

<b>THE SCIENCE OF ENERGY BALANCE: CALORIE INTAKE AND PHYSICAL ACTIVITY</b>		
<b>Texas Essential Knowledge and Skills for Science - Grades 6, 7, 8</b>		
<b>Lesson</b>	<b>Standard</b>	<b>Description</b>
2	§112.22.b.1.A §112.23.b.1.A §112.24.b.1.A	Demonstrate safe practices during field and laboratory investigations.
2	§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.
1, 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.
All lessons	§112.22.b.2.B §112.23.b.2.B §112.24.b.2.B	Collect data by observing and measuring.
All lessons	§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.
All lessons	§112.22.b.2.D §112.23.b.2.D §112.24.b.2.D	Communicate valid conclusions.
1, 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.
1, 2, 3, 4	§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.
2	§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.

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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.
2, 3, 4	§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, 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.
2	§112.22.b.7.B	Classify substances by their physical and chemical properties.
1, 2	§112.22.b.8.A	Define matter and energy.
4	§112.22.b.11.B	Identify cells as structures containing genetic material.
All lessons	§112.24.b.4.B	Extrapolate from collected information to make predictions.
2, 3, 4	§112.24.b.6.A	Describe interactions among systems in the human organism.
4	§112.24.b.11.A	Identify that change in environmental conditions can affect the survival of individuals and of species.
<b>Texas Essential Knowledge and Skills for Mathematics – Grades 6, 7, 8</b>		
<b>Lesson</b>	<b>Standard</b>	<b>Description</b>
1, 2, 3, 4	§111.22.b.1.B	Generate equivalent forms of rational numbers including whole numbers, fractions, and decimals.
All lessons	§111.22.b.1.C	Use integers to represent real-life situations.
All lessons	§111.22.b.2.A	Model addition and subtraction situations involving fractions with objects, pictures, words, and numbers.
1, 2, 3	§111.22.b.2.B	Use addition and subtraction to solve problems involving fractions and decimals.
2, 3, 4	§111.22.b.2.C	Use multiplication and division of whole numbers to solve problems including situations involving equivalent ratios and rates.
1, 2	§111.22.b.8.A	Estimate measurements and evaluate reasonableness of results.
1, 2	§111.22.b.8.D	Convert measures within the same measurement system (customary and metric) based on relationships between units.
All lessons	§111.22.b.10.D	Solve problems by collecting, organizing, displaying, and interpreting data.

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All lessons	§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.
1, 2, 3	§111.23.b.2.A	Represent multiplication and division situations involving fractions and decimals with concrete models, pictures, words, and numbers.
1, 2, 3	§111.23.b.2.B	Use addition, subtraction, multiplication, and division to solve problems involving fractions and decimals.
2	§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.
All lessons	§111.23.b.2.G	Determine the reasonableness of a solution to a problem.
2	§111.23.b.3.A	Estimate and find solutions to application problems involving percent.
1, 2	§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.
All lessons	§111.23.b.11.A	Select and use an appropriate representation for presenting collected data and justify the selection.
All lessons	§111.23.b.11.B	Make inferences and convincing arguments based on an analysis of given or collected data.
All lessons	§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.
All lessons	§111.24.b.1.A	Compare and order rational numbers in various forms including integers, percents, and positive and negative fractions and decimals.
1, 2, 4	§111.24.b.1.B	Select and use appropriate forms of rational numbers to solve real-life problems including those involving proportional relationships.
All lessons	§111.24.b.2.A	Select and use appropriate operations to solve problems and justify the selections.
All lessons	§111.24.b.2.B	Add, subtract, multiply, and divide rational numbers in problem situations.
All lessons	§111.24.b.2.C	Evaluate a solution for reasonableness.
2	§111.24.b.3.A	Compare and contrast proportional and non-proportional relationships.
All lessons	§111.24.b.4	Generate a different representation given one representation of data such as a table, graph, equation, or verbal description.
All lessons	§111.24.b.11.B	Use theoretical probabilities and experimental results to make predictions and decisions.

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1, 2, 4	§111.24.b.12.C	Construct circle graphs, bar graphs, and histograms, with and without technology.
1, 2	§111.24.b.13.A	Evaluate methods of sampling to determine validity of an inference made from a set of data.
All lessons	§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.
All lessons	§111.24.b.16.B	Validate his/her conclusions using mathematical properties and relationships.
<b>Texas Essential Knowledge and Skills for English Language Arts and Reading – Grades 6, 7, 8</b>		
<b>Lesson</b>	<b>Standard</b>	<b>Description</b>
All lessons	§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.
All lessons	§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.
All lessons	§110.22.b.10.A §110.23.b.10.A §110.22.b.10.A	Use his/her own knowledge and experience to comprehend.
All lessons	§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.
All lessons	§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.
All lessons	§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.
All lessons	§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.
All lessons	§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.

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All lessons	§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.
All lessons	§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.
All lessons	§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.
All lessons	§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.
All lessons	§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.
3, 4, 5	§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.
All lessons	§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.
All lessons	§110.22.b.15.E §110.23.b.15.E §110.24.b.15.E	Select and use voice and style appropriate to audience and purpose.
All lessons	§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.
All lessons	§110.22.b.20.A §110.23.b.20.A	Frame questions to direct research.

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	<b>§110.24.b.20.A</b>	
<b>All lessons</b>	<b>§110.22.b.22.B</b> <b>§110.23.b.22.B</b> <b>§110.24.b.22.B</b>	Interpret important events and ideas gathered from maps, charts, graphics, video segments, or technology presentations.
<b>Texas Essential Knowledge and Skills for Health Education – Grades 6, 7, 8</b>		
<b>Lesson</b>	<b>Standard</b>	<b>Description</b>
<b>2, 3, 4, 5</b>	<b>§115.22.b.1.A</b>	Analyze healthy and unhealthy dietary practices.
<b>2, 3, 4, 5</b>	<b>§115.22.b.1.B</b>	Explain the importance of a personal dietary and exercise plan.
<b>1, 3, 4, 5</b>	<b>§115.22.b.1.F</b>	Describe the mental, physical, and social benefits of regular exercise and fitness.
<b>2, 3, 4, 5</b>	<b>§115.22.b.2.A</b>	Analyze the relationships among the body systems.
<b>All lessons</b>	<b>§115.22.b.4.B</b>	Use critical thinking to research and evaluate health information.
<b>2, 3, 4</b>	<b>§115.23.b.2.E</b>	Examine physical and emotional development during adolescence.
<b>5</b>	<b>§115.23.b.3.B</b>	Analyze risks for contracting specific diseases based on pathogenic, genetic, age, cultural, environmental, and behavioral factors.
<b>5</b>	<b>§115.23.b.3.C</b>	Distinguish risk factors associated with communicable and noncommunicable diseases.
<b>All lessons</b>	<b>§115.23.b.4.C</b>	Demonstrate ways to use health information to help self and others.
<b>All lessons</b>	<b>§115.23.b.9.A</b>	Describe personal health behaviors and knowledge unique to different generations and populations.
<b>All lessons</b>	<b>§115.23.b.12.A</b>	Interpret critical issues related to solving health problems.
<b>All lessons</b>	<b>§115.23.b.12.B</b>	Relate practices and steps necessary for making health decisions.
<b>All lessons</b>	<b>§115.23.b.12.C</b>	Appraise the risks and benefits of decision-making about personal health.