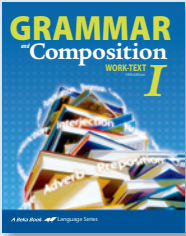


Grammar & Composition Grade 7



Grammar and Composition I purposes: to emphasize the orderly structure of our language and train students to use the English language effectively. The Christian perspective of this textbook promotes standards of correct grammar and usage, equipping students with the tools they need to become effective communicators in both speaking and writing.

Students will learn to recognize the different parts of speech, fit these parts of speech together to form sentences, join sentences together to make paragraphs, and organize paragraphs into compositions. They will also learn to develop complete and orderly thoughts and to communicate those thoughts clearly and concisely, so that they can use God's gift of language effectively.

Added Enrichment

- English teaching transparencies
- Review games
- Grammar Court procedures explained

Evaluation

- Grammar quizzes (21)
- Tests (8), 9-weeks exam (2)
- Semester exam, final exam
- Compositions:
 - Summary (3)
 - Book reports: full (2), short (2), oral (1)
 - Description, research paper, friendly letter (1 each)
- Optional (graded at teacher discretion):
 - Original poems, character sketches
 - Narratives (imaginative and first person)
 - Patriotic pledge, full book report

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Grammar

- Capitalization:
 - Proper nouns and words formed from proper nouns:
 - Particular persons, places, things
 - Words referring to Deity and Holy Scripture
 - Words from proper nouns
 - Common noun or adjective when part of proper name
 - Titles of persons, titles of works
 - First word of every sentence
 - Pronoun *I* and interjection *O*
 - First word of every line of poetry
- Punctuation:
 - End marks:
 - Period for declarative sentences and abbreviations
 - Question mark for interrogative sentences
 - Exclamation point for exclamatory sentences
 - Commas:
 - Before a coordinating conjunction joining two independent clauses
 - To indicate:
 - Omissions or avoid possible misreading
 - Nonessential elements in a sentence:
 - Appositive and appositive phrase
 - Direct address
 - *Well, yes, no, or why*
 - Parenthetical expressions
 - To set off introductory phrases or clauses
 - In dates and addresses
 - After salutations and closings of letters
 - Semicolons:
 - Between independent clauses:
 - If not using coordinating conjunction
 - Joined by:
 - Transitional words
 - Coordinating conjunction if clauses already contain commas

- Colons:
 - Before a list of items
- Between:
 - Chapter and verse of Bible reference
 - Hour and minute of time reference
- After salutation of a business letter
- Italics: for titles of books, magazines, newspapers, plays, works of art, ships, trains, aircraft, and spacecraft
- Hyphens:
 - To divide a word at the end of line
 - In compound numbers
 - In fractions used as adjectives
- Quotation Marks:
 - In a direct quotation
 - To enclose titles of short poems, songs, chapters, articles, and other parts of books or magazines
- Apostrophes:
 - To form possessive case of nouns
 - To show omissions from words
 - With *s* to form plurals of letters, numbers, signs, and words used as words
- The sentence:
 - Definition of sentence
 - Kinds of sentences classified by purpose: declarative, imperative, interrogative, exclamatory
 - Recognizing subjects and verbs: complete subject, simple subject, complete predicate, simple predicate, and verb phrase
 - Overcoming problems locating subjects and verbs:
 - Finding:
 - Subject in an inverted sentence: interrogative sentence, sentence beginning with *there* or *here*
 - Subject of an imperative sentence
 - Verb phrase that is interrupted by other words
 - Diagraming subjects and verbs
 - Recognizing and diagraming compound subjects and verbs
 - Locating complements

Grammar & Composition cont.

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Grammar cont.

- The sentence cont.:
 - Correcting fragments and run-on sentences
 - Sentence structure:
 - Defining dependent and independent clauses
 - Recognizing and diagraming:
 - Simple and compound sentences
 - Complex and compound-complex sentences
- Parts of speech:
 - Recognizing eight parts of speech
 - Verbs:
 - Recognizing action, linking, and helping verbs
 - Distinguishing verbs from verbals (participles)
 - Using principal parts of verbs
 - Regular verb endings
 - Irregular verbs
 - Using correct principal parts
 - Verb tense
 - Using consistent verb tense
 - Avoid incorrect verb forms
 - Use troublesome verbs correctly and avoid verb usage errors
 - Use exact and vivid verbs
 - Nouns:
 - Recognizing nouns: compound, common, and proper
 - Recognizing collective nouns
 - Keeping agreement of subject and verb
 - Recognizing nouns as predicate nominatives, direct objects, indirect objects, objects of prepositions, direct address
 - Diagraming nouns as predicate nominatives, direct objects, indirect objects, objects of prepositions
 - Recognizing and diagraming nouns as appositives
 - Using exact and vivid nouns
 - Pronouns:
 - Antecedents
 - Recognizing:
 - Personal, interrogative, demonstrative, indefinite, compound
 - Relative pronouns
 - Keeping agreement of verbs and indefinite pronoun subjects
 - Nominative case:
 - For subjects and predicate nominatives
 - For appositives of subjects and appositives of predicate nominatives
 - Objective case:
 - For direct objects, indirect objects, and objects of prepositions
 - For appositives of direct objects, indirect objects, objects of prepositions
 - Possessive case

- Adjectives:
 - Recognizing and diagraming:
 - Adjectives and proper adjectives
 - Participles
 - Distinguishing adjectives from nouns and pronouns
 - Recognizing and diagraming predicate adjectives
 - Using and diagraming:
 - Prepositional phrases as adjectives
 - Participial phrases as adjectives
 - Adjective clauses
 - Placing and punctuating adjective modifiers
 - Using adjectives in comparison
 - Avoiding double comparison and double negatives
 - Using exact and vivid adjectives
- Adverbs:
 - Recognizing and diagraming adverbs
 - Distinguishing adverbs from adjectives
 - Using and diagraming:
 - Prepositional phrases as adverbs
 - Adverb clauses
 - Correct placement of adverb modifiers
 - Using: adverbs in comparison, exact and vivid adverbs
- Prepositions:
 - Recognizing prepositions, prepositional phrases, and objects of prepositions
 - Distinguishing between prepositions and adverbs
 - Using prepositions correctly
- Conjunctions:
 - Recognizing:
 - Coordinating and correlative conjunctions
 - Subordinating conjunctions
 - Interjections

Composition

- Manuscript form: abbreviations, numbers
- Manuscript form: titles
- The library: Dewey Decimal System, Library of Congress Classification System, using the catalog and reference section
- Summaries (3)
- Outline (4):
 - Topical outline
 - Sentence outline
 - Format of outline
 - Parallelism in an outline
 - Steps to preparing an outline
- Book reports:
 - Preparing:
 - Written book reports including introduction, body, conclusion
 - Oral book reports: written preparation and oral presentation
- Introducing paragraphs:
 - Topic sentence
 - Summarizing sentence
 - Paragraph development with details
 - Paragraph unity
 - Paragraph coherence:
 - Chronological order, order of importance, and transitional expressions
 - Space order, pronoun reference, and repetition

Grammar & Composition cont.

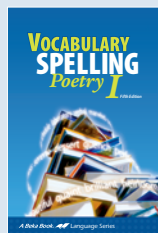
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Composition cont.

- Writing descriptions about persons, places, and things (13):
 - Steps: point of view, careful selection of details, arrangement of details, use of exact nouns and verbs
- The Writing Process: plan, write, rewrite, edit
- Research paper:
 - Planning the paper: selecting subject, finding sources, writing bibliography cards, making a preliminary outline, taking notes, writing note cards, avoiding plagiarism
 - Writing the paper: introduction, body
 - Using parenthetical citations

- Rewriting the paper:
 - Check:
 - Organization, introduction, and conclusion
 - Unity, coherence, and citations
- Editing the paper: check each paragraph, sentence, word; capitalization and punctuation
- Preparing works cited page
- Typing the paper
- Documenting the research paper
- Improving writing style: correct a choppy or monotonous style
- Writing Letters:
 - Friendly: letter parts, thank-you note, bread-and-butter note
 - Business: letter parts, order letter, request letter

Vocabulary, Spelling, Poetry Grade 7



Vocabulary, Spelling, Poetry 1 emphasizes the application of spelling rules to lists of challenging words and the utilization of an expanded vocabulary. All of the spelling words are practical, and many are words that are frequently misspelled. A majority of the vocabulary words are taken from the stories in *Of People*. The goals of poetry recitation and memorization are an enjoyment and appreciation of poetic beauty and excellence.

Added Enrichment

- Spelling and vocabulary:
 - Spelling and vocabulary lists (28) including review list at end of each 9 weeks:
 - Spelling words (480)
 - Vocabulary words (168)
 - Organized by spelling rules, suffixes, homonyms, compound words, and commonly misspelled words
 - Practice exercises (60)
- Review games
- Each vocabulary word includes:
 - Pronunciation, part of speech
 - Definition, sample sentence
- Pronunciation key
- Teacher resource: vocabulary mastery sentences
- Poetry: CD included to help with correct interpretation

Evaluation

- Spelling and vocabulary quizzes:
 - Weekly (24)
 - Quarterly review (1 each 9 weeks; each counts as 2 quiz grades)
- Poetry quizzes:
 - Written (7)
 - Oral (1)

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Spelling & Vocabulary Skills Development

- Master spelling and vocabulary lists that include:
 - Vocabulary words and definitions
 - Words that follow the spelling rules
 - Sound-alike suffixes
 - Commonly misspelled words
 - Homonyms
- Use vocabulary words in sentences and in proper context
- Memorize vocabulary definitions
- Be able to identify commonly misspelled words

- Apply spelling and phonics concepts through daily teacher-directed oral practice and independent written practice
- Learn:
 - Antonyms and synonyms of vocabulary words
 - To distinguish between homophones
 - Practical spelling tips and suggestions by studying *Keys to Good Spelling*
- Spelling rules:
 - Use *i* before *e*, except after *c*, or when sounded like long *a*
 - Double a final consonant before adding a suffix beginning with a vowel

Vocabulary, Spelling, Poetry cont.

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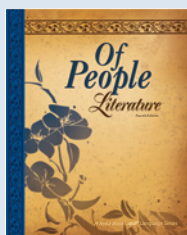
Spelling & Vocabulary Skills Development cont.

- Spelling rules cont.:
 - Change y to i when adding suffixes
 - Drop the silent e before adding a suffix beginning with a vowel
 - Learn exceptions to the spelling rules
- Creating a compound word doesn't change the spelling of the two parts
- Adding a prefix to a word doesn't change the word's spelling

Poetry Skills Development

- Memorize 7 lyrical poems and 1 hymn
- Develop appreciation of poetry
- Lay foundation for future literature study
- Perform in front of an audience
- Recite in unison
- Use appropriate expression and volume
- Increase vocabulary
- Demonstrate comprehension of emotion and content
- Develop a mental visualization of the poem
- Discuss meaning and purpose of poems
- Use proper observation of punctuation

Literature Grade 7



Of People features stories and poems that can help students increase their understanding of themselves and others. Students will gain exposure to people of different ages, nationalities, races, cultures, and economic levels to develop a better understanding of people's motives and feelings and to recognize the consequences of particular actions. Students will also become familiar with classics such as *A Christmas Carol*, *Robinson Crusoe*, *Don Quixote*, and *Of Plymouth Plantation*.

Literary Value

- 93 authors, including well-known writers such as Louisa May Alcott, John Bunyan, Charles Dickens, Robert Frost, and Longfellow
- Prose selections (50), poems (63), plays (4)
- Character-building themes such as personal sacrifice, importance of family, admitting one's mistakes, and hard-work ethics

Added Enrichment

- Footnotes define and explain unfamiliar words
- Comprehension and discussion questions after selections
- Character-building quotations and verses throughout
- Introductory paragraphs for interest and background information
- Review games

Evaluation

- Speed and comprehension quizzes (15)
- Homework reading quizzes (8)
- Tests (8), 9-weeks exam (2)
- Semester exam, final exam

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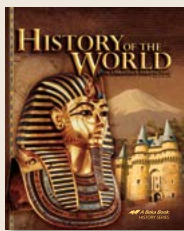
Reading Skills Development

- Develop skills in reading speed and comprehension
- Further develop oral reading skills
- Be able to identify significant quotations and the selection in which they are featured
- Increase vocabulary

Comprehension, Discussion, & Analysis Skills Development

- Develop proper discernment according to the truths of Scripture
- Answer factual, interpretive, and inferential comprehension and discussion questions
- Improve ability to use deductive reasoning, understand cause and effect, and draw conclusions
- Build appreciation for good literature and a love of reading

World History Grade 7



History of the World is presented from a conservative, Christian perspective as part of a well-rounded program designed to give students a better understanding and a working knowledge of the geography of the Eastern Hemisphere. The interesting narrative style of the text and the many illustrations, maps, and photographs invite students to explore the past and learn about the people behind the events of world history.

The goal of the text is threefold: first, to show God's hand in the history of the world; second, to emphasize the role of individuals in history; and third, to teach the many lessons that can be learned from history. Above all, *History of the World* emphasizes the providence of God in the actions of men. It provides students with heroes to emulate and goals to fulfill by focusing on the individuals whose character, initiative, and hard work have made a positive impact on world history.

Added Enrichment

- Special feature boxes (42):
 - Highlight important people and events of history
 - Present fascinating facts and intriguing details from a Christian perspective
 - Introduce the foundations of history and place importance on knowing current history
- Maps correlating to text (62)

Evaluation

- Review quizzes (40)
- Reading quizzes (27)
- Current event reports (31; each presentation counts as quiz grade)
- Geography projects (13; each counts as quiz grade)
- Tests (8), 9-weeks exam (2)
- Semester exam, final exam

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Beginning of World History: The Ancient Middle East

- The beginning:
 - Creation
 - Fall of man:
 - Cain, Abel, Seth
 - Capital punishment
 - Flood
 - Dispersion
- From Sumer to Canaan
 - Sumerian civilization and religion
 - Call of Abraham
 - Hammurabi and Babylon
 - Patriarchs in Canaan
- Down to Egypt
 - Egyptian civilization
 - Hebrew exodus:
 - God's judgment through the plagues
- Israel in its land
 - Ten Commandments
 - Conquest of Canaan
 - Samuel
 - David and Solomon
 - Division of Israel
 - Phoenicians and Hittites

New Empires & Cultures

- Assyria, Babylon, and Persia
 - Assyrian Empire:
 - Shalmaneser V and Ashurbanipal
 - Chaldean Empire: Nebuchadnezzar
 - Persian Empire: Cyrus the Great:
 - Darius and the Royal Road
- Greece
 - Early Greek civilization:
 - Dorians
 - Homer and the Olympian gods
 - Greco-Persian Wars
 - Athens and Sparta:
 - Greek politics and philosophy
 - Peloponnesian War
 - Alexander the Great
- Rome before Christ
 - Foundation of Rome
 - Roman republic
 - Punic Wars
 - Julius Caesar
 - Roman drama
 - Caesar Augustus
 - Measuring time
- Rome after Christ
 - Gospel of Christ
 - Persecution of early church:
 - Claudian and Flavian emperors
 - Constantine the Great:
 - Edict of Milan
 - Fall of the Roman Empire
 - Understanding why the Roman Empire fell

World History cont.

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The Middle Ages & the Distortion of Christianity

- Early church history
 - New Testament
- Early church
 - Rise of Roman church and popes
- Islam and the Crusades
 - Mohammed and Islam
 - Europe's Crusades:
 - Christendom and Islam: checks and balances
- From empire to feudalism
 - Merovingian and Carolingian Kings:
 - Papal states
 - Charlemagne and his empire
 - Treaty of Verdun
 - Feudalism
- Age of Darkness
 - Distorted Christianity:
 - Doctrines of the Roman church
 - Scholasticism
 - Holy Roman Empire
 - Renaissance

Beginning of the Modern Age

- Protestant Reformation
 - Forerunners of the Reformation
 - John Wycliffe and John Huss
 - Inquisition
 - Gutenberg and the printing press
 - Erasmus
 - Martin Luther:
 - Luther's reforms
 - Zwingli and Calvin
 - Anabaptists and Mennonites
- Post-Reformation Europe
 - Peasant's Revolt
 - State churches: Peace of Augsburg
 - Counter-Reformation
 - Thirty Years' War: Peace of Westphalia
- Seventeenth-century Europe:
 - Swiss Confederation
 - Franks and Capetian Dynasty
- English nation
 - Alfred the Great
 - Norman Conquest:
 - Domesday Book
 - Witan and the Great Council
 - Plantagenet kings:
 - Henry II, Richard I, John
 - Magna Carta and Parliament
 - Hundred Years' War and Wars of the Roses
 - Henry VIII
 - Scottish and English Reformation
 - Elizabethan Age: Spanish Armada
 - Great English Civil War
 - Restoration of the monarchy
 - Glorious Revolution

- Age of Exploration
 - Asia's mysterious land: India, China, and Japan
 - Time of discovery:
 - Effects of the Crusades
 - New World: Christopher Columbus, Vasco da Gama, and Amerigo Vespucci
 - Other nations explore: Portugal, France, England
- United States
 - Pilgrims
 - Philipp Spener
 - Wesleyan Revival and Great Awakening
 - War for Independence
 - Constitution of the United States
 - Expansion and progress
 - Rise as a world power
 - Revival and missions

Rise of Modern Europe

- France in the Modern Age
 - Huguenots:
 - Edict of Nantes
 - Reign of Louis XIV
 - Age of Enlightenment: Voltaire, Montesquieu, and Rousseau
 - French Revolution
 - Robespierre and Reign of Terror
 - Napoleon Bonaparte:
 - Battle of Nations and Battle of Waterloo
 - Congress of Vienna
 - July Revolution
- British Empire: Asia, Africa, and Australia
 - Victorian Age
 - British Empire:
 - Conflicts of England and Ireland
 - Christianity and charity
 - Missions
 - India and the Far East:
 - Sepoy Rebellion
 - Africa:
 - Slave trade
 - Samuel Adjai Crowther
 - Australia and Canada:
 - British North America Act
- Science and industry in the Modern Age
 - Failures of ancient and medieval science
 - Founders of modern science
 - Darwin and evolution:
 - Understanding evolution's threat to science
 - Agricultural advancement
 - Industrial Revolution:
 - Inventors and captains of industry
 - Triumph of capitalism
- New world of classics
 - Ancient and modern classics
 - Medieval music
 - Post-Reformation music, art, and literature

World History cont.

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An Era of Change

- World War I and the rise of Communism
 - Unification of Germany and Italy
 - World War I:
 - Battles: Verdun, Sommé, Jutland
 - Treaty of Versailles
 - Czarist Russia
 - Karl Marx and Communism:
 - Capitalism, socialism, and Communism
 - Bolshevik Revolution
 - Vladimir Lenin and Joseph Stalin:
 - Five Year Plan
 - Soviet Union
- Before and during World War II
 - Anti-Christian philosophies
 - Mussolini and Fascist Italy
 - Hitler's Third Reich
 - 1920s and the Great Depression
 - World War II:
 - Battle of Britain
 - American involvement: Pearl Harbor
 - War in Africa
 - European and Pacific Theater
 - Atomic bomb and the Holocaust
- Cold War Era:
 - United Nations
 - Cold War
 - NATO
 - Berlin Wall:
 - Operation Airlift
 - Space Age
 - Communist takeovers
 - China
 - Korean War:
 - 38th Parallel
 - Communist Cuba
 - Vietnam Conflict:
 - Gulf of Tonkin Resolution
 - Modern Middle East:
 - Balfour Declaration; independence for India and African nations
 - Collapse of Soviet Union
 - Ronald Reagan
 - Gorbachev's influence: perestroika and glasnost
 - Tiananmen Square

- Toward a new millennium
 - New World Order
 - European Union
 - NAFTA
 - World Changes
 - Persian Gulf War
 - United States, Central and South America, Russia
 - Modern culture: literature, music, art, architecture
 - Changes in technology
- Change in the new millennium
 - 9/11 Attack: Osama bin Laden and al-Qaeda
 - War on Terror:
 - Operation Iraqi Freedom
 - Arab Spring
 - Change in politics
 - Nuclear nations
 - Israeli/Palestinian conflict
 - African Union
 - Kosovo, Venezuela, Cuba
 - Economic world change
 - United States' financial crises
 - Asian economies
 - Changes in the natural world
 - Environmentalism and global warming

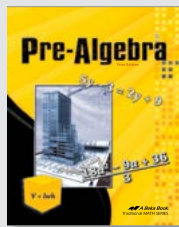
Geography Projects

- Fertile Crescent
- The Modern Middle East
- Asia
- Ancient Empires
- Greek Lands
- Italy
- World Geography
- Europe
- The British Isles
- France
- Australia
- Africa
- Nations of the World

Prayer Time

- Learn to pray for our nation and for government officials

Pre-Algebra Grade 8



Pre-Algebra completes the span of study between elementary arithmetic and the more advanced study of mathematics at the high school level. It not only provides mathematical tools for daily practical use, such as banking, graphs, statistics, and measurements, but is an excellent introduction to algebra, geometry, and trigonometry. Many links from arithmetic to algebra are highlighted throughout the book.

Frequent word problems and the Problem Solving Strategies feature ensure that students can apply their mathematical skills to real-life situations. The problems and strategies also encourage them to connect varying types of mathematical knowledge.

Evaluation

- Written quizzes (34)
- Skills development exercises (57)
- Tests (8)
- 9-weeks exam (2)
- Semester exam
- Final exam

➤ **RED** indicates first introduction of content.

Numbers

- Place value
- Terms: notation, numeration, whole numbers, prime, composite, natural (counting) numbers, integers, rational and irrational numbers
- Order of operations
- Rounding: whole numbers, decimals
- Roman numerals:
 - Value of I, V, X, L, C, D, M
 - Rules for forming Roman numerals
- Number sentences:
 - Order of operations (with and without parenthesis)
- Signed numbers

Addition

- Terms: addend, sum
- Whole numbers, fractions, decimals, compound measures, signed numbers with and without a number line
 - Distributive
- Timed mastery
- Mental arithmetic
- Word problems

Subtraction

- Terms: minuend, subtrahend, difference
- Whole numbers, fractions, decimals, compound measures, signed numbers with and without a number line
- Timed mastery
- Mental arithmetic
- Word problems

Multiplication

- Terms: factors, product
- Recognize symbols: \times (multiplication sign); \cdot (raised dot)
- Whole numbers, fractions, decimals, by powers of ten, compound measures, signed numbers including two or more factors
 - Distributive
- Factors:
 - Common and greatest common factor
 - Prime factoring: division by primes
 - Common and least common multiple
- Timed mastery

- Mental arithmetic
- Word problems

Division

- Terms: dividend, divisor, quotient
- Steps of division
- Whole numbers, fractions, decimals, by powers of ten, compound measures, signed numbers
- Timed mastery
- Mental arithmetic
- Word problems

Fractions

- Terms: numerator, denominator
- Types: mixed number, proper, improper, complex
- Equivalent
- Reducing
- Addition, subtraction, multiplication, division
- Simplifying complex fractions
- Changing fractions to decimals and decimals to fractions
- Word problems

Decimals

- Reading and writing
- Place value to the ten millionths' place
- Types: mixed, terminating, repeating, nonterminating, nonrepeating
- Comparing, rounding
- Addition, subtraction, multiplication, division
- Changing decimals to fractions, fractions to decimals
- Timed mastery
- Word problems

Ratios & Proportions

- Ratios:
 - Terms: antecedent, consequent
 - Reading and writing
 - Reducing and equivalents
 - Word problems

Pre-Algebra cont.

► **RED** indicates first introduction of content.

- Proportions:
 - Terms: means, extremes
 - Finding missing terms by cross multiplication
 - Word problems

Percents

- Recognize symbol: % (percent)
- Writing decimals as percents
- Percents less than 1% and more than 100%
- Percent given as more or less than
- Finding:
 - The percentage, percent, and base using decimal methods
- Percent of increase and decrease
- Discount, rate of discount, sale price, commission, rate of commission

Measures

- Linear:
 - English: inch, foot, yard, mile
 - Metric: millimeter, centimeter, decimeter, meter, decameter, hectometer, kilometer
 - Biblical: reed, cubit, span, finger
- Capacity:
 - English: teaspoon, tablespoon, fluid ounce, cup, pint, quart, gallon, peck, bushel
 - Metric: milliliter, centiliter, deciliter, liter, decaliter, hectoliter, kiloliter
 - Biblical: homer, ephah, cor, bath, hin, log
- Weight:
 - English: ounce, pound, ton
 - Metric: milligram, centigram, decigram, gram, decagram, hectogram, kilogram
 - Biblical: talent, menah, shekel, dram
- Time:
 - Second, minute, hour, day, week, month, year, leap year, decade, century, millennium
 - Time zones
- Money:
 - Biblical: talent of pure gold, talent, menah, shekel, pence, farthing, mite
- Square measures:
 - English: square inches, square feet, square yards, square miles, acres
 - Metric: square centimeters, square meters, hectares, square kilometers
- Temperature:
 - Degree
 - Fahrenheit and Celsius: freezing and boiling points of water and normal body temperature
 - Converting Celsius to Fahrenheit and Fahrenheit to Celsius
 - Temperature zones
- Compound measures: adding, subtraction, multiplying, dividing
- Converting measures within the same system and from metric to English and English to metric
- Metric-English approximate equivalents

Algebra

- Terms:

- Variables
- Terms, polynomial, monomial, binomial, trinomial, base, exponent
 - Like and unlike terms
- Reading and writing algebraic expressions
- Adding and subtracting like terms
- Order of operations
- Evaluating algebraic expressions
- Equations:
 - Addition, subtraction, multiplication, division axioms
 - Eliminating fractions
- Formulas expressed by tables and graphs
- Signed numbers:
 - Zero used as reference point
 - Signs of operation and direction
 - Absolute value
 - Comparing, adding and subtracting with and without the number line, multiplying, and dividing
 - Evaluating algebraic expressions with signed numbers
 - Combining like terms with signed numbers
- Square root:
 - Terms: radical sign, radicand, index, principal square root, perfect square
 - Extracting the square root
- Word problems

Graphing, Statistics, Probability

- Terms: data, statistics, rank, range, graph
- Graphs:
 - Pictograph, bar, line, circle, rectangle, histogram
 - Scale drawing and finding distance on maps
- Statistics: mean, median, mode
- Probability:

Business Mathematics

- Terms: employers, employees
- Income: salary, hourly, piecework wages, commission, tips, gross pay, net pay
- Taxes:
 - Income
 - Sales
- Budget
- Banking:
 - Check, deposit slip, balancing checkbook
- Borrowing money:
 - Simple interest, installment buying
- Insurance: life, health, fire, automobile

Geometry

- Models and symbols:
 - Point, line, line segment, ray, angle, parallel lines, perpendicular, right angle
 - Triangle
- Plane geometric figures:
 - Curve, closed curve, simple closed curve, polygon, triangle
 - Quadrilateral, parallelogram, rectangle, rhombus, square, trapezoid

Pre-Algebra cont.

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- Pentagon, hexagon, heptagon, octagon, circle
- Lines:
 - Line, line segment, ray, intersecting, perpendicular
- Angles:
 - Terms: sides, vertex, degree
 - Types:
 - Right, acute, obtuse, straight
 - Congruent
 - In a circle
 - Measuring, constructing
- Using a compass and protractor
- Circle:
 - Terms:
 - Center, radius, diameter, arc, semicircle
- Triangles:
 - Types:
 - Right, equiangular, equilateral, isosceles
 - Similar, congruent
- Constructions:
 - Angles, bisecting angles
- Perimeter: polygon, rectangle, square, triangle
- Circumference: formulas when given diameter or radius
- Area: rectangle, square, parallelogram, triangle, trapezoid, circle
- Geometric solid shapes:
 - Prism, rectangular prism, cube, triangular prism, pyramid, square pyramid, cylinder, cone, sphere
 - Surface area: rectangular prism, cube, square pyramid, cylinder
 - Volume: rectangular prism, cube, square pyramid, cylinder, cone

Trigonometry

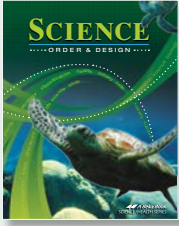
- Terms: hypotenuse, legs, sine, cosine, tangent
- Pythagorean formula: to find length of hypotenuse and legs
- Finding sine, cosine, tangent using formulas and trigonometric table

Problem Solving & Applications

- Word problems:
 - Addition, subtraction, multiplication, division, rounding, fractions
 - Decimals, ratios, proportions, measures, percent, time, graphs
 - Statistics, probability, maps, commission, gross pay
 - Net pay, taxes, budget, interest
 - Insurance, geometry, trigonometry
 - One-, two-, and three-step problems
- Applications:
 - Making change, unit pricing, percent of discount, commission
 - Measures, time zones
 - Banking:

- Writing checks, filling out deposit slips, balancing a checkbook
- Insurance, taxes
- Mental arithmetic: problems combining addition, subtraction, multiplication, and division with up to 18 numbers
- 13 Multi-step Problem Solving Strategies

Science: Order & Design Grade 7



Many life science textbooks study the “simple” cell as the origin of life and discuss the “evolution” of life through the plant and animal worlds. *Science: Order and Design* uses a different approach.

This life science text begins with the more complex plant world and human anatomy and physiology. Evolutionary hypotheses are discussed and discarded as unscientific. Similarities between man and animals are explored and proved to be the result of a common Designer, laying a biblical foundation of origins.

A look at the complexity of the “simple” cell, the basis of all life, emphasizes the hand of the Creator in its design. A study of ecology shows God’s providential design in the relationships between living things and their environments.

Added Enrichment

- Feature boxes with activities, puzzles, extra information, hands-on investigations for the classroom and at home
- Short articles highlighting God’s design in Creation (93)
- Challenging homework questions to provoke thinking more deeply about concepts taught (69)
- Thought-provoking review exercises (7)
- Highlighted fun facts (127)
- Review activities to prepare for tests (38)

Evaluation

- Reading quizzes (18)
- Review quizzes (40)
- Insect collection (counts as 3 quiz grades)
- Science project background paper and investigation plan (counts as test grade)
- Tests (8), 9-weeks exam (2)
- Semester exam, final exam

➤ **RED** indicates first introduction of content.

Introduction to Life Science

- Introduction of basic terms: biology, organism, divisions of biology, respiration, excretion
- Symmetry in living things
- Observing nature: how to set up an observation notebook and observation kit
- Overview of environments: meadow, woodlands, freshwater, and marine
- Scientific method:
 - Six-step process
 - Explains process of the experimental method
 - Differentiate hypotheses, theories, and scientific laws
 - Differentiate experimental and control groups, constants and variables

Plants

- Purpose and design of flowers:
 - Functions and structures of flowers:
 - Style, anther, filament, receptacle
- Pollination and fertilization:
 - Process, provisions for fertilization, results, development:
 - Sperm cell, egg cell, embryo, endosperm, plumule, radicle
- Seed dispersal:
 - Fruit
 - Mechanical and agent dispersal
- Germination:
 - Requirements
 - Process
- Plant life expectancies:
 - Angiosperms vs. gymnosperms
- Familiar flower families:
 - Buttercup, mint, honeysuckle, parsley, milkweed, and amaryllis families
- Flower arrangements: spikes, umbels, racemes
- Monocots vs. dicots
- Leaf structure and arrangement:
 - Margins
 - Leaf arrangement, simple or compound leaves, venation

- Photosynthesis and respiration:
 - Structures, process, chemicals
 - Producers vs. consumers; uses of glucose
- Vascular system:
 - Roots
 - Vegetative reproduction
 - Xylem, phloem
 - Primary vs. secondary growth
 - Osmosis in plants
 - Capillarity
 - Transpiration

Human Anatomy & Physiology

- Outward divisions: head, trunk, appendages
- Cardiovascular system:
 - Arterioles, venules
 - Blood flow through veins
 - Pericardium
 - Pulmonary, coronary, and systemic circulation
- Respiratory system:
 - Nasal cavity, pleura
- Digestive system:
 - Enzymes, peristalsis, duodenum, rectum, feces
- Excretory system:
 - Urinary system, ureters, urethra
- Lymphatic system:
 - Neutrophils, macrophages, phagocytes
 - Main types of lymphocytes
- Integumentary system:
 - Adipose
- Skeletal system:
 - Axial and appendicular skeleton
 - Maxillary bones, mandible
 - Pelvis
 - Hinge joint, pivot joint, ball-and-socket joint
 - Fracture repair

Science: Order & Design cont.

➤ **RED** indicates first introduction of content.

Human Anatomy & Physiology cont.

- Muscular system:
 - Largest body system by weight
- Nervous system:
 - Impulses
- Endocrine system:
 - *Gland* defined, parathyroid glands, epinephrine
 - Types of diabetes mellitus
- Reproductive system: eggs, sperm
- Tissue types
- Prenatal growth and development:
 - Pictures and detailed descriptions of development at weekly intervals:
 - Conception, fertilization, uterus

A Healthy Life

- Proper nutrition:
 - Carbohydrates, fiber, protein, fats, vitamins, minerals, and water:
 - Amino acids, lipids
- Exercise:
 - Anaerobic
 - Aerobic, training heart rate, benefits
- Rest
- Outward appearance: cleanliness, grooming, sun exposure, acne, dental care
- Introduction to disease:
 - Bacteria, viruses
 - Infectious
 - Noninfectious, congenital
 - Spread of pathogens
 - Common diseases:
 - Common cold, allergies
 - Cardiovascular disease, cancer
- Substance abuse:
 - Medications, abuse
 - Dependence, withdrawal
 - Narcotics, hallucinogens, stimulants, depressants
- Emotions: adolescence
- Spiritual health: Bible study and prayer

Creation & Science

- Design in nature: introduction, history, and evidence of design
- Homology: similar structures
- Information in living things: complexity, DNA, mutations
- Natural selection: kind, speciation vs. macroevolution, specific examples
- Three views of life: “tree of life”—evolution, “lawn view,” “orchard view”—Creation science
- A Christian’s faith: what I believe and why
- History of science:
 - Materialism, Aristotle, Middle Ages
 - General and special revelation
 - Protestant Reformation
- The Bible and science: advances in modern life science
- Law of biogenesis: experiments by Redi and Pasteur
- World views and science: ordered or accidental, who determines truth, faith

- Development of modern evolutionary thought: Darwin, Lyell, uniformitarianism, missing links
- Evolution as a retreat from true science:
 - Chemical evolution, evolutionary relationships
 - Recapitulation, vestigial organs, mutations
 - Evolution of horses, whales, humans
- Mutations: most are harmful or deadly, gradualism, punctuated equilibrium

Biological Classification

- Pioneers in classification: John Ray and Carolus Linnaeus
- Classification system:
 - Kingdom, phylum, class, order, family, genus, species, scientific name
 - Six-kingdom system
- Classifying the plant kingdom—with and without vascular systems (tracheophytes and bryophytes)
- Classifying the animal kingdom—with and without backbones (vertebrates and invertebrates)

Mammals

- Characteristics of mammals:
 - Four-chambered heart
 - Hair, mammary glands, endoskeleton, warm-blooded
- Orders of placental mammals: 16 orders taught with more than 90 specific example animals
- Marsupials: mammals with pouches
- Egg-laying mammals—monotremes
- Endangered animals

Birds

- Internal anatomy:
 - Skeletal and muscular systems
 - Respiratory, cardiovascular, and digestive systems
- Senses:
 - Sight, hearing
 - Smell
- Feathers:
 - Flight and down feathers, structure, preening
 - Contour feathers, growth, molting
- Flight: motions, types of flight
- Behavior:
 - Audible communication
 - Visual communication
 - Baths
 - Dusting, anting, mobbing, running, migration
 - Courtship, egg laying, nesting, incubation
- Identifying features: wings, tails, bills, feet, field marks
- Groups: perching, birds of prey, water, game, tropical, flightless

Fish, Reptiles, & Amphibians (Cold-Blooded)

- Fish anatomy and groups:
 - External and internal structures of bony and cartilaginous fish:
 - Types of fins, types of scales, myomeres
 - Circulatory, digestive, excretory, nervous, and reproductive systems
- Reptile anatomy and groups:
 - External and internal structures, and characteristics:
 - Lizard and snake groups, snake movement, snake venom, tuataras

Science: Order & Design cont.

► **RED** indicates first introduction of content.

Fish, Reptiles, & Amphibians (Cold-Blooded) cont.

- Dinosaurs and similar creatures: descriptions of various types
- Amphibians:
 - Anatomy
 - Metamorphosis
 - Salamanders, frogs, and toads:
 - Salamander life cycles, estivation
 - Caecilians (limbless amphibians)

Insects & Other Arthropods

- Common characteristics of arthropods:
 - Basic common traits:
 - Open system of circulation
- Jean-Henri Fabre—entomologist
- Insect anatomy and life cycles:
 - Complete and incomplete metamorphosis
 - Structure of compound eyes
- Insect orders:
 - Detailed description and examples for each order
 - Coleoptera (sheathed wings), Hemiptera (half-wing)
 - Homoptera (same wings), Diptera (two wings)
 - Orthoptera (straight wings), Odonata (toothed)
 - Neuroptera (nerve wings)
 - Hymenoptera (membrane wings), Lepidoptera (scale-wing)
- Insects and man: helpful and harmful characteristics of insects
- Crustacean anatomy and orders (aquatic arthropods):
 - Common anatomy
 - Orders:
 - Decapoda (ten feet)
 - Amphipoda (both legs), Copepoda (one eye), Branchiopoda (gill feet)
 - Cirripedia
 - Euphausiacea (shining bright)
 - Isopoda (equal feet), includes wood lice
- Arachnid anatomy and groups:
 - Details of common anatomy
 - Spiders, harvestmen (daddy longlegs), scorpions
 - Pseudoscorpions
 - Mites, ticks
- Centipedes and millipedes: comparison and contrast of traits

Microbiology

- Cell theory: introduction to the cell, Robert Hooke
- Cell structure:
 - Basic structures and functions:
 - Plant cell structure and differences from human and animal cells
- Algae:
 - Characteristics and types:
 - Classification; volvox, spirogyra
- Fungi:
 - Characteristics and types:
 - Classification
 - Rusts, smuts
 - Yeast reproduction

- Protozoa:
 - Leeuwenhoek, sarcodines, ciliates
 - Flagellates, sporozoa, vorticella, stentor
- Bacteria: eukaryotes and prokaryotes, examples of helpful and harmful bacteria

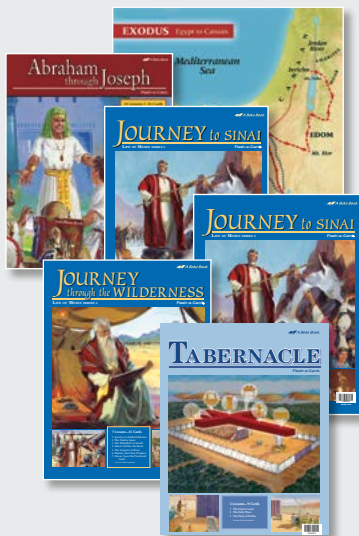
Forestry

- Tree groups:
 - Basic traits of angiosperm and gymnosperm trees:
 - Cycads, ginkgoes
- Tree structure:
 - Details of roots, stems, branches, and leaves:
 - Bark and wood as vascular tissue
 - Pith
 - Bud structure and types
 - Nodes and lenticels
 - Sun and shade leaves, leaf pigments
- Locations of American forests: introduction and geographical description of North American forests
- Branches of forestry: introductory concepts regarding forestry
- Functions and resources of forests
- Using forests: harvesting methods and renewing the resources
- Notable tree species: details and characteristics of 24 types of North American trees
- Forest conservation: Theodore Roosevelt, sustainability, reforestation, forest fires, disease, insects

Ecology

- Factors in an ecosystem:
 - Overview of factors affecting an ecosystem
 - Tolerance vs. optimum range
 - Limiting factor
 - Carrying capacity
 - Biodiversity
 - Biogeochemical cycles
- Levels of ecology: biosphere, atmosphere, lithosphere, hydrosphere, community, population
- Types of biomes:
 - Overview of traits and communities of:
 - Tundra, boreal forest, temperate deciduous forest
 - Grassland, tropical rainforest
 - Aquatic biomes
- Nutrition types: traits and types of producers and consumers:
 - Food chains
 - Trophic levels
 - Food webs
 - Special nutritional relationships: predation, symbiosis, competition, and neutralism
- Dominion and stewardship: role of man in the environment, biblical stewardship
- Dangers of modern environmentalism: bias, pantheism
- Biblical conservation:
 - Bible examples

Exodus—First Semester Grade 7



Bible 7 consists of two semester courses: *Exodus* and the *Life of Christ*.

Exodus is designed to give students a basic overview of the way God miraculously delivered His people out of captivity and led them into the Promised Land.

When we understand many of the Israelites' struggles and how God's people often turned away from His leading, it shows us how God will deal with us if we stray from trusting in His perfect plan. By studying *Exodus*, students will clearly see God's patience and mercy as He deals with His people.

Evaluation

- Verses:
 - Verse quizzes (11)
 - 9-weeks verses exam (1)
 - Final verses exam (1)
- Content:
 - Quiz on the books of the Bible (1)
 - 9-weeks content exam (1)
 - Final content exam (1)

Lessons 142 A Beka Flash-a-Cards

- Abraham through Joseph (14 lessons)
- Moses in Egypt (17)
- Journey to Sinai (15)
- Journey through the Wilderness (18)
- Tabernacle (6)

Music 37 songs

- Hymns of the faith, choruses, holiday songs

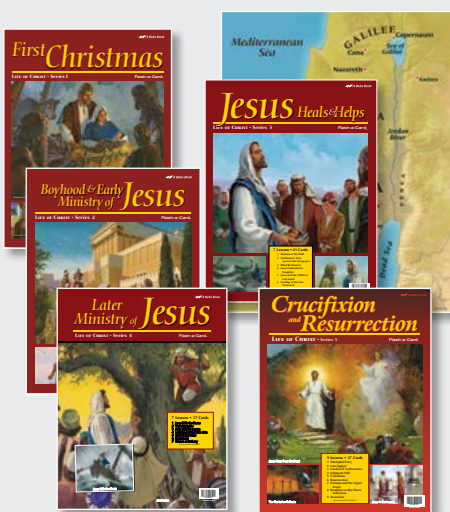
Memory Work

- Passages (11 containing 34 verses) and the books of the Bible

Prayer Time

- Learn to pray for each other, our nation, those in authority over us

Life of Christ—Second Semester Grade 7



This second-semester course focuses on the many narratives in the Gospels and covers Christ's life from His birth through His ascension. The example that Christ set for believers, both then and now, helps us pattern our lives after our Savior. Christ's teaching and miracles show us what He valued and help us understand His earthly ministry in a more complete way.

Evaluation

- Verses:
 - Verse quizzes (13)
 - 9-weeks verses exam (1)
 - Final verses exam (1)
- Content:
 - 9-weeks content exam (1)
 - Tests (4)
 - Final content exam (1)

Lessons 178 A Beka Flash-a-Cards

- First Christmas (8 lessons)
- Boyhood & Early Ministry of Jesus (17)
- Jesus Heals & Helps (13)
- Later Ministry of Jesus (12)
- Crucifixion and Resurrection (17)

Music 40 songs

- Hymns of the faith, holiday songs, choruses

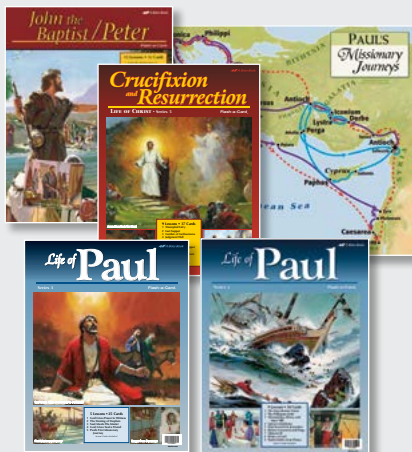
Memory Work

- Passages (13 containing 35 verses)

Prayer Time

- Learn to pray for each other, our nation, those in authority over us

Book of Acts — First Semester Grade 8



Bible 8 consists of two parts: *Book of Acts* and *Joshua and Judges*.

This first-semester course is designed to give students a basic overview of the life of Peter and Paul, the beginning of the church, and the spread of the gospel to the Gentiles and eventually to the world through Paul's missionary travels.

Through the *Book of Acts*, students may see the power of God at work in His willing servants. His servant Paul is a real person—a person with feelings just like anyone else. Yet Paul's reactions to the trials of life and his indomitable faith in the power of Christ separated him from the nominal Christian life. His life serves as an example for all believers to follow.

Evaluation

- Verses:
 - Verse quizzes (14)
 - 9-weeks verses exam (1)
 - Final verses exam (1)
- Content:
 - 9-weeks content exam (1)
 - Final content exam (1)

Lessons 129 A Beka Flash-a-Cards

- John the Baptist/Peter (19 lessons)
- Crucifixion and Resurrection (16)
- Life of Paul Series 1 (14)
- Life of Paul Series 2 (21)

Music 44 songs

- Hymns of the faith, choruses, holiday songs

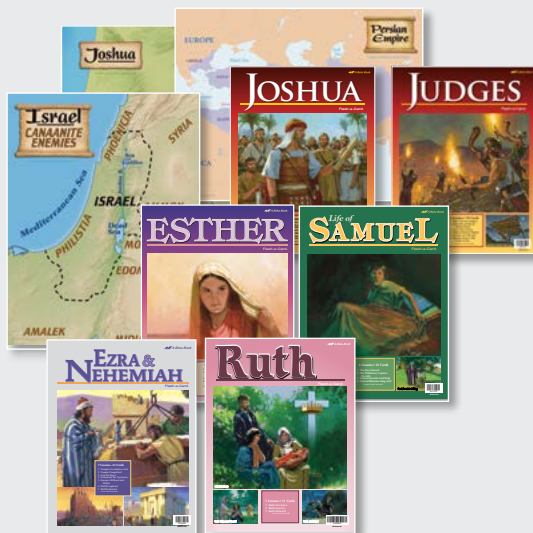
Memory Work

- Passages (14 containing 48 verses)

Prayer Time

- Learn to pray for each other, our nation, those in authority over us

Joshua & Judges — Second Semester Grade 8



The second-semester course, *Joshua and Judges*, focuses on the nation of Israel after their triumphant exodus from Egypt. The exciting, dramatic account of the conquering of the Promised Land will remind the student of the power of God and the provision for His people. This course begins with the anointing of Joshua and ends with the rule of Israel's judges.

Evaluation

- Verses:
 - Verse quizzes (14)
 - 9-weeks verses exam (1)
 - Final verses exam (1)
- Content:
 - 9-weeks content exam (1)
 - Final content exam (1)

Lessons 154 A Beka Flash-a-Cards

- Joshua (16 lessons)
- Judges (19)
- Ruth (5)
- Life of Samuel (9)
- Esther (8)
- Ezra and Nehemiah (15)

Music 40 songs

- Hymns of the faith, holiday, choruses

Memory Work

- Passages (14 containing 44 total verses)

Sword Drill 85 verses

- Old and New Testament

Prayer Time

- Learn to pray for each other, our nation, those in authority over us