

Alabama High School Graduation Exam

Science Objectives

#	CONTENT STANDARDS	NUMBER OF ITEMS
I-1	Analyze the methods of science	7
II-1	Trace matter and energy transfer	8
II-2	Relate particle motion to matter states	4
II-3	Apply the periodic table	4
II-4	Identify physical and chemical changes	4
III-1	Distinguish among taxonomic groups	4
III-2	Differentiate characteristics of plants	8
III-3	Differentiate characteristics of animals	10
IV-1	Recognize genetic characteristics	4
IV-2	Define the function of DNA	6
V-1	Distinguish cell structures and functions	14
V-2	Differentiate between mitosis and meiosis	4
VI-1	Define the components of an ecosystem	7
VII-1	Relate energy conservation to transformation	4
VII-2	Relate waves to energy transfer	4
VIII-1	Apply Newton's three laws of motion	4
VIII-2	Relate force to pressure in fluids	4
	TOTAL	100

Alabama High School Graduation Exam

Biology Objectives

#	CONTENT STANDARDS	NUMBER OF ITEMS
1	Select appropriate laboratory glassware, balances, time measuring equipment, and optical instruments to conduct an experiment.	6
2	Describe cell processes necessary for achieving homeostasis, including active and passive transport, osmosis, diffusion, exocytosis, and endocytosis.	6
3	Identify reactants and products associated with photosynthesis and cellular respiration, and the purposes of these two processes.	6
4	Describe similarities and differences of cell organelles, using diagrams and tables. Differentiate between the previous five-kingdom and current six-kingdom classification systems.	6
5	Identify cells, tissues, organs, organ systems, organisms, populations, communities, and ecosystems as levels of organization in the biosphere.	6
6	Describe the roles of mitotic and meiotic divisions during reproduction, growth, and repair of cells.	6
7	Apply Mendel's laws to determine phenotypic and genotypic probabilities of offspring.	6
8	Identify the structure and function of DNA, RNA, and protein.	6
9	Distinguish between monocots and dicots, angiosperms and gymnosperms, and vascular and nonvascular plants.	6
10	Classify animals according to type of skeletal structure, method of fertilization and reproduction, body symmetry, body coverings, and locomotion.	6
11	Describe protective adaptations of animals, including mimicry, camouflage, beak type, migration, and hibernation.	6
12	Trace the flow of energy as it decreases through the trophic levels from producers to the quaternary level in food chains, food webs, and energy pyramids.	6
13	Trace biogeochemical cycles through the environment, including water, carbon, oxygen, and nitrogen.	6
14	Identify biomes based on environmental factors and native organisms.	6
15	Identify density-dependent and density-independent limiting factors that affect populations in an ecosystem.	6
	TOTAL	90

Alabama High School Graduation Exam

Language Objectives

#	CONTENT STANDARDS	NUMBER OF ITEMS
I-1	Identify correct noun forms	5
I-2	Identify correct verb forms	5
I-3	Recognize subject-verb agreement	5
I-4	Recognize pronoun-antecedent agreement	5
I-5	Identify verb shifts	5
I-6	Identify correct pronoun case	5
I-7	Identify effective use of voice	5
I-8	Determine correct use of modifiers	5
I-9	Identify commonly confused words	5
II-1	Use clear, vivid, precise language	5
II-2	Use formal and informal language	5
III-1	Demonstrate correct sentence structure	5
III-2	Demonstrate internal parallelism	5
IV-1	Demonstrate correct use of capitalization	5
IV-2	Demonstrate correct use of commas	5
IV-3	Demonstrate semicolon and colon usage	5
IV-4	Demonstrate quotation marks and underlining	5
IV-5	Demonstrate correct use of the apostrophe	5
V-1	Paragraph progression and completeness	10
	TOTAL	100

Alabama High School Graduation Exam

Math Objectives

#	CONTENT STANDARDS	NUMBER OF ITEMS
I-1	Apply order of operations	4
I-2	Add and subtract polynomials	4
I-3	Multiply polynomials	4
I-4	Factor polynomials	4
II-1	Solve multi-step equations	4
II-2	Solve quadratic equations	4
II-3	Solve systems of linear equations	4
II-4	Solve multi-step inequalities	4
III-1	Identify functions	4
III-2	Find the range of functions	4
IV-1	Find perimeter, circumference, area, volume	4
IV-2	Find the distance, midpoint, slope	4
V-1,4	Graph: linear equations; common relations	6
V-2	Graph lines given certain conditions	4
V-3	Determine solution sets of inequalities	4
VI-1	Translate: verbal or symbolic; Graph: equations or inequalities	6
VII-1	Apply properties and relationships between angles	4
VII-2	Apply Pythagorean Theorem	4
VII-3	Apply properties of similar polygons	4
VII-4	Apply properties of geometric figures	4
VII-5	Determine measures of central tendency	4
VII-6	Determine probabilities	4
VII-7	Solve problems: Direct Variation	4
VII-8	Solve problems: Algebraic Concepts	4
	TOTAL	100

Alabama High School Graduation Exam

Reading Objectives

#	CONTENT STANDARDS	NUMBER OF ITEMS
I-1	Identify supporting details	6
I-2	Determine sequence of events	6
I-3	Follow directions	6
II-1	Identify main idea	6
II-2	Draw conclusions	6
II-3	Determine cause and effect	6
II-4	Propaganda; fact from opinion	6
II-5	Recognize summary statements	6
III-1	Recognize logic and arguments	6
III-2	Analyze literary elements	6
III-3	Understand figurative language	6
IV-1	Determine meaning of words	6
IV-2	Preview; predict	3
IV-3	Discern organizational patterns	3
IV-4	Demonstrate reference material usage	6
	TOTAL	84

Alabama High School Graduation Exam

Social Studies Objectives

#	CONTENT STANDARDS	NUMBER OF ITEMS
I-1	Identify and evaluate America's exploration, development, and divergence	10
II-1	Recognize and comprehend the impact of the influences of intellectual and religious thought on the political systems	6
II-2	Identify and comprehend the provisions of essential documents of the government	14
III-1	Identify and evaluate the impact of the American Revolution	6
III-2	Identify and evaluate the Era of Expansion	6
IV-1	Identify and evaluate events, causes, and effects of the Civil War Era	8
V-1	Identify and evaluate the events that led to the settlement of the West	6
V-2	Evaluate the concepts, developments, and consequences of industrialization and urbanization	8
VI-1	Evaluate the causes of World War I	9
VI-2	Analyze the effects of World War I	9
VII-1	Analyze the advent and impact of the Great Depression and the New Deal on American Life	8
VII-2	Analyze America's involvement in World War II	4
	TOTAL	100