

**Side-by-Side Comparison of the Texas Educational Knowledge and Skills (TEKS)  
and Louisiana Grade Level Expectations (GLEs)**

**SCIENCE: Grade 7**

| <b>TEKS</b>                                                                                                                                                        | <b>Comments</b>                           | <b>Louisiana GLE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| (7.1) Science Concepts. The student conducts field and laboratory investigations using safe, environmentally appropriate, and ethical practices.                   |                                           | The Abilities Necessary to Do Scientific Inquiry (SI)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| (7.1.A) demonstrate safe practices during field and laboratory investigations; and                                                                                 | <i>Similar</i>                            | SI GLE 23. Use relevant safety procedures and equipment to conduct scientific investigations (SI-M-A8)<br><br>SI GLE 24. Provide appropriate care and utilize safe practices and ethical treatment when animals are involved in scientific field and laboratory research (SI-M-A8)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| (7.1.B) make wise choices in the use and conservation of resources and the disposal or recycling of materials.                                                     | <i>Addressed in LA, Grade 6 SE GLE 46</i> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| (7.2) Science Concepts. The student uses scientific methods during field and laboratory investigations.                                                            |                                           | The Abilities Necessary to Do Scientific Inquiry (SI)<br>Understanding Scientific Inquiry (SI)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| (7.2.A) plan and implement investigative procedures including asking questions, formulating testable hypotheses, and selecting and using equipment and technology; | <i>Similar</i>                            | SI GLE 1. Generate testable questions about objects, organisms, and events that can be answered through scientific investigation (SI-M-A1)<br><br>SI GLE 2. Identify problems, factors, and questions that must be considered in a scientific investigation (SI-M-A1)<br><br>SI GLE 4. Design, predict outcomes, and conduct experiments to answer guiding questions (SI-M-A2)<br><br>SI GLE 5. Identify independent variables, dependent variables, and variables that should be controlled in designing an experiment (SI-M-A2)<br><br>SI GLE 6. Select and use appropriate equipment, technology, tools, and metric system units of measurement to make observations (SI-M-A3)<br><br>SI GLE 20. Write clear, step-by-step instructions that others can follow to carry out procedures or conduct investigations (SI-M-A7) |

| TEKS                                                                                                                        | Comments                                           | Louisiana GLE                                                                                                                                                                                                                                                                                                                                                                 |
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| (7.2.B) collect data by observing and measuring;                                                                            | <i>Similar</i>                                     | SI GLE 7. record observations using methods that complement investigations (e.g., journals , tables, charts)(SI-M-A3)<br><br>SI GLE 8. Use consistency and precision in data collection, analysis, and reporting (SI-M-A3)                                                                                                                                                    |
| (7.2.C) organize, analyze, make inferences, and predict trends from direct and indirect evidence;                           | <i>Similar</i>                                     | SI GLE 9. Use computers and/or calculators to analyze and interpret quantitative data(SI-M-A3)<br><br>SI GLE 12. Use data and information gathered to develop an explanation of experimental results (SI-M-A4)<br><br>SI GLE 13. Identify patterns in data to explain natural events (SI-M-A4)<br><br>SI GLE 16. Use evidence to make inferences and predict trends (SI-M-A5) |
| (7.2.D) communicate valid conclusions; and                                                                                  | <i>Similar</i>                                     | SI GLE 19. Communicate ideas in a variety of ways (e.g., symbols, illustrations, graphs, charts, spreadsheets, concept maps, oral and written reports, equations) (SI-M-A7)<br><br>SI GLE 22. Use evidence and observations to explain and communicate the results of investigations (SI-M-A7)                                                                                |
| (7.2.E) construct graphs, tables, maps, and charts using tools including computers to organize, examine, and evaluate data. | <i>Similar</i>                                     | SI GLE 9. Use computers and/or calculators to analyze and interpret quantitative data(SI-M-A3)<br><br>SI GLE 11. Construct, use, and interpret appropriate graphical representations to collect, record, and report data (e.g., tables, charts, circle graphs, bar and line graphs, diagrams, scatter plots, symbols) (SI-M-A4)                                               |
|                                                                                                                             | <i>Not specifically addressed in TX in grade 7</i> | SI GLE 32. Explain the use of statistical methods to confirm the significance of data (e.g., mean, median, mode, range) (SI-M-B3)<br><br>SI GLE 34. Recognize the importance of communication among scientists about investigations in progress and the work of others (SI-M-B5)                                                                                              |
| (7.3) Science Concepts. The student uses critical thinking and scientific problem solving to make informed decisions.       |                                                    | Understanding Scientific Inquiry (SI)                                                                                                                                                                                                                                                                                                                                         |

| TEKS                                                                                                                                                                              | Comments                                | Louisiana GLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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| (7.3.A) analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information; | <i>Implied</i>                          | <p>SI GLE 17. Recognize that there may be more than one way to interpret a given set of data, which can result in alternative scientific explanations and predictions (SI-M-A6)</p> <p>SI GLE 18. Identify faulty reasoning and statements that misinterpret or are not supported by the evidence (SI-M-A6)</p> <p>SI GLE 25. Compare and critique scientific investigations (SI-M-B1)</p> <p>SI GLE 27. Recognize that science uses processes that involve a logical and empirical, but flexible, approach to problem solving (SI-M-B1)</p> <p>SI GLE 35. Explain how skepticism about accepted scientific explanations (i.e., hypotheses and theories) leads to new understanding (SI-M-B5)</p> <p>SI GLE 37. Critique and analyze their own inquiries and the inquiries of others (SI-M-B5)</p> |
| (7.3.B) draw inferences based on data related to promotional materials for products and services;                                                                                 | <i>Not specifically addressed in LA</i> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| (7.3.C) represent the natural world using models and identify their limitations;                                                                                                  | <i>Similar</i>                          | <p>SI GLE 14. Develop models to illustrate or explain conclusions reached through investigation(SI-M-A)</p> <p>SI GLE 15. Identify and explain the limitations of models used to represent the natural world (SI-M-A5)</p> <p>SI GLE 33. Evaluate models, identify problems in design, and make recommendations for improvement (SI-M-B4)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

| TEKS                                                                                                                                                                                                                                                                                                                                                                                                              | Comments                                | Louisiana GLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| (7.3.D) evaluate the impact of research on scientific thought, society, and the environment; and                                                                                                                                                                                                                                                                                                                  | <i>Similar/Implied</i>                  | <p>SI GLE 29. Explain how technology can expand the senses and contribute to the increase and/or modification of scientific knowledge (SI-M-B3)</p> <p>SI GLE 30. Describe why all questions cannot be answered with present technologies (SI-M-B3)</p> <p>SI GLE 38. Explain that, through the use of scientific processes and knowledge, people can solve problems, make decisions, and form new ideas (SI-M-B6)</p> <p>SI GLE 39. Identify areas in which technology has changed human lives (e.g., transportation, communication, geographic information systems, DNA fingerprinting) (SI-M-B7)</p> <p>SI GLE 40. Evaluate the impact of research on scientific thought, society, and the environment (SI-M-B7)</p> |
| (7.3.E) connect Grade 7 science concepts with the history of science and contributions of scientists.                                                                                                                                                                                                                                                                                                             | <i>Not specifically addressed in LA</i> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| (7.4) Science Concepts. The student knows how to use tools and methods to conduct science inquiry.                                                                                                                                                                                                                                                                                                                |                                         | The Abilities Necessary to Do Scientific Inquiry (SI)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| (7.4.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 | <i>Not specifically addressed in LA</i> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| (7.4.B) collect and analyze information to recognize patterns such as rates of change.                                                                                                                                                                                                                                                                                                                            | <i>Similar</i>                          | SI GLE 13. Identify patterns in data to explain natural events (SI-M-A4)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

| TEKS                                                                                     | Comments                                           | Louisiana GLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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|                                                                                          | <i>Not specifically addressed in TX in grade 7</i> | <p>SI GLE 3. Use a variety of sources to answer questions (SI-M-A1)</p> <p>SI GLE 10. Identify the difference between description and explanation (SI-M-A4)</p> <p>SI GLE 21. Distinguish between observations and inferences (SI-M-A7)</p> <p>SI GLE 26. Use and describe alternate methods for investigating different types of testable questions (SI-M-B1)</p> <p>SI GLE 28. Recognize that investigations generally begin with a review of the work of others (SI-M-B2)</p> <p>SI GLE 29. Explain how technology can expand the senses and contribute to the increase and/or modification of scientific knowledge (SI-M-B3)</p> <p>SI GLE 30. Describe why all questions cannot be answered with present technologies (SI-M-B3)</p> <p>SI GLE 31. Recognize that there is an acceptable range of variation in collected data (SI-M-B3)</p> <p>SI GLE 32. Explain the use of statistical methods to confirm the significance of data (e.g., mean, median, mode, range) (SI-M-B3)</p> <p>SI GLE 34. Recognize the importance of communication among scientists about investigations in progress and the work of others (SI-M-B5)</p> <p>SI GLE 36. Explain why an experiment must be verified through multiple investigations and yield consistent results before the findings are accepted (SI-M-B5)</p> <p>SI GLE 37. Critique and analyze their own inquiries and the inquiries of others (SI-M-B5)</p> |
| (7.5) Science Concepts. The student knows that an equilibrium of a system may change.    |                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| (7.5.A) describe how systems may reach an equilibrium such as when a volcano erupts; and | <i>Not specifically addressed in LA</i>            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

| TEKS                                                                                                                                                               | Comments                                           | Louisiana GLE                                                                                                                                                                                                                            |
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| (7.5.B) observe and describe the role of ecological succession in maintaining an equilibrium in an ecosystem.                                                      | <i>Not specifically addressed in LA</i>            |                                                                                                                                                                                                                                          |
| (7.6) Science Concepts. The student knows that there is a relationship between force and motion.                                                                   |                                                    | Structure and Function in Living Systems (LS)                                                                                                                                                                                            |
| (7.6.A) demonstrate basic relationships between force and motion using simple machines including pulleys and levers;                                               | <i>Addressed in Grade 6, PS GLE 20</i>             |                                                                                                                                                                                                                                          |
| (7.6.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 | <i>Addressed in Grade 8, ESS GLE 39</i>            |                                                                                                                                                                                                                                          |
| (7.6.C) relate forces to basic processes in living organisms including the flow of blood and the emergence of seedlings.                                           | <i>Implied</i>                                     | LS GLE 10. Describe the way major organ systems in the human body interact to sustain life (LS-M-A5)<br><br>LS GLE 15. Contrast the processes of mitosis and meiosis in relation to growth, repair, reproduction, and heredity (LS-M-B1) |
| (7.7) Science Concepts. The student knows that substances have physical and chemical properties.                                                                   |                                                    | Properties and Changes of Properties in Matter (PS)                                                                                                                                                                                      |
| (7.7.A) identify and demonstrate everyday examples of chemical phenomena such as rusting and tarnishing of metals and burning of wood;                             | <i>Addressed in Grade 5, PS GLE 6</i>              |                                                                                                                                                                                                                                          |
| (7.7.B) describe physical properties of elements and identify how they are used to position an element on the periodic table; and                                  | <i>implied</i>                                     | PS GLE 1. Identify the elements most often found in living organisms (e.g., C, N, H, O, P, S, Ca, Fe) (PS-M-A9)                                                                                                                          |
| (7.7.C) recognize that compounds are composed of elements.                                                                                                         | <i>implied</i>                                     | PS GLE 1. Identify the elements most often found in living organisms (e.g., C, N, H, O, P, S, Ca, Fe) (PS-M-A9)                                                                                                                          |
| (7.8) Science Concepts. The student knows that complex interactions occur between matter and energy.                                                               |                                                    | Structure and Function in Living Systems (LS)<br>Populations and Ecosystems (LS)<br>Science and the Environment (SE)                                                                                                                     |
| (7.8.A) illustrate examples of potential and kinetic energy in everyday life such as objects at rest, movement of geologic faults, and falling water; and          | <i>Addressed in Grade 5, PS GLE 10</i>             |                                                                                                                                                                                                                                          |
| (7.8.B) identify that radiant energy from the Sun is transferred into chemical energy through the process of photosynthesis.                                       | <i>Implied</i>                                     | LS GLE 7. Construct a word equation that illustrates the processes of photosynthesis and respiration (LS-M-A4)                                                                                                                           |
|                                                                                                                                                                    | <i>Not specifically addressed in grade 7 in TX</i> | SE GLE. 42. Describe how photosynthesis and respiration relate to the carbon cycle (SE-M-A7)                                                                                                                                             |
| (7.9) Science Concepts. The student knows the relationship between structure and function in living systems.                                                       |                                                    | Structure and Function in Living Systems (LS)                                                                                                                                                                                            |

| TEKS                                                                                                              | Comments                                  | Louisiana GLE                                                                                                                                                                                                                                                                         |
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| (7.9.A) identify the systems of the human organism and describe their functions; and                              | <i>Similar</i>                            | LS GLE 9. Relate structural features of organs to their functions in major systems (LS-M-A5)<br><br>LS GLE 10. Describe the way major organ systems in the human body interact to sustain life (LS-M-A5)                                                                              |
| (7.9.B) describe how organisms maintain stable internal conditions while living in changing external environments | <i>Implied</i>                            | LS GLE 3. Illustrate and demonstrate osmosis and diffusion in cells (LS-M-A1)<br><br>LS GLE 4. Compare functions of plant and animal cell structures (i.e., organelles) (LS-M-A2)<br><br>LS GLE 9. Relate structural features of organs to their functions in major systems (LS-M-A5) |
|                                                                                                                   | <i>Addressed in TX in Grade 6, 6.10 B</i> | LS GLE 2. Compare the basic structures and functions of different types of cells (LS-M-A1)                                                                                                                                                                                            |

| TEKS                                                                                                                                                                                | Comments                                           | Louisiana GLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
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|                                                                                                                                                                                     | <i>Not specifically addressed in TX in grade 7</i> | <p>LS GLE 5. Compare complete and incomplete metamorphosis in insects (e.g., butterflies, mealworms, grasshoppers) (LS-M-A3)</p> <p>LS GLE 6. Compare the life cycles of a variety of organisms, including non-flowering and flowering plants, reptiles, birds, amphibians, and mammals (LS-M-A3)</p> <p>LS GLE 11. Describe the growth and development of humans from infancy to old age (LS-M-A6)</p> <p>LS GLE 12. Explain how external factors and genetics can influence the quality and length of human life (e.g., nutrition, smoking, drug use, exercise) (LS-M-A6)</p> <p>LS GLE 13. Identify and describe common communicable and noncommunicable diseases and the methods by which they are transmitted, treated, and prevented (LS-M-A7)</p> <p>LS GLE 19. Apply the basic laws of Mendelian genetics to solve simple monohybrid crosses, using a Punnett square (LS-M-B3)</p> <p>LS GLE 21. Use a Punnett square to demonstrate how sex-linked traits are inherited (LS-M-B3)</p> <p>LS GLE 22. Give examples of the importance of selective breeding (e.g., domestic animals, livestock, horticulture) (LS-M-B3)</p> <p>LS GLE 23. Classify organisms based on structural characteristics, using a dichotomous key (LS- M-C1)</p> <p>LS GLE 29. Predict the impact changes in a species' population have on an ecosystem (LS-M- C4)</p> <p>LS GLE 31. Describe and evaluate the impact of introducing nonnative species into an ecosystem (LS-M-D1)</p> |
| (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. |                                                    | <p>Reproduction and Heredity (LS)</p> <p>Adaptations of Organisms (LS)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

| TEKS                                                                                                                                               | Comments                                           | Louisiana GLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
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|                                                                                                                                                    |                                                    | <p>LS GLE 32. Describe changes that can occur in various ecosystems and relate the changes to the ability of an organism to survive (LS-M-D2)</p> <p>LS GLE 33. Illustrate how variations in individual organisms within a population determine the success of the population (LS-M-D2)</p> <p>LS GLE 34. Explain how environmental factors impact survival of a population (LS-M-D2)</p> <p>LS GLE 39. Analyze the consequences of human activities on ecosystems (SE-M-A4)</p>                      |
| (7.10.A) identify that sexual reproduction results in more diverse offspring and asexual reproduction results in more uniform offspring;           | <i>Similar</i>                                     | <p>LS GLE 14. Differentiate between sexual and asexual reproduction (LS-M-B1)</p> <p>LS GLE 15. Contrast the processes of mitosis and meiosis in relation to growth, repair, reproduction, and heredity (LS-M-B1)</p> <p>LS GLE 16. Explain why chromosomes in body cells exist in pairs (LS-M-B2)</p> <p>LS GLE 17. Explain the relationship of genes to chromosomes and genotypes to phenotypes (LS-M-B2)</p> <p>LS GLE 18. Recognize genetic errors caused by changes in chromosomes (LS-M-B2)</p> |
| (7.10.B) compare traits of organisms of different species that enhance their survival and reproduction; and                                        | <i>Not specifically addressed in LA</i>            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                                                                                                                    | <i>Not specifically addressed in TX in Grade 7</i> | <p>LS GLE 33. Illustrate how variations in individual organisms within a population determine the success of the population (LS-M-D2)</p>                                                                                                                                                                                                                                                                                                                                                             |
| (7.10.C) distinguish between dominant and recessive traits and recognize that inherited traits of an individual are contained in genetic material. | <i>Similar</i>                                     | <p>LS GLE 17. Explain the relationship of genes to chromosomes and genotypes to phenotypes (LS-M-B2)</p> <p>LS GLE 20. Explain the differences among the inheritance of dominant, recessive, and incomplete dominant traits (LS-M-B3)</p>                                                                                                                                                                                                                                                             |
| (7.11) Science Concepts. The student knows that the responses of organisms are caused by internal or external stimuli.                             |                                                    | <p>Structure and Function in Living Systems (LS)</p> <p>Adaptations of Organisms (LS)</p> <p>Science and the Environment (LS)</p>                                                                                                                                                                                                                                                                                                                                                                     |
| (7.11.A) analyze changes in organisms such as a fever or vomiting that may result from internal stimuli; and                                       | <i>Implied</i>                                     | <p>LS GLE 10. Describe the way major organ systems in the human body interact to sustain life (LS-M-A5)</p>                                                                                                                                                                                                                                                                                                                                                                                           |

| TEKS                                                                                                                                                    | Comments                                           | Louisiana GLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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| (7.11.B) identify responses in organisms to external stimuli found in the environment such as the presence or absence of light.                         | <i>Implied</i>                                     | SE GLE 37. Identify and describe the effects of limiting factors on a given population (SE-M-A2)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                                                                         | <i>Not specifically addressed in TX in Grade 7</i> | LS GLE 30. Differentiate between structural and behavioral adaptations in a variety of organisms (LS-M-D1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| (7.12) Science Concepts. The student knows that there is a relationship between organisms and the environment.                                          |                                                    | Populations and Ecosystems (LS)<br>Science and the Environment (SE)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| (7.12.A) identify components of an ecosystem;                                                                                                           | <i>Similar</i>                                     | <p>LS GLE 26. Describe and compare the levels of organization of living things within an ecosystem (LS-M-C3)</p> <p>LS GLE 27. Identify the various relationships among plants and animals (e.g., mutualistic, parasitic, producer/consumer) (LS-M-C4)</p> <p>LS GLE 28. Differentiate between ecosystem components of habitat and niche (LS-M-C4)</p> <p>SE GLE 36. Distinguish the essential roles played by biotic and abiotic components in various ecosystems (SE-M-A1)</p> <p>SE GLE 37. Identify and describe the effects of limiting factors on a given population (SE-M-A2)</p> <p>SE GLE 38. Evaluate the carrying capacity of an ecosystem (SE-M-A5)</p> <p>SE GLE 40. Construct or draw food webs for various ecosystems (SE-M-A5)</p> |
| (7.12.B) observe and describe how organisms including producers, consumers, and decomposers live together in an environment and use existing resources; | <i>Implied</i>                                     | <p>LS GLE 24. Analyze food webs to determine energy transfer among organisms (LS-M-C2)</p> <p>LS GLE 27. Identify the various relationships among plants and animals (e.g., mutualistic, parasitic, producer/consumer) (LS-M-C4)</p> <p>SE GLE 36. Distinguish the essential roles played by biotic and abiotic components in various ecosystems (SE-M-A1)</p> <p>SE GLE 41. Describe the nitrogen cycle and explain why it is important for the survival of organisms (SE-M-A7)</p>                                                                                                                                                                                                                                                               |

| TEKS                                                                                                                                                                    | Comments                                           | Louisiana GLE                                                                                                                                                                                                                                          |
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|                                                                                                                                                                         | <i>Not specifically addressed in grade 7 in TX</i> | LS GLE 8. Distinguish between aerobic respiration and anaerobic respiration (LS-M-A4)<br><br>SE GLE 35. Identify resources humans derive from ecosystems (SE-M-A1)                                                                                     |
| (7.12.C) describe how different environments support different varieties of organisms; and                                                                              | <i>Implied</i>                                     | LS GLE 25. Locate and describe the major biomes of the world (LS-M-C3)<br><br>LS GLE 32. Describe changes that can occur in various ecosystems and relate the changes to the ability of an organism to survive (LS-M-D2)                               |
|                                                                                                                                                                         | <i>Not specifically addressed in grade 7 in TX</i> | LS GLE 34. Explain how environmental factors impact survival of a population (LS-M-D2)                                                                                                                                                                 |
| (7.12.D) observe and describe the role of ecological succession in ecosystems.                                                                                          | <i>Not specifically addressed in LA</i>            |                                                                                                                                                                                                                                                        |
| (7.13) Science Concepts. The student knows components of our solar system.                                                                                              |                                                    |                                                                                                                                                                                                                                                        |
| (7.13.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 | <i>Addressed in LA in Grade 8 GLE 45, 46</i>       |                                                                                                                                                                                                                                                        |
| (7.13.B) relate the Earth's movement and the moon's orbit to the observed cyclical phases of the moon.                                                                  | <i>Addressed in LA in Grade 8 GLE 40</i>           |                                                                                                                                                                                                                                                        |
| (7.14) Science Concepts. The student knows that natural events and human activity can alter Earth systems.                                                              |                                                    | Adaptations of Organisms (LS)<br>Science and the Environment (SE)                                                                                                                                                                                      |
| (7.14.A) describe and predict the impact of different catastrophic events on the Earth;                                                                                 | <i>Addressed in LA in Grade 8 GLE 12, 13</i>       |                                                                                                                                                                                                                                                        |
| (7.14.B) analyze effects of regional erosional deposition and weathering; and                                                                                           | <i>Addressed in LA in Grade 8 GLE 14</i>           |                                                                                                                                                                                                                                                        |
| (7.14.C) make inferences and draw conclusions about effects of human activity on Earth's renewable, non-renewable, and inexhaustible resources.                         | <i>Implied</i>                                     | SE GLE 43. Identify and analyze the environmental impact of humans' use of technology (e.g., energy production, agriculture, transportation, human habitation) (SE-M-A8)<br><br>SE GLE 39. Analyze the consequences of human activities on ecosystems. |