

CHEMICALS, THE ENVIRONMENT, AND YOU		
Texas Essential Knowledge and Skills for Science - Grades 6, 7, 8		
Lesson	Standard	Description
2, 3, 4	§112.22.b.1.A §112.23.b.1.A §112.24.b.1.A	Demonstrate safe practices during field and laboratory investigations.
2, 3, 4	§112.22.b.1.B §112.23.b.1.B §112.24.b.1.B	Make wise choices in the use and conservation of resources and the disposal or recycling of materials.
2, 3, 4	§112.22.b.2.A §112.23.b.2.A §112.24.b.2.A	Plan and implement investigative procedures including asking questions, formulating testable hypotheses, and selecting and using equipment and technology.
2, 3, 4	§112.22.b.2.B §112.23.b.2.B §112.24.b.2.B	Collect data by observing and measuring.
2, 3, 4, 5, 6	§112.22.b.2.C §112.23.b.2.C §112.24.b.2.C	Analyze and interpret information to construct reasonable explanations from direct and indirect evidence.
3, 4, 5, 6	§112.22.b.2.D §112.23.b.2.D §112.24.b.2.D	Communicate valid conclusions.
2, 3, 4	§112.22.b.2.E §112.23.b.2.E §112.24.b.2.E	Construct graphs, tables, maps, and charts using tools including computers to organize, examine, and evaluate data.
3, 4, 5	§112.22.b.3.A §112.23.b.3.A §112.24.b.3.A	Analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information.
3, 4	§112.22.b.3.B §112.23.b.3.B §112.24.b.3.B	Draw inferences based on data related to promotional materials for products and services.

TEXAS ALIGNMENT FOR NIH SUPPLEMENT CHEMICALS, THE ENVIRONMENT, AND YOU

2, 3, 4	§112.22.b.3.C §112.23.b.3.C §112.24.b.3.C	Represent the natural world using models and identify their limitations.
3, 4, 5, 6	§112.22.b.3.D §112.23.b.3.D §112.24.b.3.D	Evaluate the impact of research on scientific thought, society, and the environment.
2, 3, 4	§112.22.b.4.A §112.23.b.4.A §112.24.b.4.A	Collect, analyze, and record information using tools including beakers, petri dishes, meter sticks, graduated cylinders, weather instruments, timing devices, hot plates, test tubes, safety goggles, spring scales, magnets, balances, microscopes, telescopes, thermometers, calculators, field equipment, compasses, computers, and computer probes.
1	§112.22.b.7.B	Classify substances by their physical and chemical properties.
2	§112.22.b.10.B	Determine that all organisms are composed of cells that carry on functions to sustain life.
1	§112.23.b.7.C	Recognize that compounds are composed of elements.
3, 4	§112.23.b.9.B	Describe how organisms maintain stable internal conditions while living in changing external environments.
2, 3, 4, 5, 6	§112.24.b.4.B	Extrapolate from collected information to make predictions.
All lessons	§112.24.b.11.A	Identify that change in environmental conditions can affect the survival of individuals and of species.

Texas Essential Knowledge and Skills for Mathematics – Grades 6, 7, 8

Lesson	Standard	Description
2, 3, 4	§111.22.b.1.B	Generate equivalent forms of rational numbers including whole numbers, fractions, and decimals.
2, 3, 4	§111.22.b.1.C	Use integers to represent real-life situations.
2, 3, 4	§111.22.b.2.A	Model addition and subtraction situations involving fractions with objects, pictures, words, and numbers.
2, 3, 4	§111.22.b.2.B	Use addition and subtraction to solve problems involving fractions and decimals.
4	§111.22.b.2.C	Use multiplication and division of whole numbers to solve problems including situations involving equivalent ratios and rates.
4	§111.22.b.3.A	Use ratios to describe proportional situations.
4	§111.22.b.3.C	Use ratios to make predictions in proportional situations.
2, 3, 4	§111.22.b.8.A	Estimate measurements and evaluate reasonableness of results.

TEXAS ALIGNMENT FOR NIH SUPPLEMENT CHEMICALS, THE ENVIRONMENT, AND YOU

2, 4	§111.22.b.8.D	Convert measures within the same measurement system (customary and metric) based on relationships between units.
2, 3, 4	§111.22.b.10.D	Solve problems by collecting, organizing, displaying, and interpreting data.
2, 3, 4	§111.22.b.11.A	Identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics.
2, 3, 4	§111.22.b.11.B	Use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.
2, 3, 4	§111.23.b.1.B	Convert between fractions, decimals, whole numbers, and percents mentally, on paper, or with a calculator.
2, 3, 4	§111.23.b.2.A	Represent multiplication and division situations involving fractions and decimals with concrete models, pictures, words, and numbers.
2, 3, 4	§111.23.b.2.B	Use addition, subtraction, multiplication, and division to solve problems involving fractions and decimals.
4	§111.23.b.2.D	Use division to find unit rates and ratios in proportional relationships such as speed, density, price, recipes, and student-teacher ratio.
2, 3, 4	§111.23.b.2.G	Determine the reasonableness of a solution to a problem.
2, 3, 4	§111.23.b.3.A	Estimate and find solutions to application problems involving percent.
2, 4	§111.23.b.3.B	Estimate and find solutions to application problems involving proportional relationships such as similarity, scaling, unit costs, and related measurement units.
2, 3, 4	§111.23.b.11.A	Select and use an appropriate representation for presenting collected data and justify the selection.
2, 3, 4	§111.23.b.11.B	Make inferences and convincing arguments based on an analysis of given or collected data.
2, 3, 4	§111.23.b.13.A	Identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics.
2, 3, 4	§111.24.b.1.A	Compare and order rational numbers in various forms including integers, percents, and positive and negative fractions and decimals.
2, 3, 4	§111.24.b.1.B	Select and use appropriate forms of rational numbers to solve real-life problems including those involving proportional relationships.
2, 3, 4	§111.24.b.2.A	Select and use appropriate operations to solve problems and justify the selections.
2, 3, 4	§111.24.b.2.B	Add, subtract, multiply, and divide rational numbers in problem situations.
2, 3, 4	§111.24.b.2.C	Evaluate a solution for reasonableness.
3, 4	§111.24.b.3.A	Compare and contrast proportional and non-proportional relationships.

TEXAS ALIGNMENT FOR NIH SUPPLEMENT CHEMICALS, THE ENVIRONMENT, AND YOU

2, 3, 4	§111.24.b.4	Generate a different representation given one representation of data such as a table, graph, equation, or verbal description.
2, 3, 4	§111.24.b.11.B	Use theoretical probabilities and experimental results to make predictions and decisions.
3, 4	§111.24.b.12.C	Construct circle graphs, bar graphs, and histograms, with and without technology.
3, 4	§111.24.b.13.A	Evaluate methods of sampling to determine validity of an inference made from a set of data.
2, 3, 4	§111.24.b.14.A	Identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics.
2, 3, 4	§111.24.b.16.B	Validate his/her conclusions using mathematical properties and relationships.

Texas Essential Knowledge and Skills for English Language Arts and Reading – Grades 6, 7, 8

Lesson	Standard	Description
2, 4, 5, 6	§110.22.b.7.B §110.23.b.7.B §110.24.b.7.B	Read regularly in instructional-level materials that are challenging but manageable.
1, 2, 4, 5, 6	§110.22.b.9.B §110.23.b.9.B §110.24.b.9.B	Draw on experiences to bring meanings to words in context such as interpreting idioms, multiple-meaning words, and analogies.
1, 2, 4, 5, 6	§110.22.b.10.A §110.23.b.10.A §110.22.b.10.A	Use his/her own knowledge and experience to comprehend.
2, 4, 5, 6	§110.22.b.10.F §110.23.b.10.F §110.24.b.10.F	Determine a text's main (or major ideas) and how those ideas are supported with details.
1, 2, 4, 5, 6	§110.22.b.10.G §110.23.b.10.G §110.24.b.10.G	Paraphrase and summarize text to recall, inform, or organize ideas.
1, 2, 4, 5, 6	§110.22.b.10.H §110.23.b.10.H §110.24.b.10.H	Draw inferences such as conclusions or generalizations and support them with text evidence and experience.

TEXAS ALIGNMENT FOR NIH SUPPLEMENT CHEMICALS, THE ENVIRONMENT, AND YOU

1, 2, 4, 5, 6	§110.22.b.11.A §110.22.b.11.A §110.24.b.11.A	Offer observations, make connections, react, speculate, interpret, and raise questions in response to texts.
2, 4, 6	§110.22.b.13.A §110.23.b.13.A §110.24.b.13.A	Form and revise questions for investigations, including questions arising from readings, assignments, and units of study.
4, 6	§110.22.b.13.C §110.23.b.13.C §110.24.b.13.C	Use multiple sources, including electronic texts, experts, and print resources, to locate information relevant to research questions.
2, 4	§110.22.b.13.D §110.23.b.13.D §110.24.b.13.D	Interpret and use graphic sources of information such as maps, graphs, timelines, or tables to address research questions.
All lessons	§110.22.b.13.G §110.23.b.13.G §110.24.b.13.G	Draw conclusions from information gathered from multiple sources.
2, 3, 4, 6	§110.22.b.13.H §110.23.b.13.H §110.24.b.13.H	Use compiled information and knowledge to raise additional, unanswered questions.
2, 3, 4, 5, 6	§110.22.b.13.I §110.23.b.13.I §110.24.b.13.I	Present organized statements, reports, and speeches using visuals or media to support meaning, as appropriate.
2, 4, 5, 6	§110.22.b.15.A §110.23.b.15.A §110.24.b.15.A	Write to express, discover, record, develop, reflect on ideas, and to problem solve.
5, 6	§110.22.b.15.B §110.23.b.15.B §110.24.b.15.B	Write to influence such as to persuade, argue, and request.
2, 4, 5, 6	§110.22.b.15.C §110.23.b.15.C §110.24.b.15.C	Write to inform such as to explain, describe, report, and narrate.
2, 4, 5, 6	§110.22.b.15.E §110.23.b.15.E	Select and use voice and style appropriate to audience and purpose.

TEXAS ALIGNMENT FOR NIH SUPPLEMENT CHEMICALS, THE ENVIRONMENT, AND YOU

	§110.24.b.15.E	
2, 3, 4, 5, 6	§110.22.b.15.F §110.23.b.15.F §110.24.b.15.F	Choose the appropriate form for his/her own purpose for writing, including journals, letters, editorials, reviews, poems, presentations, narratives, reports, and instructions.
2, 4	§110.22.b.20.A §110.23.b.20.A §110.24.b.20.A	Frame questions to direct research.
1, 4, 6	§110.22.b.22.B §110.23.b.22.B §110.24.b.22.B	Interpret important events and ideas gathered from maps, charts, graphics, video segments, or technology presentations.
Texas Essential Knowledge and Skills for Health Education – Grades 6, 7, 8		
Lesson	Standard	Description
1, 4	§115.22.b.3.C	List noncommunicable and hereditary diseases and respective prevention and treatment techniques.
4	§115.22.b.4.A	List ways to evaluate health products, practices, and services such as sunblocks, dietary aides, and over-the-counter medications.
4, 5, 6	§115.22.b.4.B	Use critical thinking to research and evaluate health information.
1, 3, 4, 5, 6	§115.23.b.3.B	Analyze risks for contracting specific diseases based on pathogenic, genetic, age, cultural, environmental, and behavioral factors.
1, 4, 5, 6	§115.23.b.3.C	Distinguish risk factors associated with communicable and noncommunicable diseases.
4, 5, 6	§115.23.b.4.A	Use critical thinking to analyze and use health information such as interpreting media messages.
1, 3, 4, 5, 6	§115.23.b.4.C	Demonstrate ways to use health information to help self and others.
5, 6	§115.23.b.6.B	Describe the application of strategies for controlling the environment such as emission control, water quality, and waste management.
4, 5, 6	§115.23.b.9.A	Describe personal health behaviors and knowledge unique to different generations and populations.
1, 3, 4, 5, 6	§115.23.b.12.A	Interpret critical issues related to solving health problems.
1, 3, 4, 5, 6	§115.23.b.12.B	Relate practices and steps necessary for making health decisions.
1, 3, 4, 5, 6	§115.23.b.12.C	Appraise the risks and benefits of decision-making about personal health.