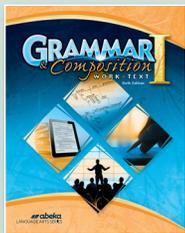


## ENGLISH: *Grammar & Composition*



*Grammar and Composition I's* purpose is to emphasize the orderly structure of our language and to 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 DTAs
- Review games
- Grammar Court procedures explained

### Evaluation

- Grammar quizzes (21)
- Tests (8), quarter exams (2)
- Semester exam, final exam
- Compositions

### Compositions

- Essays (Answer, Informative, Narrative, Process)
- Letters
- Summaries
- Character sketch
- Book reports
- Research paper

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

### 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
    - Period or exclamation point for an imperative sentence
    - 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
      - If 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
    - 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:
    - Recognizing eight parts of speech
    - 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
    - Diagramming subjects and verbs
    - Recognizing and diagramming compound subjects and verbs
    - Locating complements

## ENGLISH: Grammar &amp; Composition cont.

## Grammar cont.

- The sentence cont.:
  - Correcting fragments and run-on sentences
- Parts of speech:
  - Verbs:
    - Recognizing action, linking, and helping verbs
    - Distinguishing verbs from verbals
    - 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
  - 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
    - Diagramming nouns as predicate nominatives, direct objects, indirect objects, objects of prepositions
    - Recognizing and diagramming nouns as appositives
  - 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 diagramming:
      - Adjectives and proper adjectives
      - Participles
    - Distinguishing adjectives from nouns and pronouns
    - Recognizing and diagramming predicate adjectives
    - Using and diagramming:
      - 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
  - Adverbs:
    - Recognizing and diagramming adverbs
    - Distinguishing adverbs from adjectives
    - Using and diagramming:
      - Prepositional phrases as adverbs

- Adverb clauses
  - Correct placement of adverb modifiers
  - Using adverbs in comparison
- 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
- Sentence structure:
  - Defining dependent and independent clauses
  - Recognizing and diagramming:
    - Simple and compound sentences
    - Complex and compound-complex sentences

## Composition

- Manuscript form: abbreviations, numbers
- Essay Answer
- Writing Letters:
  - Friendly: letter parts, thank-you note
  - Business: letter parts, appropriateness
- Summaries
- The Writing Process: plan, write, rewrite, edit
- Outline:
  - 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
- Informative Essay
- Writing descriptions: character sketch
- Steps: point of view, careful selection of details, arrangement of details, use of exact nouns and verbs
- The library: Dewey Decimal System, Library of Congress Classification System, using the catalog and reference section
- Research paper:
  - Planning the paper: selecting subject, finding sources, noting bibliography information, making a preliminary outline, taking notes, avoiding plagiarism
  - Writing the paper: introduction, body, conclusion
  - Using parenthetical citations

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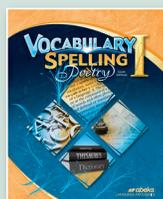
## ENGLISH: Grammar & Composition *cont.*

### Composition *cont.*

- 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**

- **Finalizing the paper**
- **Documenting the research paper**
- **Narrative Essay**
- **Process Essay**

## ENGLISH: Vocabulary, Spelling, Poetry



*Vocabulary, Spelling, Poetry I* 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

- English DTAs
- Spelling and vocabulary lists (28) including review list at end of each quarter:
  - Spelling words (560)
  - Vocabulary words (280)
- Organized by spelling rules, suffixes, homonyms, compound words, and commonly misspelled words
- Application exercises (56)
- Review exercises (17)
- Each vocabulary word includes:
  - Pronunciation, part of speech
  - Synonyms, antonyms, related forms
  - Definition, sample sentence
- Pronunciation key
- Teacher resource: spelling and vocabulary mastery sentences
- Poetry teacher resource: introductions for each poem

### Evaluation

- Spelling and vocabulary quizzes:
  - Weekly (28)
  - Quarterly review (1 each quarter; each counts as 2 quiz grades)
- Poetry quizzes:
  - Written (7)
  - Oral (2)

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### Spelling & Vocabulary Skills Development

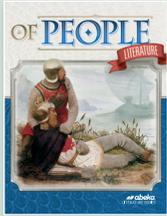
- **Master spelling and vocabulary lists that include:**
  - **Vocabulary words and definitions**
  - **Words that follow the spelling rules**
  - **Sound-alike suffixes**
  - **Commonly misspelled words**
  - **Homonyms**
- Use vocabulary words in sentences and in proper context
- Memorize vocabulary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

- 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

## ENGLISH: *Literature*



*Of People* features stories and poems that can help students increase their understanding of the world, man, and God from a Christian perspective. 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 Henry Wadsworth 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
- Literary terms such as alliteration, conflict, personification, simile, setting, and protagonist and antagonist

### 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
- Author biographies and photos for important authors to know
- Suggested compositions (descriptions, summaries, poems, narratives, and imaginative stories)

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

### Evaluation

- Speed and comprehension quizzes (14) with English DTA words-per-minute timer
- Homework reading quizzes (20)
- Tests (12), quarter exams (2)
- Semester exam, final exam

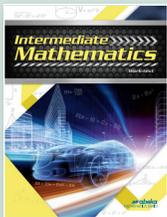
### Reading Skills Development

- 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
- Recognize basic literary devices in the selection

### 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
- Apply literary devices throughout the text
- Build appreciation for good literature and a love of reading

## MATHEMATICS: *Intermediate Mathematics*



*Intermediate Mathematics* gives a strong review of all arithmetic concepts with practical application to daily life. With solid skills in arithmetic, students have the confidence to advance to other branches of mathematics. Instruction in plane and solid geometry, probability and statistics, and algebra (four units) provides the foundation students need to enjoy success in future mathematics courses.

Practice and review problems in each lesson give sufficient opportunity for students to develop and maintain their skills while learning to work quickly and accurately. Word problems and problem-solving strategies throughout the text ensure that students can apply their mathematical skills to everyday situations and encourage students to connect varying types of mathematical knowledge. Fast Fact opportunities allow for further expansion of the concepts covered.

### Features

- Flexible pacing options in curriculum: Fast Facts (35)
- Review exercises in every section (81)
- Mid-chapter reviews (14)
- Chapter reviews (12)
- Nine-weeks reviews (2)
- Semester review
- Final review

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### Evaluation

- Quizzes (47)
- Tests (8)
- 9-weeks exam (2)
- Semester exam
- Final exam

### Numbers

- Arabic system
- Place value
  - Decimal system/powers of ten
  - Whole numbers up to 100 millions place
  - Decimals up to ten thousandths place

- Rounding: whole numbers, decimals, money
- Types of numbers
  - Counting (natural), whole, positive, negative, integer
  - Rational/irrational numbers
  - Absolute value
- Comparing numbers

## MATHEMATICS: *Intermediate Mathematics* cont.

### Numbers cont.

- Number line
- Scientific Notation
  - Standard form
- Sequences, numerical
  - Arithmetic, geometric
  - Common difference
  - Common ratio
  - Finding the next term
- Sequences, visual

### Factoring

- Rules of divisibility
- Prime Factoring
  - Prime/Composite numbers
  - Prime to each other
  - Fundamental theorem of arithmetic
  - Division by primes/Factor Tree
- Greatest common factor
- Least common multiple
- Exponent/base
- Factorial

### Arithmetic

- Estimation
- Order of operation
  - Parentheses
  - Brackets, braces, fraction bar
- Addition
  - Addend, sum, annex
  - Whole numbers, fractions, decimals
  - Signed numbers
  - Additive inverse
- Subtraction
  - Minuend, subtrahend, difference
  - Whole numbers, fractions, decimals
  - Signed numbers
- Multiplication
  - Factor, partial product, product
  - Whole numbers, fractions, decimals
  - Powers of ten
  - Signed numbers
  - By zero
- Division
  - Dividend, divisor, quotient, remainder
  - Whole numbers, fractions, decimals
  - Signed numbers
  - Powers of ten
- Word problems
  - Problem Solving Strategies
- Properties of arithmetic
  - Commutative
  - Associative
  - Distributive
  - Applying properties

### Fractions

- Numerator, denominator
- Types:
  - Proper, improper, mixed number
  - Complex, reciprocal
- Addition, subtraction, multiplication, division
  - Least common denominator
- Simplifying complex fractions
- Changing a fraction to a decimal

- Unit price
- Word problems
- Ratios
  - Antecedent, consequent
  - Expressing/reading
  - Word problems

### Decimals

- Types:
  - Terminating, repeating
  - Rational, irrational
- Changing a decimal to a fraction

### Percent, percentage, base

- Expressing:
  - Percent as a decimal
  - Decimal as a percent
  - Fraction as a percent
  - Percent as a fraction
  - Fractional percent as a decimal
- Percentage
  - Simple interest
  - Discount and sale price
  - More or less in percent
- Percent
  - Rate of discount
  - Percent of change
- Base

### Geometry

- Plane figure notation
- Plane figures
  - Plane, point, line, line segment, ray, angle
  - Intersecting, parallel, or perpendicular lines
- Polygon, closed figures
  - Side, vertex
  - Triangle, pentagon, hexagon, octagon
  - Quadrilateral, rectangle, square, rhombus, trapezoid
  - Similar polygons
- Congruent polygons
- Line symmetry
- Perimeter: polygon, rectangle, square, any polygon with equal sides
- Angles: acute, obtuse, right, straight, reflex
- Pairs of angles: vertical, adjacent, complementary, supplementary
- Measuring and drawing angles
- Using a protractor and compass
- Constructing angles
  - Triangles: acute, obtuse, right, equiangular, equilateral, isosceles, scalene
- Drawing triangles
  - Included side or angle
- Triangles formed: 0, 1, 2, or infinitely many
  - Ambiguous case
- Circles
  - Center, radius, diameter, arc, semicircle, chord, central angle, subtended
  - Sum of central angles:  $360^\circ$
- Circumference with radius or diameter
- Area
  - rectangle, square, parallelogram, triangle, circle, trapezoid
  - using a grid and scale
  - Complex figures using addition or subtraction
  - Fundamental theorem of counting

# MATHEMATICS: *Intermediate Mathematics* cont.

## Geometry cont.

- Three-dimensional figures
  - Face, edge, base
  - Rectangular prism, cube, triangular prism, square pyramid, cylinder, cone, sphere
- Surface area
  - Rectangular prism, cube, square pyramid, cylinder
- Lateral surface area
  - Rectangular prism, cube, cylinder
- Volume
  - Rectangular prism, cube, cylinder, cone
- Cross Sections

## Measurement

- Linear
  - U.S. Customary: inch, foot, yard, mile
  - Metric: millimeter, centimeter, decimeter, meter, decameter, hectometer, kilometer
- Capacity
  - U.S. Customary: fluid ounce, cup, pint, quart, gallon, peck, bushel, teaspoon, tablespoon
  - Metric: milliliter, centiliter, deciliter, liter, decaliter, hectoliter, kiloliter
- Weight
  - U.S. Customary: ounce, pound, ton
- Mass:
  - Metric: milligram, centigram, decigram, gram, decagram, hectogram, kilogram
- Biblical Measures
  - Weight: Shekel
  - Money: talent, mite
  - Length: cubit
- Converting between U.S. Customary measures
  - Single conversion factor
  - Multiple conversion factors
- Converting between metric measures
- Converting between square measures
- Time
  - Second, minute, hour, day, week, month, year, decade, score of years, century, millennium
  - solar year, calendar year, leap year
  - 24-hour time
  - Elapsed time
- Mixed measures
  - Express a mixed measure as a single measure
  - Add, subtract, multiply, divide
- Dimensional analysis
  - Express conversion factor as a ratio
  - Convert between U.S. Customary or time measures

## Probability

- Counting
  - Outcome
  - Exhaustive list, tree diagram
  - Fundamental theorem of counting
- Basic probability
  - Outcome, event,
- Properties of probability
  - Each probability  $0 \leq x \leq 1$ ,
  - Sum = 1
  - Complement
- Compound probability
  - Compound events
  - Mutually exclusive
  - Independent
  - Dependent
- Theoretical probability

- Experimental probability
- Relative frequency table (one way)

## Statistics

- Data, statistic, statistics
- Frequency table
- Population, sample, random sample
- Biased questions
  - Measures of center: Mean, median, mode
  - Range
  - Outliers, sensitive
  - Ranked data
- Dot plot

## Statistical Representation

- Chart title, scale, category label, axis title, major/minor gridlines, legend
- Bar graph, stacked bar graph
  - Interpreting/constructing
- Circle graph
  - Interpreting/constructing
- Box-and-whisker plot
  - Dispersion, range
  - Five-number summary
  - Minimum, first quartile, median, third quartile, maximum
  - Interpreting/constructing
  - Comparing two plots
- Stem-and-leaf plot
  - Stem, leaf, class
  - Interpreting/constructing
- Histogram
  - Class, frequency
  - Interpreting/constructing
- Line graph
  - Comparing two lines on the same graph
  - Interpreting/constructing
  - Straight, curved, or broken

## Graphing on the Cartesian Plane

- Cartesian plane, origin, x-axis, y-axis, quadrants, point, ordered pair
- x-intercept, y-intercept
- Plotting points
- Coordinate geometry, transformations
  - Translation
  - Preimage, image,
  - Rigid transformation
  - Reflection
- Slope
  - Rise, run,
  - Positive, negative, zero
  - Parallel and perpendicular slopes
- Graphing a line
  - Using two points
  - Using a point and a slope
  - Using a table of values
  - Using slope-intercept form
- Linear equations
  - Input, output, independent variable, dependent variable, equation
  - Slope-intercept form
- Direct Variation
  - Constant of variation
  - Proportional/nonproportional
  - Word problems

## Algebra

- Variable, constant
- Notation

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

## MATHEMATICS: *Intermediate Mathematics* cont.

### Algebra cont.

- Raised dot, side-by-side, parentheses
  - Fraction bar
- Factors
  - Numerical coefficient
- Term
  - Constant term
  - Variable term
- Polynomial
  - Monomial, binomial, trinomial
- Evaluation
- Algebraic translation
- Polynomial arithmetic
  - Adding like terms
  - Multiplying/dividing like bases
  - Negative exponents
  - Raising a power to a power
  - Multiplying/dividing monomials
  - Multiplying a polynomial by a monomial
  - Dividing a polynomial by a monomial
  - Factoring out a monomial

### Radicals

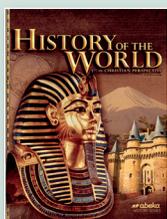
- Perfect square, perfect cube
- Radical symbol, index (indices), radicand
- Square root, cube root
- Expressing a radical as a fractional exponent
- Finding rational roots using fractional exponents
- Estimating irrational roots

### Equations/Inequalities

- Solving, isolating

- Inverse operation
- Solving equations
  - Addition property of equality
  - Multiplication property of equality
  - Both properties
- Word problems
  - Addition property of equality
  - Multiplication property of equality
  - Both properties
  - With multiple unknowns
- Proportions
  - Means, extremes
  - Cross multiplication
  - Scale drawings, maps
  - Word problems
- Similarity
  - Similar polygons
  - Word problems
- Pure quadratic equation
  - Pythagorean theorem
- Inequality graphing
  - $<$ ,  $>$ ,  $\leq$ ,  $\geq$ ,  $\neq$
  - Open dot, closed dot
  - Solution
  - Compound inequality
- Solving inequalities
  - Addition property of inequality
  - Multiplication property of inequality
  - Both properties
    - Compound
      - Addition property of inequality
      - Multiplication property of inequality

## HISTORY & GEOGRAPHY: *World History*



*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

**HISTORY & GEOGRAPHY: World History** *cont.*

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

**Beginning of World History** *cont.*

- 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**

**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**

## HISTORY & GEOGRAPHY: World History cont.

### Rise of Modern Europe cont.

- 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

### 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

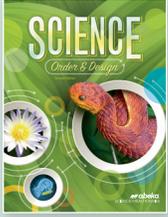
### Geography

- 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

# SCIENCE: Science: Order & Design



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 (16)
- Science Investigations (28)
- Challenging homework questions to provoke thinking more deeply about concepts taught (88)
- Thought-provoking review exercises (7)
- Highlighted fun facts (131)
- Review activities to prepare for tests (33)

## Evaluation

- Reading quizzes (27)
- Review quizzes (40)
- Insect collection (counts as 3 quiz grades)
- In-class STEM project (counts as one quiz grade and one test grade)
- Tests (8), quarter exams (2)
- Semester exam, final exam

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

## Introduction to Life Science

- Introduction of basic terms: biology, organism, divisions of biology, characteristics of living things
- Symmetry in living things
- Observing nature: how to set up an observation notebook and observation kit
- Overview of environments: meadow, woodlands, freshwater, and marine
- Biological classification:
  - Pioneers in classification: John Ray and Carolus Linnaeus
  - Classification system:
    - Kingdom, phylum, class, order, family, genus, species, scientific name
    - Six-kingdom system
- Scientific method:
  - Six-step process
  - Explains process of the experimental method
  - Differentiate hypotheses, theories, and scientific laws
  - Differentiate experimental and control groups, types of variables
- Scientific reasoning, scientific models

## 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
- Classifying the plant kingdom—with and without vascular systems (tracheophytes and bryophytes)

## 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, sections of small intestine, rectum, feces
- Excretory system:
  - Urinary system, ureters, urethra
- Lymphatic system:
  - Neutrophils, macrophages, phagocytes
  - Main types of lymphocytes; types of immunity
- Integumentary system:
  - Adipose tissue

## SCIENCE: Science: Order & Design *cont.*

### Human Anatomy & Physiology *cont.*

- Skeletal system:
  - Axial and appendicular skeleton
  - Maxilla, mandible
  - Pelvis
  - Hinge joint, pivot joint, ball-and-socket joint
  - Fracture repair
- 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
  - Calories, metabolism, healthy diet:
    - Basal metabolic rate
- Exercise:
  - Anaerobic
    - Aerobic, training heart rate, benefits
- Rest
- Outward appearance: cleanliness, grooming, sun exposure, acne, dental care
- Introduction to disease:
  - Bacteria, viruses
  - Infectious
    - Noninfectious
    - Spread of pathogens
  - Common diseases:
    - Common cold, AIDS, allergies
    - Cardiovascular disease, cancer
- Substance abuse:
  - Medications, abuse
  - Dependence, withdrawal
  - Narcotics, hallucinogens, stimulants, depressants, inhalants
- Personal safety: falls, electrical safety, fire and burns, poisons, power tools
- First aid: basic principles, sprains, strains, fractures, dislocations, wounds, choking, poisoning, burns
- 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
- Worldviews 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:
  - Abiogenesis, evolutionary relationships, phylogenetic trees
  - Recapitulation, vestigial organs, mutations
  - Evolution of horses, whales, humans
- Mutations: most are harmful or deadly, gradualism, punctuated equilibrium

### Mammals

- Vertebrates and invertebrates
  - Characteristics of vertebrates
- 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; airfoil, lift, thrust, drag
- 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
- Dinosaurs and similar creatures: descriptions of various types

## SCIENCE: Science: Order & Design *cont.*

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

- Amphibians:
  - Anatomy
  - Metamorphosis
  - Salamanders, frogs, and toads:
    - Salamander life cycles, estivation
  - Caecilians (limbless amphibians)

### Insects

- 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
- Assorted Invertebrates
- Crustacean anatomy and orders (aquatic arthropods):
  - Common anatomy
  - Groups:
    - Decapods
    - Amphipods, copepods, branchiopods
    - Cirripedes
    - Krill
    - Isopods, includes woodlice
- Arachnid anatomy and groups:
  - Details of common anatomy
  - Spiders, daddy longlegs (harvestmen), scorpions
  - Pseudoscorpions
  - Mites, ticks
- Centipedes and millipedes: comparison and contrast of traits
- Non-arthropod invertebrates
  - Worms
    - Annelids, (segmented worm, platyhelminth (flatworm), nematode)
  - Mollusks: bivalve, gastropod, cephalopod
    - Echinoderm, coelenterate
  - Sponges

### 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
- Microscope parts and operation
- Genetics and heredity
  - Gene, allele, homozygous, heterozygous, genotype, phenotype
  - Asexual and sexual reproduction, mitosis, meiosis
  - Replication, transcription, translation
  - Laws of heredity, Punnett square, pedigree chart
  - Selective breeding, genetic engineering
- 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, characteristics, 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, overpopulation
  - Biodiversity
  - Biogeochemical cycles
  - Ecological succession
- 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
  - Energy pyramids
  - 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

## BIBLE: *Exodus* (one semester)



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.



### Lessons 142 Abeka 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

### 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)

## BIBLE: *Life of Christ* (one semester)



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.



### Lessons 178 Abeka 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

### 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)