

CHEMICALS, THE ENVIRONMENT, AND YOU: EXPLORATIONS IN SCIENCE AND HUMAN HEALTH**Alabama Science Standards – Life Science: Grade 7**

Lesson	Standard	Descriptor
2, 4	1	Describe characteristics common to living things, including growth and development, reproduction, cellular organization, use of energy, exchange of gases, and response to the environment. <ul style="list-style-type: none"> • Identifying homeostasis as the process by which an organism responds to its internal or external environment • Predicting how an organism's behavior impacts the environment
1, 5	7	Describe biotic and abiotic factors in the environment.

Alabama Science Standards – Physical Science: Grade 8

2, 4, 6	1	Identify steps within the scientific process. <ul style="list-style-type: none"> • Applying process skills to interpret data from graphs, tables, and charts • Identifying controls and variables in a scientific investigation • Measuring dimension, volume, and mass using Système International d'Unités (SI units) • Identifying examples of hypotheses • Identifying appropriate laboratory glassware, balances, time measuring equipment, and optical instruments used to conduct an investigation
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Alabama Mathematics Standards – Grades 6 – 8**Grade 6**

Lesson	Standard	Descriptor
2, 4	1	Demonstrate computational fluency with addition, subtraction, multiplication, and division of decimals and fractions.
2, 4	2	Solve problems involving decimals, percents, fractions, and proportions.
3	10	Interpret information from bar graphs, line graphs, and circle graphs.

Grade 7

2, 4	1	Demonstrate computational fluency with addition, subtraction, and multiplication of integers.
2, 4	2	Use order of operations to evaluate numerical expressions.
2, 4	3	Solve problems requiring the use of operations on rational numbers. <ul style="list-style-type: none"> • Describing the method used • Determining the reasonableness of results • Using percents to solve problems, including problems involving discounts, taxes, commissions, and simple interest
2, 4	6	Solve one- and two-step equations.

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	11	Solve problems involving ratios or rates, using proportional reasoning. • Converting units of length, weight, or capacity from metric to customary and from customary to metric
Grade 8		
2, 4	1	Use various strategies and operations to solve problems involving real numbers.
2, 4	3	Use order of operations to evaluate and simplify algebraic expressions.
3, 4	13	Interpret data from populations, using given and collected data. • Representing the data with the most appropriate graph, including box-and-whisker plot, circle graph, and scatterplot
Alabama English Language Arts Standards: Grades 6 – 8		
Grade 6		
Lesson	Standard	Descriptor
1, 2, 4, 5, 6	3	Apply strategies that include making complex predictions, identifying the likely source of a text, and comparing to comprehend sixth-grade informational and functional reading materials. • Drawing conclusions to extend meaning • Making generalizations • Using context clues to determine meaning • Identifying sequence of events • Previewing text features before reading
4, 5, 6	4	Recognize the use of text elements, including implied main idea, explicit cause-effect relationships, and persuasive techniques, in sixth-grade informational and functional reading materials. • Identifying details related to main idea
4, 6	8	Compose in persuasive mode for a specific purpose and audience, including clearly stated opinions with supporting details and reasons or examples to influence thought or action. • Using the steps of the writing process, including prewriting, drafting, revising, editing, and publishing in all forms of written composition • Demonstrating use of graphic organizers for prewriting and drafting • Organizing content of paragraphs and other written compositions, including topic sentences, supporting sentences, and concluding sentences with varied sentence structure • Using transitional words or phrases to help create coherence in compositions • Using tone appropriate to the topic, purpose, and audience
4, 6	9	Utilize vocabulary and spelling skills, including using homonyms, synonyms, and antonyms in writing.
4, 6	13	Utilize resource materials for supporting evidence in compositions.
1, 4, 5, 6	14	Use organizing and paraphrasing in the research process. • Taking notes to gather and summarize information
All lessons	17	Use listening skills for remembering significant details, directions, and sequences. • Summarizing messages for content and purpose

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		<ul style="list-style-type: none"> • Practicing note-taking skills to gather and summarize information • Paraphrasing spoken messages to summarize or clarify • Recognizing propaganda as an art of persuasion in evaluating content and purpose
Grade 7		
Lesson	Standard	Descriptor
1, 2, 4, 5, 6	4	<p>Apply strategies that include setting purposes for reading, distinguishing fact from opinion, making generalizations, and reviewing to comprehend informational and functional reading materials.</p> <ul style="list-style-type: none"> • Determining sequence of events to enhance text understanding • Using specific context clues to determine meaning of unfamiliar words • Applying self-monitoring strategies for text understanding • Drawing conclusions to determine unstated intent
4, 5, 6	5	Recognize the use of textual elements, including main idea and supporting details, to gain information from various text formats, including graphs.
4, 6	9	<p>Compose in descriptive, narrative, expository, and persuasive modes with a thesis sentence and introductory, supporting, and concluding paragraphs when appropriate.</p> <p>Using transitional words and phrases for coherence</p>
4, 6	13	<p>Apply steps in the research process to identify a problem or issue, locate resources and information, and present findings.</p> <ul style="list-style-type: none"> • Taking notes to gather and summarize information
3, 4, 6	14	<p>Present findings from inquiry and research using a variety of resources.</p> <ul style="list-style-type: none"> • Examples: projects, brochures, display boards, speeches, multimedia presentations
All lessons	15	Demonstrate listening skills, including identifying the main idea, detail, purpose, and bias in group discussions, public speeches, and media messages.
Grade 8		
Lesson	Standard	Descriptor
1, 2, 4, 5, 6	4	<p>Apply strategies appropriate to type of reading material, including making inferences to determine bias or theme and using specific context clues, to comprehend eighth-grade informational and functional reading materials.</p> <ul style="list-style-type: none"> • Applying self-monitoring strategies for text understanding • Comparing predicted with actual content in informational and functional reading materials • Distinguishing fact from opinion in informational reading materials • Confirming author's credentials • Determining sequence of steps, events, or information
4, 6	8	Write in narrative, expository, and persuasive modes with attention to descriptive elements.
4, 5, 6	14	Identify characteristics of spoken formal and informal language.

Alabama Health Education Standards: Grades 6 – 8		
Grade 6		
Lesson	Standard	Descriptor
4, 5	1	Identify health advocacy strategies.
5, 6	2	Identify services provided by local, state, and national health agencies and organizations.
4, 5	4	Recognize criteria to be used in determining reliability of health information, products, and services.
1, 5	5	Describe practices that are related to the control of disease and other health problems.
2, 5	7	Describe current issues that relate to healthy living.
All lessons	10	Apply effective verbal and nonverbal communication skills to enhance relationships.
4	18	Describe the physical and social consequences of substance use and abuse.
Grade 7		
Lesson	Standard	Descriptor
4	3	Identify appropriate providers for health care needs.
1, 5, 6	4	Describe how health is affected by the environment.
4	15	Analyze the short- and long-term effects of risk behaviors that compromise adolescent health.
4	16	Describe the consequences of misusing legal drugs.
Grade 8		
5	3	Identify how public laws protect the environment.
5	4	Recognize cultural influences that impact health behaviors.
1, 2, 5, 6	5	Analyze how environment and personal health are interrelated.
4	13	Identify the short- and long-term effects of using alcohol and other drugs, including legal and illegal substances.