TEKS and TAKS *continued*

Knowledge and Skills	Glencoe Texas Science Student Edition (by page)	TAKS Grade 10 and Grade 11 Exit Level Science
TEKS 7.3: Scientific processes The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:		
(A) analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information;	4, 10, 11, 13, 16, 25, 57, 83, 99, 189, 282, 374, 375, 444, 460, 461, 477, 596, 615, 656	TAKS Objective 1 The student will demonstrate an understanding of the nature of science.
(B) draw inferences based on data related to promotional materials for products and services;	18, 34, 35, 38, 44, 154, 155, 204, 479, 480, 495, 519, 668, 669, 814	
(C) represent the natural world using models and identify their limitations;	4, 16, 32, 33, 37, 46, 61, 78, 79, 81–83, 100, 131, 154, 155, 240, 252, 253, 261, 275, 278, 329, 345, 359, 369, 448, 455, 461, 469, 553, 573, 580, 721, 728, 729, 760, 761, 818	
(D) evaluate the impact of research on scientific thought, society, and the environment; and	4, 6–11, 13–16, 21–27, 30–35, 78–83, 102, 103, 145, 317, 377, 385, 390, 436, 437	
(E) connect Grade 7 science concepts with the history of science and contributions of scientists.	6–11, 13–17, 21–27, 32–35, 77, 79, 80–83, 86, 98, 102, 121, 141, 144, 150, 152, 159, 200, 210, 377, 385, 390, 436, 437, 444, 463, 491, 609	
TEKS 7.4: Scientific processes The student knows how to use tools and methods to conduct science inquiry. The student is expected to:		
(A) collect, analyze, and record information to explain a phenomenon using tools including beakers, petri dishes, meter sticks, graduated cylinders, weather instruments, hot plates, dissecting equipment, test tubes, safety goggles, spring scales, balances, microscopes, telescopes, thermometers, calculators, field equipment, computers, computer probes, timing devices, magnets, and compasses; and	4, 5, 9, 12, 14, 15, 25, 32, 34, 35, 53, 57, 97, 123, 125–129, 173, 174, 185, 187, 199, 208, 212, 272, 278, 299, 336, 344, 345, 361, 402, 405, 425, 435, 448, 455, 459, 473, 480, 484, 486, 491, 512, 517, 535, 540, 542, 544, 545, 553, 577, 579–581, 625, 628, 636, 637, 663, 695, 700, 701, 709, 718, 728, 729, 742, 750, 759–761	TAKS Objective 1 The student will demonstrate an understanding of the nature of science.
(B) collect and analyze information to recognize patterns such as rates of change.	9, 12, 19, 32, 34, 35, 108–110, 229, 272, 344, 345, 361, 448, 455, 459, 473, 480, 486, 491, 544, 545, 562, 577, 695, 700, 701	



Knowledge and Skills	Glencoe Texas Science Student Edition (by page)	TAKS Grade 10 and Grade 11 Exit Level Science
TEKS 7.5: Science concepts The student knows that an equilibrium of a system may change. The student is expected to:		
(A) describe how systems may reach an equilibrium such as when a volcano erupts; and	443, 451, 455, 526, 527, 532, 533, 539, 543–558, 562, 563, 569, 614, 616, 618, 619, 640, 642, 654, 656	TAKS Objective 2 The student will demonstrate an understanding of the organization of living systems. TAKS Objective 3 The student will demonstrate an understanding of the interdependence of organisms and the environment.
(B) observe and describe the role of ecological succession in maintaining an equilibrium in an ecosystem.	616, 617–619, 640, 642	
TEKS 7.6: Science concepts The student knows that there is a relationship between force and motion. The student is expected to:		
(A) demonstrate basic relationships between force and motion using simple machines including pulleys and levers;	148–151, 153, 158–161, 505, 506	TAKS Objective 5 The student will demonstrate an understanding of motion, forces, and energy.
(B) demonstrate that an object will remain at rest or move at a constant speed and in a straight line if it is not being subjected to an unbalanced force; and	132–144, 149, 153, 158–161	
(C) relate forces to basic processes in living organisms including the flow of blood and the emergence of seedlings.	139, 147, 158–161, 231, 240, 243, 305, 318–321, 328, 348–351, 352, 415, 436, 440, 441, 449, 484, 485, 494, 495, 520, 522	
TEKS 7.7: Science concepts The student knows that substances have physical and chemical properties. The student is expected to:		
(A) identify and demonstrate everyday examples of chemical phenomena such as rusting and tarnishing of metals and burning of wood;	79, 91, 97, 99–103, 110, 111, 114–119, 121, 126–129, 180–184, 186–188, 189–193, 254, 255, 333, 339, 340, 348, 349, 473, 481–483, 486, 487, 492, 493, 512, 529, 541, 685, 686, 704, 707	TAKS Objective 4 The student will demonstrate an understanding of the structures and properties of matter.
(B) describe physical properties of elements and identify how they are used to position an element on the periodic table; and	85–90, 100–103, 106–109, 112–116, 121, 124, 126–129	
(C) recognize that compounds are composed of elements.	84, 91–93, 95, 96, 99–103, 121, 494, 600	

Correlation to Grade 7 Science TEKS and TAKS *continued*

Knowledge and Skills	Glencoe Texas Science Student Edition (by page)	TAKS Grade 10 and Grade 11 Exit Level Science
TEKS 7.8: Science concepts The student knows that complex interactions occur between matter and energy. The student is expected to:		
(A) illustrate examples of potential and kinetic energy in everyday life such as objects at rest, movement of geologic faults, and falling water; and	163–173, 175–179, 182–188, 190–193, 649, 742, 743, 760, 761, 764–767, 822–825	TAKS Objective 4 The student will demonstrate an understanding of the structures and properties of matter. TAKS Objective 5 The student will demonstrate an understanding of motion, forces, and energy.
(B) identify that radiant energy from the Sun is transferred into chemical energy through the process of photosynthesis.	226, 294, 320, 321, 328–335, 347–349, 351, 600, 610–612, 646	
TEKS 7.9: Science concepts The student knows the relationship between structure and function in living systems. The student is expected to:		
(A) identify the systems of the human organism and describe their functions; and	354–365, 367–373, 376–381, 414, 416–441, 442–448, 450–462, 464–467, 468–479, 481–487, 489, 490, 492–495, 496–523, 524, 526–545, 547–551, 552–574, 576–581, 814–817	TAKS Objective 2 The student will demonstrate an understanding of the organization of living systems.
(B) describe how organisms maintain stable internal conditions while living in changing external environments.	200–211, 213, 214–218, 220, 221, 223–227, 244, 246, 247, 260, 261, 262–272, 273, 274–278, 279, 280–289, 292–312, 315, 318–321, 330–335, 336, 337, 348–351, 357, 378–381, 414, 416–427, 429–433, 435–441, 443–448, 450–462, 464–467, 470–474, 476–479, 481, 492–495, 498–506, 508–518, 520–523, 526, 527, 529, 530, 534, 540, 548–551, 560, 566, 576, 580, 581, 614, 814–817	
TEKS 7.10: Science concepts The student knows that species can change through generations and that the instructions for traits are contained in the genetic material of the organisms. The student is expected to:		
(A) identify that sexual reproduction results in more diverse offspring and asexual reproduction results in more uniform offspring;	226, 231, 233–237, 243, 251, 354–359, 360, 362–367, 370–381, 390, 406–409	TAKS Objective 2 The student will demonstrate an understanding of the organization of living systems.



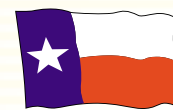
Knowledge and Skills	Glencoe Texas Science Student Edition (by page)	TAKS Grade 10 and Grade 11 Exit Level Science
(B) compare traits of organisms of different species that enhance their survival and reproduction; and	200–211, 215–218, 223, 224–226, 227, 230, 231, 233–250, 254, 255, 260–272, 273, 274–278, 279, 280, 281, 285–289, 296, 298–300, 308–313, 315, 317, 319, 320, 321, 328–335, 342, 343, 354–359, 361, 365–367, 373–375, 378–381, 387, 390, 391, 394, 396, 397, 399, 400, 401, 406, 407–409, 614, 643, 810–813	TAKS Objective 3 The student will demonstrate an understanding of the interdependence of organisms and the environment.
(C) distinguish between dominant and recessive traits and recognize that inherited traits of an individual are contained in genetic material.	368, 369, 371–381, 383, 386, 388–390, 392–394, 386, 388–390, 392–394, 396–398, 400–403, 406–409	
TEKS 7.11: Science concepts The student knows that the responses of organisms are caused by internal or external stimuli. The student is expected to:		
(A) analyze changes in organisms such as a fever or vomiting that may result from internal stimuli; and	269, 336–340, 342, 344, 348–351, 416, 418–421, 423–425, 429–432, 438–441, 445, 446–448, 450, 451, 452–459, 463–465, 521, 522, 526, 527, 529–531, 534, 537, 538, 540, 542, 543, 548–551, 554, 560, 566, 576, 578, 580, 581, 814–817	TAKS Objective 2 The student will demonstrate an understanding of the organization of living systems. TAKS Objective 3 The student will demonstrate an understanding of the interdependence of organisms and the environment.
(B) identify responses in organisms to external stimuli found in the environment such as the presence or absence of light.	227, 249, 254, 269–271, 283, 286–289, 294, 304, 305, 337–339, 341–344, 345, 348–351, 394, 421, 423–425, 429–433, 438–441, 444–448, 450–459, 462, 464–467, 521, 522, 525–531, 533–545, 547–551, 554, 560, 566, 576, 578, 580, 581, 589, 594, 595, 600–603, 606, 607	TAKS Objective 3 The student will demonstrate an understanding of the interdependence of organisms and the environment.
TEKS 7.12: Science concepts The student knows that there is a relationship between organisms and the environment. The student is expected to:		
(A) identify components of an ecosystem;	290, 589–591, 600–605, 610–617, 619–623, 625, 628, 629, 631, 633–635, 640–643, 659, 818–825	TAKS Objective 3 The student will demonstrate an understanding of the interdependence of organisms and the environment.
(B) observe and describe how organisms including producers, consumers, and decomposers live together in an environment and use existing resources;	200, 201, 204, 205, 207, 210, 213, 215, 216–219, 224–227, 228, 229, 236, 237, 239, 242, 243, 246–250, 252, 253, 299, 312, 318–321, 586, 595, 600–605, 610–613, 615, 619, 621–623, 625, 627, 628, 629, 631, 633, 635, 640–643	

Correlation to Grade 7 Science TEKS and TAKS *continued*

Knowledge and Skills	Glencoe Texas Science Student Edition (by page)	TAKS Grade 10 and Grade 11 Exit Level Science
(C) describe how different environments support different varieties of organisms; and	198, 229, 236, 239, 246, 247, 293, 294, 295, 301–304, 308–311, 588–592, 594–596, 598–617, 619–623, 625, 626, 628–631, 633, 635, 640–643, 656, 672, 673, 675, 818–825	
(D) observe and describe the role of ecological succession in ecosystems.	616, 617, 619, 625, 635, 640–643	
TEKS 7.13: Science concepts The student knows components of our solar system. The student is expected to:		
(A) identify and illustrate how the tilt of the Earth on its axis as it rotates and revolves around the Sun causes changes in seasons and the length of a day; and	38, 40–43, 66–69	Content on these pages may be integrated with TAKS Objective 5.
(B) relate the Earth's movement and the moon's orbit to the observed cyclical phases of the moon.	39, 41, 44–46, 47, 48–53, 66–69	
TEKS 7.14: Science concepts The student knows that natural events and human activity can alter Earth systems. The student is expected to:		
(A) describe and predict the impact of different catastrophic events on the Earth;	239, 250, 685, 687, 689, 694, 695, 699–701, 705–709, 713, 715–719, 722, 723, 725–727, 730, 732 64, 65, 68, 69, 618, 631, 661, 689, 697, 710–712, 716, 717, 723, 730, 731, 733, 746, 747, 751, 752, 754, 758–767	Content on these pages may be integrated with TAKS Objective 3.
(B) analyze effects of regional erosion, deposition, and weathering; and	661, 672, 673, 680, 681, 682–735, 738–741, 743–758, 759, 760–767, 822–825	
(C) make inferences and draw conclusions about effects of human activity on Earth's renewable, nonrenewable, and inexhaustible resources.	242, 620, 621, 630, 636–643, 644, 645, 647–655, 657, 661–664, 668, 669, 670–674, 675, 697–699, 746, 747, 806–809	

Correlation of Science TEKS and TAKS

to Glencoe Texas Science Grade 7



by Chapter/Section and Program Content

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Unit 1 The Nature of Science			
Chapter 1 The Nature of Science		7.2B, 7.2C, 7.2D, 7.3B, 7.4A, 7.4B	
Section 1 What is science?	6–11	7.2, 7.2A, 7.2B, 7.2C, 7.2D, 7.3, 7.3A, 7.3D, 7.3E	TAKS Objective 1: The student will demonstrate an understanding of the nature of science.
Activity: Battle of the Drink Mixes	12	7.1A, 7.2A, 7.2B, 7.2C, 7.2D, 7.2E, 7.4A, 7.4B	
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Activity: When is the Internet the busiest?	28–29	7.2A, 7.2B, 7.2C, 7.2D, 7.2E, 7.3, 7.4	
Science and Language Arts: The Everglades: River of Grass	30–31	7.2B, 7.2C, 7.2D, 7.2E, 7.3, 7.3D, 7.4	
Chapter Study Guide	32–33	7.2A, 7.2B, 7.2C, 7.2D, 7.4A, 7.4B	
Chapter Assessment	34–35	7.2, 7.2A, 7.2B, 7.2C, 7.2D, 7.3B, 7.4A, 7.4B	
Chapter 2 Earth in Space		7.13A, 7.13B, 7.14A	
Section 1 Earth's Motion and Seasons	38–43	7.2, 7.2C, 7.3B, 7.4A, 7.13, 7.13A, 7.13B	Content on these pages may be integrated with TAKS Objective 5.
Section 2 Earth's Moon	44–52	7.1, 7.2, 7.2A, 7.2B, 7.2C, 7.2D, 7.3B, 7.13, 7.13B	
Activity: Viewing the Moon	53	7.1, 7.2, 7.2B, 7.2C, 7.2D, 7.4, 7.4A, 7.13, 7.13B	
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Unit 2 Interactions in the Physical World			
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TAKS The content and process skills in Glencoe Texas Science support your efforts to prepare students for future TAKS examinations in science, reading, and mathematics.

Correlation of Science TEKS and TAKS to Glencoe Science Grade 7 *continued*

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Section 3 Compounds and Mixtures	91–95	7.2A, 7.2B, 7.2C, 7.2E, 7.3, 7.7, 7.7A, 7.7B, 7.7C	
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Section 1 Physical and Chemical Properties	106–110	7.2A, 7.2B, 7.2C, 7.2D, 7.2E, 7.4B, 7.7, 7.7A, 7.7B	TAKS Objective 4: The student will demonstrate an understanding of the structures and properties of matter.
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Chapter 24 Erosional Forces		7.14A, 7.14B	
Section 1 Erosion by Gravity	710–714	7.1, 7.2, 7.2A, 7.2B, 7.3, 7.3C, 7.14, 7.14A, 7.14B	Content on these pages may be integrated with TAKS Objective 3.
Section 2 Glaciers	715–720	7.1, 7.1A, 7.2A, 7.2B, 7.2C, 7.2D, 7.2E, 7.3, 7.3C, 7.14, 7.14A, 7.14B	
Activity: Glacial Grooving	721	7.1, 7.1A, 7.2A, 7.2B, 7.2C, 7.2D, 7.2E, 7.3, 7.3C, 7.14B	
Section 3 Wind	722–727	7.1, 7.1A, 7.2A, 7.2B, 7.2C, 7.2D, 7.2E, 7.3C, 7.4A, 7.14, 7.14A, 7.14B	
Activity: Blowing in the Wind	728–729	7.1, 7.1A, 7.2A, 7.2B, 7.2C, 7.2D, 7.2E, 7.3, 7.3C, 7.4A, 7.14B	
Science Stats: Losing Against Erosion	730–731	7.2, 7.14, 7.14A, 7.14B	
Chapter Study Guide	732–733	7.2, 7.14, 7.14A, 7.14B	
Chapter Assessment	734–735	7.3, 7.14B	
Chapter 25 Water Erosion and Deposition		7.8A, 7.14A, 7.14B	
Section 1 Surface Water	738–748	7.2A, 7.2B, 7.3, 7.3C, 7.8A, 7.14, 7.14A, 7.14B	Content on these pages may be integrated with TAKS Objective 4.
Section 2 Groundwater	749–754	7.4, 7.14, 7.14A, 7.14B	
Section 3 Ocean Shoreline	755–758	7.1, 7.1A, 7.2, 7.2A, 7.2B, 7.2C, 7.2D, 7.2E, 7.3, 7.3C, 7.4A, 7.14, 7.14A, 7.14B	
Activity: Classifying Types of Sand	759	7.2C, 7.2D, 7.2E, 7.4, 7.4A, 7.14B	
Activity: Water Speed and Erosion	760–761	7.1, 7.1A, 7.2, 7.2A, 7.2B, 7.2C, 7.2D, 7.2E, 7.3, 7.3C, 7.4A, 7.8A, 7.14A, 7.14B	
Science and Society: Sands in Time	762–763	7.2, 7.14, 7.14A, 7.14B	
Chapter Study Guide	764–765	7.2, 7.8A, 7.14A, 7.14B	
Chapter Assessment	766–767	7.3, 7.8A, 7.14A, 7.14B	

Correlation of Language Arts and Reading TEKS and TAKS

to Glencoe Texas Science Grade 7

Knowledge and Skills	Glencoe Texas Science Student Edition (by page)	TAKS Grade 7 Reading and Writing
<p>TEKS 7.1: <i>Listening/speaking/purposes</i> The student listens actively and purposefully in a variety of settings.</p>	53, 75, 185, 645	Not tested
<p>TEKS 7.2: <i>Listening/speaking/critical listening</i> The student listens critically to analyze and evaluate a speaker's message(s).</p>	53, 336	Not tested
<p>TEKS 7.4: <i>Listening/speaking/culture</i> The student listens and speaks to gain and share knowledge of his/her own culture, the culture of others, and the common elements of culture.</p>	75, 461, 645	Not tested
<p>TEKS 7.5: <i>Listening/speaking/audiences</i> The student speaks clearly and appropriately to different audiences for different purposes and occasions.</p>	63, 111, 461, 575	Not tested
<p>TEKS 7.8: <i>Reading/variety of texts</i> The student reads widely for different purposes in varied sources.</p>	327, 383, 480	Not tested
<p>TEKS 7.9: <i>Reading/vocabulary development</i> The student acquires an extensive vocabulary through reading and systematic word study.</p>	353, 383, 68	<p>Reading TAKS Objective 1 The student will demonstrate a basic understanding of culturally diverse written texts.</p>
<p>TEKS 7.10: <i>Reading/comprehension</i> The student uses a variety of strategies to comprehend a wide range of texts of increasing levels of difficulty.</p>	5, 31, 75, 105, 131, 163, 229, 327, 383, 443, 469, 480, 525, 587, 615, 737	<p>Reading TAKS Objective 1 The student will demonstrate a basic understanding of culturally diverse written texts.</p> <p>Reading TAKS Objective 3 The student will use a variety of strategies to understand culturally diverse written texts.</p> <p>Reading TAKS Objective 4 The student will apply critical thinking skills to understand culturally diverse written texts.</p>
<p>TEKS 7.11: <i>Reading/literary response</i> The student expresses and supports responses to various types of texts.</p>	327, 547, 615, 645, 657, 668	<p>Reading TAKS Objective 4 The student will apply critical thinking skills to understand culturally diverse written texts.</p>
<p>TEKS 7.12: <i>Reading/text structures/literary concepts</i> The student analyzes the characteristics of various types of texts (genres).</p>	105, 547, 703	<p>Reading TAKS Objective 2 The student will apply knowledge of literary elements to understand culturally diverse written texts.</p>

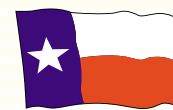


Knowledge and Skills	Glencoe Texas Science Student Edition (by page)	TAKS Grade 7 Reading and Writing
		<p>Reading TAKS Objective 3 The student will use a variety of strategies to understand culturally diverse written texts.</p> <p>Reading TAKS Objective 4 The student will apply critical thinking skills to understand culturally diverse written texts.</p>
TEKS 7.13: Reading/inquiry/research The student inquires and conducts research using a variety of sources.	5, 12, 131, 153, 163, 261, 291, 375, 497, 564, 628, 637, 657, 668, 681, 695, 701, 737	Not tested
TEKS 7.14: Reading/culture The student reads to increase knowledge of his/her own culture, the culture of others, and the common elements of cultures.	695, 703	Not tested
TEKS 7.15: Writing/purposes The student writes for a variety of audiences and purposes and in a variety of forms.	97, 185, 187, 212, 222, 251, 253, 313, 315, 336, 353, 361, 391, 403, 443, 489, 515, 517, 535, 545, 547, 605, 668	<p>Writing TAKS Objective 1 The student will, within a given context, produce an effective composition for a specific purpose.</p>
TEKS 7.17: Writing/grammar/usage The student applies standard grammar and usage to communicate clearly and effectively in writing.	261, 291	<p>Writing TAKS Objective 2 The student will produce a piece of writing that demonstrates a command of the conventions of spelling, capitalization, punctuation, grammar, usage, and sentence structure.</p> <p>Writing TAKS Objective 4 The student will recognize correct and effective sentence construction in written text.</p> <p>Writing TAKS Objective 5 The student will recognize standard usage and appropriate word choice in written text.</p> <p>Writing TAKS Objective 6 The student will proofread for correct punctuation, capitalization, and spelling in written text.</p>
TEKS 7.18: Writing/writing processes The student selects and uses writing processes for self-initiated and assigned writing.	253, 261, 291, 391, 443	<p>Writing TAKS Objective 1 The student will, within a given context, produce an effective composition for a specific purpose.</p>

Correlation of **Language Arts and Reading TEKS and TAKS** to Glencoe Texas Science Grade 7 *continued*

Knowledge and Skills	Glencoe Texas Science Student Edition (by page)	TAKS Grade 7 Reading and Writing
		<p>Writing TAKS Objective 2 The student will produce a piece of writing that demonstrates a command of the conventions of spelling, capitalization, punctuation, grammar, usage, and sentence structure.</p> <p>Writing TAKS Objective 3 The student will recognize appropriate organization of ideas in written text.</p> <p>Writing TAKS Objective 4 The student will recognize correct and effective sentence construction in written text.</p> <p>Writing TAKS Objective 5 The student will recognize standard usage and appropriate word choice in written text.</p> <p>Writing TAKS Objective 6 The student will proofread for correct punctuation, capitalization, and spelling in written text.</p>
TEKS 7.19: Writing/evaluation The student evaluates his/her own writing and the writings of others.	153	Not tested
TEKS 7.20: Writing/inquiry/research The student uses writing as a tool for learning and research.	29, 37, 123, 131, 155, 199, 222, 229, 459, 545, 553, 607, 695, 759	Not tested
TEKS 7.21: Writing/connections The student interacts with writers inside and outside the classroom in ways that reflect the practical uses of writing.	153, 155, 443, 759	Not tested
TEKS 7.22: Viewing/representing/interpretation The student understands and interprets visual images, messages, and meanings.	153, 222, 517, 628, 637	Not tested
TEKS 7.24: Viewing/representing/production The student produces visual images, messages, and meanings that communicate with others.	29, 63, 90, 97, 111, 123, 187, 212, 272, 273, 313, 315, 345, 459, 517, 535, 564, 575, 607, 628, 695	Not tested

Correlation of Mathematics TEKS and TAKS to Glencoe Texas Science Grade 7



Knowledge and Skills	Glencoe Texas Science Student Edition (by page)	TAKS Grade 7 Mathematics
TEKS 7.1: Number, operation, and quantitative reasoning The student represents and uses rational numbers in a variety of equivalent forms. The student is expected to:		
(A) compare and order integers and positive rational numbers.	14, 23, 57, 61, 93, 242, 300, 430, 456, 474, 595, 723	TAKS Objective 1 The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.
(B) convert between fractions, decimals, whole numbers, and percents mentally, on paper, or with a calculator.	23, 203, 279, 303, 389, 390, 692, 694	
TEKS 7.2: Number, operation, and quantitative reasoning The student adds, subtracts, multiplies, and divides to solve problems and justify solutions. The student is expected to:		
(A) represent multiplication and division situations involving fractions and decimals with concrete models, pictures, words, and numbers.	179, 203, 237, 250, 279, 281, 501, 514, 632, 723,	TAKS Objective 1 The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.
(B) use addition, subtraction, multiplication, and division to solve problems involving fractions and decimals.	179, 203, 237, 242, 250, 279, 281, 339, 501, 599, 632, 723	
(C) use models to add, subtract, multiply, and divide integers and connect the actions to algorithms.	89, 110, 121, 134, 136, 137, 142, 147, 237, 250, 360, 365, 430, 431, 458, 541, 563, 599, 619, 727, 758	
(D) use division to find unit rates and ratios in proportional relationships such as speed, density, price, recipes, and student-teacher ratio.	61, 137, 203, 237, 250, 281, 303, 458, 563, 599, 619, 727	
(E) simplify numerical expressions involving order of operations and exponents.	134, 136, 142, 147, 339, 632	
(F) select and use appropriate operations to solve problems and justify the selections.	61, 110, 121, 134, 136, 137, 142, 147, 179, 203, 237, 250, 279, 281, 335, 339, 360, 365, 430, 431, 458, 501, 514, 541, 563, 599, 619, 632, 751, 758	
(G) determine the reasonableness of a solution to a problem.	758	
TEKS 7.3: Patterns, relationships, and algebraic thinking The student solves problems involving proportional relationships. The student is expected to:		
(A) estimate and find solutions to application problems involving percent.	23, 279, 281, 360, 363, 365, 430, 431, 555, 692, 694	TAKS Objective 2 The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.
(B) estimate and find solutions to application problems involving proportional relationships such as similarity, scaling, unit costs, and related measurement units.	203, 237, 250, 281, 303, 458, 514, 595, 563, 751, 758	
TEKS 7.4: Patterns, relationships, and algebraic thinking The student represents a relationship in numerical, geometric, verbal, and symbolic form. The student is expected to:		
(A) generate formulas involving conversions, perimeter, area, circumference, volume, and scaling.	137, 203, 237, 250, 501, 514, 541, 632	TAKS Objective 2 The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.
(B) graph data to demonstrate relationships in familiar concepts such as conversions, perimeter, area, circumference, volume, and scaling.	281	

Correlation of **Mathematics TEKS** and **TAKS** to Glencoe Texas Science Grade 7 *continued*

Knowledge and Skills	Glencoe Texas Science Student Edition (by page)	TAKS Grade 7 Mathematics
TEKS 7.5: Patterns, relationships, and algebraic thinking The student uses equations to solve problems. The student is expected to:		
(A) use concrete models to solve equations and use symbols to record the actions.	110, 118, 121, 137, 179, 203, 279, 335, 501, 555, 563, 632	TAKS Objective 2 The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.
(B) formulate a possible problem situation when given a simple equation.	751	
TEKS 7.9: Geometry and spatial reasoning The student solves application problems involving estimation and measurement. The student is expected to:		
Estimate measurements and solve application problems involving length (including perimeter and circumference), area, and volume.	203, 237, 250, 501, 514, 541, 619, 727	TAKS Objective 4 The student will demonstrate an understanding of the concepts and uses of measurement.
TEKS 7.10: Probability and statistics The student recognizes that a physical or mathematical model can be used to describe the probability of real-life events. The student is expected to:		
(A) construct sample spaces for compound events (dependent and independent).	389, 390	TAKS Objective 5 The student will demonstrate an understanding of probability and statistics.
(B) find the approximate probability of a compound event through experimentation.	389	
TEKS 7.11: Probability and statistics The student understands that the way a set of data is displayed influences its interpretation. The student is expected to:		
(A) select and use an appropriate representation for presenting collected data and justify the selection.	23, 281, 389, 390	TAKS Objective 5 The student will demonstrate an understanding of probability and statistics.
(B) make inferences and convincing arguments based on an analysis of given or collected data.	14, 57, 93, 242, 281, 300, 389, 390, 430, 456, 474, 595, 723	
TEKS 7.12: Probability and statistics The student uses measures of central tendency and range to describe a set of data. The student is expected to:		
(A) describe a set of data using mean, median, mode, and range.	242, 339, 723	TAKS Objective 5 The student will demonstrate an understanding of probability and statistics.
(B) choose among mean, median, mode, or range to describe a set of data and justify the choice for a particular situation.	242, 339	



Knowledge and Skills	Glencoe Texas Science Student Edition (by page)	TAKS Grade 7 Mathematics
TEKS 7.13: Underlying processes and mathematical tools The student applies Grade 7 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities inside and outside of school. The student is expected to:		
(A) identify and apply mathematics to everyday experiences, to activities inside and outside of school, with other disciplines, and with other mathematical topics.	14, 57, 61, 89, 93, 110, 121, 134, 136, 137, 142, 147, 179, 203, 237, 242, 250, 279, 281, 300, 303, 335, 339, 360, 365, 389, 390, 430, 431, 456, 458, 474, 501, 514, 541, 555, 563, 595, 599, 619, 632, 694, 723, 727, 751, 758	TAKS Objective 6 The student will demonstrate an understanding of the mathematical processes and tools used in problem solving.
(B) use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.	137, 237, 250, 360, 431, 458, 514, 563, 595, 599, 619, 758	
(C) select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.	137, 237, 250, 360, 431, 458, 514, 563, 595, 599, 619, 758	
(D) select tools such as real objects, manipulatives, paper/pencil, and technology or techniques such as mental math, estimation, and number sense to solve problems.	57, 61, 89, 134, 136, 137, 142, 147, 179, 203, 237, 360, 431, 458, 514, 555, 563, 595, 599, 619, 632, 694, 727, 758	
TEKS 7.14: Underlying processes and mathematical tools The student communicates about Grade 7 mathematics through informal and mathematical language, representations, and models. The student is expected to:		
(A) communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models.	14, 57, 61, 89, 93, 110, 121, 134, 136, 137, 142, 147, 179, 203, 237, 242, 250, 279, 281, 300, 303, 335, 339, 360, 365, 389, 390, 430, 431, 456, 458, 474, 501, 514, 541, 555, 563, 595, 599, 619, 632, 694, 723, 727, 751, 758	TAKS Objective 6 The student will demonstrate an understanding of the mathematical processes and tools used in problem solving.
TEKS 7.15: Underlying processes and mathematical tools The student uses logical reasoning to make conjectures and verify conclusions. The student is expected to:		
(A) make conjectures from patterns or sets of examples and nonexamples.	57, 93, 242, 389, 390, 430, 474	TAKS Objective 6 The student will demonstrate an understanding of the mathematical processes and tools used in problem solving.
(B) validate his/her conclusions using mathematical properties and relationships.	389, 474	