

# Scope & Sequence

# 2015 Curriculum Overview by GRADE



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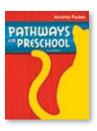
## 29 Secondary

- 29 Grade 7
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# Preschool

## Pathways for Preschool



## Circle Time: In the Big Red Barn

- · Large group activity
- · Language and vocabulary skills

#### Prereading: A-B-C Time

- Print awareness
- · Letter recognition
- Auditory discrimination

#### **Prereading: Colors Are Fun!**

Color recognition

#### Prereading: Rhyme Time

- · Language expression
- · Auditory discrimination
- Dramatizations

# Listening and Literature: Once Upon a Time

• Tales in the Barnyard stories

#### · Read-aloud suggestions

Listening skills and visual memory

#### Premath: 1, 2, 3, Go!

- Counting and number recognition
- Sorting and sequencing

#### Premath: Look Up, Look Down

Opposites and positional words

#### Premath: Show Me a Shape

- Shape recognition
- · Large motor-skill development
- · Following directions
- Creative movement

#### **Environment: Let's Discover!**

• Science and observation skills

#### • Hands-on learning

#### Arts: Let's Create!

- Creative expression
- Hand-eye coordination

#### Music: Sing with Me

- Singing and listening
- Moving and playing

#### Motor: A Hop, Skip, and a Jump

Social interaction

#### **Social: Happy Habits**

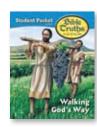
Manners, habits, and social training

#### Cooking: Yummy in My Tummy

- Cooking and following directions
- Sensory and language experiences

## **Bible Truths**

Walking God's Way 2nd Edition



#### **Bible Content**

- Topical Bible study in thirteen units
- Character traits based on Christ's perfect example
- Bible stories from Old and New Testaments illustrate character traits: obedience (David), courage (Esther), kindness (Elisha), responsibility (Joseph), thankfulness

(Timothy), contentment (Paul), generosity (the Wise Men), honesty (Paul's nephew), prayer (Elijah), forgiveness (Jesus), trust (Noah), respect (Josiah), and patience (Abraham).

#### **Character Emphasis**

 Character traits emphasized in application stories show children their need of Christ as Savior and demonstrate ways to apply biblical principles to personal life situations.

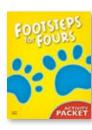
## Bible Truths for Christian Growth

• 13 questions and answers correlated with Bible content

#### **Memory Verses**

• 13 verses

## **Footsteps for Fours**



#### Prereading

- Language acquisition and development
- Recognition of alphabet letters
- Phonemic awareness of alphabet sounds /a/–/z/
- Letter-sound recognition of medial short vowel sounds; initial and final consonants
- Optional beginning reading strand for eager learners

#### **Listening and Literature**

- Traditional literature; realistic and fanciful prose and poetry; nursery rhymes
- Vocabulary development and enrichment
- Auditory memory; sound by direction, pitch, tempo, and volume; rhyming words
- Listening questions to develop comprehension
- Dictation of group writing experiences; sentence completions; sequencing of story

#### Handwriting

- Correct posture, pencil hold, and paper placement
- Prewriting skills; finger tracing and pencil tracking of left-toright, vertical, horizontal, diagonal, zig-zag, and curved line
- Uppercase and lowercase PreCursive alphabet; numbers 0–12

#### Mathematics

- Number recognition 0–20; counting to 100; shape recognition; pattern sequencing; color sequencing
- Calendar, clock, coins, measurement, dot patterns, number sets, number line, ordinals, fractions
- Position words

#### Social Studies

- Concepts of God's plan for the child and his family
- Patriotism, patriotic symbols, holidays

 Community helpers, transportation

#### Science

- Environment: seasonal changes of plants and animals; animal families and animal homes
- Hands-on: experiments, cooking, weather, space, and magnets

#### Art

• Art suggestions and craft activities correlated with unit themes

#### Motor

 Fine and gross motor development activities; games, action rhymes, and action songs

#### Music

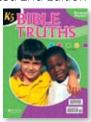
- Songs, rhymes, and musical games
- Additional music strand to complement lessons through movement, rhythm instruments, retelling of stories, games, and songs



# **K5**

#### **Bible Truths**

Updated 2nd Edition



#### **Bible Content**

- Chronological and topical study of the Old and New Testaments
- Bible characters include Noah, Abraham, Joseph, Moses, Joshua through Jonah, and Christ.
- Topics include Creation, learning about the Bible, the life of Christ, prayer, and missions.
- Lessons for Thanksgiving, Christmas, and Easter

#### **Character Emphasis**

 Character traits emphasized in application stories correlated with biblical content

#### Catechism

 50 questions correlated with biblical content

#### **Memory Verses**

25 verses or passages

## **Beginnings**

3rd Edition



# LANGUAGE ARTS Prereading

- Print awareness: left-to-right eye progression; visual discrimination; visual memory
- Reasoning; classifying; sequencing size and shape relationships
- Rhyming; awareness of author; picture reading
- · Listening comprehension
- Comparing
- Following directions; perceiving concepts, such as up/down, hard/ soft
- Alphabet recognition: phonemic awareness

#### **Phonics and Word Perception**

- Units 1–3: Letter-sound association—consonants and short vowels; words with closed syllable phonograms (examples: \_it, \_at); plural words with s; compound words
- Units 4–6: Letter-sound association—consonant blends and digraphs, long vowels; r-influenced vowels; special vowel combinations; vowel patterns for long vowels (examples: \_oke, \_o, \_oat)

#### **Early Reading Skills**

Comprehension

- Predicting outcomes; answering questions after silent reading; sequencing events; developing vocabulary
- Perceiving relationships; distinguishing reality from fantasy
- Matching words and pictures; matching sentences and pictures; reading short stories
- Oral communication and oral reading
- Discussion; action rhymes; pantomime; retelling stories; reading phonics stories orally

#### Composition

 Dictating composed sentences for experience stories; dictating sentence ideas for individual composition; completing sentence starters

#### **Handwriting**

 Letter formation; principles of slant; alignment; spacing

#### **RELATED ARTS**

#### Art

 Drawing; painting; making crafts to match the unit themes of the lessons (examples: puppets, papier-mâché pig)

#### Heritage Studies

• Geography: U.S. landmarks; history: Native Americans, colonial life; culture: families, community helpers, Hispanic culture, Bible times, farming, American celebrations

#### Science

- Appreciating God's creation
- Learning about birds, bugs, magnets, seasons, water, our bodies, weather, rocks, oceans, sun, moon, plants, and animals
- Experiencing hands-on activities

#### **Motor Skills**

- Encouraging fine motor skills through prewriting activities, fingerplays, cooking and Learning Stations activities, and student activity worksheets
- Developing gross motor skills during simple games and group activities

## Reading



#### **Word Recognition**

- Application of phonics concepts presented in K5 Beginnings
- Readers 1–16—short vowels, single consonants, few consonant blends
- Readers 17–32—short vowels, consonant blends and digraphs, long vowels, r-influenced vowels, special vowels
- Word families; service words; compound words; words with suffixes

#### Comprehension

Picture reading

- Literal, interpretive, critical, appreciative levels of questioning
- Predict text; make inferences; draw conclusions; predict outcomes
- Compare; sequence events; follow directions

#### Vocabulary

· Meaning from context

#### Literature

- Read a variety of genres: family stories, informational articles, fanciful animal stories, poetry, Bible accounts, and realistic fiction
- Distinguish reality from fantasy

#### Silent Reading

 Reading for specific information, reading for author's message

#### **Oral Reading**

- Communicate message of the author; communicate in a natural manner
- Portray a character
- Respond to punctuation: period, exclamation point, question mark

## Math

4th Edition



#### Numeration

- Identify numbers 0-100
- Write numbers 0-100

#### Number sense

- Compose/decompose numbers
- Identify ordinal positions: firsttenth; first, next, last
- Determine order: before, after, between
- Find patterns in numeration
- Develop place value: tens and ones
- Identify teen numbers as 10 and some more

#### Counting and cardinality

- Count and make sets to 20
- $\bullet$  Count to 100 by 1s and 10s
- Count on from any given number to 100
- Represent the quantity of a number using manipulatives or by drawing a picture

# Whole Number Operations: Addition & Subtraction

- Sums to 10: join sets; count on; compose/decompose numbers
- count back differences to 10; take apart; unknown part
- Represent addition/subtraction sentences with pictures (manipulatives, draw, act out)

- Write addition/subtraction sentences (equations)
- Solve word problems
- Tell a story for a number sentence
- Explain the sum or difference

#### Algebra Readiness

- Understand part-whole relationship
- Correlate the relationship between addition and subtraction

# Equal Parts of a Whole (Fraction Concepts)

- Count equal parts in a whole
- Distinguish between equal parts and unequal parts
- Partition a whole into equal parts

#### Geometry

- Describe attributes of plane shapes: circle, square, triangle, rectangle in various orientations
- Describe attributes of solid figures: ball shape (sphere), can shape (cylinder), box shape (rectangular solid, cube), cone shape (cone)
- Construct shapes with manipulatives
- Identify spatial relationships: top, middle, bottom; left, right; over, under; inside, outside; on, off; front, back

• Extend and construct patterns (color, shape, size)

#### Estimation

- Number of objects
- · Length: longer, shorter
- Weight: weighs more, weighs less
- Capacity: holds more, holds less
- Time: more time, less time

#### Measurement and Data

- Sort and classify objects by attributes (number, color, size, shape)
- Compare measurable attributes; length (longer/shorter), height (taller/shorter), weight (heavier, lighter), capacity (more, less)
- Measure: nonstandard units and inches; more than one attribute
- Determine temperature: hot, cold
- Tell time: read and write time to the hour; daytime, nighttime; sequence events; more time, less time
- Read a calendar: days of the week; months of the year; yesterday, today, tomorrow; seasons
- · Identify and count pennies

#### **Problem Solving**

- Solve word problems using manipulatives, drawing pictures, or acting-out situations
- Write and solve number sentences (equations)



# **Bible Truths**A Father's Care 3rd Edition



#### **Bible Content**

- Chronological and thematic study of the Old and New Testaments
- Bible characters include Noah, Abraham, Moses, Jesus, Peter, and Paul.
- Themes include God keeps His promises, God's guidance, God's care, God gives strength, the Bible, and prayer.

 Lessons for Thanksgiving, Christmas, and Easter

#### **Bible Study Skills**

• Using the contents page of a Bible to locate a verse

#### **Character Emphasis**

 Character traits used in application stories show students their need of Christ as Savior and ways to apply biblical principles to personal life situations.

## Bible Truths for Christian Growth

• 159 questions correlated with 10 biblical themes

#### **Memory Verses**

• 36 verses or passages

#### **Hymns and Songs**

 10 songs, each accompanying a unit theme; 20 more to choose from

## Science

3rd Edition



#### **GENERAL SCIENCE**

process skills, science tools, scientific method

# EARTH SCIENCE Earth

- Parts of the earth: the surface, volcanoes, earthquakes, layers of the earth
- Seasons: characteristics of spring, summer, autumn, and winter
- Weather: temperature, wind, water cycle, clouds, precipitation, what a weatherman does
- · Soil: what it is made of

#### Space

 Sun, moon, and stars: the sun as a star, sunrise, sunset, the moon's size, phases of the moon, stars, the Little Dipper and the Big Dipper

#### LIFE SCIENCE Living Things

- Animals: tame animals (pets, farm animals), zoo animals, wild animals, meeting needs, animal tracks, animal marks
- Plants: roots, stems, leaves, flowers, uses for plants

#### **Human Body**

- **Senses:** seeing, hearing, touching, tasting, smelling
- Health and safety: forming healthy habits, teeth, keeping safe

## PHYSICAL SCIENCE

#### Motion

 Forces, motion, friction, gravity, weight, magnetism

#### Energy

 Sound: how sounds are made, how sound moves, sound and matter, uses of sounds

#### Matter

 Characteristics of solids, liquids, and gases; parts to a whole

## **Heritage Studies**

3rd Edition



#### **Focus**

 Developing a Christian worldview of the family, community, America, and the world

#### Geography

- Beginning map skills: cardinal directions, map key, continents and oceans, globe
- Tracing routes
- Simple mapmaking
- Reading map symbols

#### **World History**

- Missions
- Explorers

#### **American History**

- Native Americans
- Columbus and the New World
- Settlements: Jamestown and Plymouth

#### Government

- Community, state, and national leaders
- The United States capital
- National symbols and monuments

#### **Economics**

- Needs and wants
- · Trading with the Indians

Goods and services

#### Culture

- · Biblical worldview
- Changes in technology and transportation
- Families and family trees
- Diverse Native American cultures

#### **Social Studies Skills**

- Primary sources
- Timeline
- Compare and contrast, main idea, classification, sequencing
- Graphic organizers, charts, graphs, diagrams

#### Math

4th Edition



#### Numeration

- Read and identify 0-999
- Write and picture 0-999
- · Number words: zero to twenty

#### **Number Sense**

- Compose/decompose
- Ordinals: first-tenth; first, next, last; before, after, between
- Patterns; sequencing: first, next, last; before, after, between

#### **Number line**

- Place Value
- Hundreds/tens/ones; 1 more / 1 less, 10 more / 10 less, 100 more / 100 less
- Expanded form
- · Compare with < and >
- Even/odd numbers

#### Counting

- Find patterns in numeration
- Count to 999
- Count by 1s, 5s, 10s to 200
- Count forward and backward

#### Addition

- 100 basic facts (using strategies)
- Number sentences (equations) and vertical form
- 2- and 3-digit addends; money
- Rename 10 ones as 1 ten

#### Subtraction

- 100 basic facts (using fact families and other strategies); 2-digit minuend and subtrahend; equation; vertical form; money
- Word problems: take-away, comparison, missing addend
- Subtract 0 rule

#### **Multiplication Readiness**

 Repeated addition; counting by 2s, 5s, 10s

#### Algebra Readiness

- Represent a picture with a number sentence; missing addend
- Understand and use Addition Properties (Commutative, Associative, Identity)

#### **Fractions**

• Equal parts; halves; fourths (quarter); part of a set of objects

#### Geometry

- Plane shapes: circle, square, triangle, rectangle; sides and corners
- Solid figures: sphere, cylinder, rectangular prism, cube, cone; corners, faces, curved sides
- Spatial relationships; patterns; perimeter

#### **Estimation**

- Numbers of objects
- · Length: is longer, is shorter
- Weight: weighs more, weighs less
- · Capacity: holds more, holds less

#### Measurement

- Length/height: nonstandard units, inch, centimeter
- · Weight: weighs more, weighs less
- Capacity: holds more, holds less
- Temperature: Fahrenheit; Celsius
- Measuring tools: ruler, scale, thermometer, cup
- Time: hour and half hour; elapsed time
- · Calendar: days, weeks, months
- Money: penny, nickel, dime, quarter

#### **Problem Solving**

- Word problems; picture, tally charts, , bar graph
- Reasoning

#### **Graphs and Data**

• Pictures, graph, bar graph, tally charts

#### Calculators (optional)

 Make numbers; addition; subtraction

## **Phonics & English**

3rd Edition



#### Prereading Skills

 Interpreting pictures, sequencing, matching sounds with pictures

#### Listening

- Listening enjoyment: songs, stories, poems, nursery rhymes, folktales
- Listening comprehension: interpreting information, listening for facts and details, following directions, making critical judgments, making application, identifying a main idea

#### **Oral Communication**

 Taking part in songs, discussion, sharing of ideas, action rhymes, pantomimes, dialogues, and choral readings; retelling stories

## Phonemic Awareness and Phonics

- Using auditory discrimination and letter-sound association for each of the 44 English sounds and their variant spellings
- Identifying: consonant blends and digraphs, vowel digraphs and diphthongs, r-influenced vowels

- Recognizing soft and hard c and g, the silent consonants, open and closed syllables
- Decoding 130 phonograms or word families
- Developing word-recognition skills
- Recognizing rhymes; writing analogies
- Reading phrases and sentences with comprehension

#### Vocabulary

- Determining meaning from context
- Synonyms, antonyms, compound words

#### Structural Analysis

 Counting syllables; dividing words: base words, prefixes, suffixes

#### Study Skills

 Using alphabetical order, following directions, reading a color key, reading for the main idea

#### Composition

- Oral composition: dictating a word, a phrase, and a sentence; describing an experience; sharing an idea
- Written composition: completing a sentence, a story, and a rhyme; writing complete sentences, stories, letters, poems, a recipe, instructions; journaling; learning the five steps in the writing process

#### **Grammar and Mechanics**

- Capitalization; punctuation: periods, question marks, exclamation points, commas, contractions, possessives
- Parts of speech: action words, naming words, describing words
- Position words; comparatives, superlatives

#### Reading

 Reading for comprehension, drawing conclusions

## Reading

4th Edition



#### Phonics and Word Recognition

- Review and application of phonics concepts presented in Phonics and English 1
- Word families
- Consonant sounds: single, blends, digraphs, silent, soft and hard c and q
- Vowel sounds: short, long, r-influenced, special
- Open/closed syllables; syllable division
- Service words

#### Vocabulary

 Meaning from context; synonyms; antonyms; prefixes; suffixes; analogies; compound words; contractions; action words; describing words; naming words; riddles; Bible words

#### Comprehension

Literal, interpretive, critical, appreciative levels; biblical truth

- Interpret pictures; follow directions, sequence; classify; compare and contrast; cause and effect
- Make inferences; draw conclusions; predict outcomes
- True/false statements; size/spatial/time relationships; main idea
- Punctuation; capitalization; sentence sense; comparatives/ superlatives

#### Literature

- Reading a variety of genres: realistic fiction, historical fiction, fantasy, fable, folktale, article, Bible account, missionary stories, drama
- Character traits and motives; setting
- Fanciful elements; similes
- Poetry: rhyme, rhythm, onomatopoeia

#### **Study Skills**

 Alphabetizing, book parts, glossary, calendar, color key, locate information, maps, diagrams

#### **Fluency**

- Silent Reading: read for understanding, specific information, biblical truth, author's message
- Oral Reading: communicate message of the author; language-like flow; communicate meaning, mood; portray characters, emotion; respond to punctuation

#### Composition

- Describe a picture, an experience, an object, a place, and an event
- Write a newspaper article, a letter, a journal entry, and a poem
- Complete a sentence and a story frame
- Write a response to the theme of a story, an event from another point of view, and things learned about God

# **Spelling**3rd Edition



#### 30 Weekly Word Lists

- 10 words per list (9 pattern words and 1 sight word)
- Words frequently used in writing
- Review list with pattern words every fifth week

#### Generalizations

- Phonics generalizations: short- and long-vowel patterns, r-influenced vowel patterns, diphthongs
- Consonant patterns: consonants, consonant blends and digraphs, soft c

• Structural generalizations: suffixes s, es, ed, er, est, ing; suffix rules: no change to base word, double the final consonant, drop the final e

#### **Word Study**

- Phonics and structural analysis activities
- Word meaning activities: sentence contexts, rhyming words, meaning or picture clues, puzzles

#### Proofreading

 Spelling awareness: identifying the correct spelling for a given word, identifying and correcting misspelled words, standardizedtest practice

#### **Dictionary Skills**

- Location skills
- Alphabetical order to the first and second letter
- Entry words, guide words, word forms, sample sentence

#### **Writing Application**

• Dictation sentences in tests

# Handwriting 3rd Edition

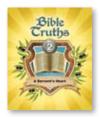


 PreCursive letter formation for A–Z; using correct pencil hold, paper position, posture, and spacing; being consistent in slant and letter alignment; placing words on a line correctly; practicing letter formation with words, sentences, Bible principles, and poems



## **Bible Truths**

A Servant's Heart
4th Edition



#### **Bible Content**

- Integrates doctrine into a chronological and thematic study of the Old and New Testaments
- Bible characters include Noah, Abraham, Gideon, Samson, Nehemiah, Ruth, Esther, Daniel, Dorcas, Paul, and Jesus.
- Themes include God is my King, obedience, humility, serving, forgiveness, giving, thankfulness, surrender, stewardship, courage, faith, faithfulness, zeal, priorities, loyalty, joy, and evangelism.

#### **Bible Study Skills**

• Understanding parts of a verse

- Interpreting meaning
- Using a Bible glossary
- Using the contents page of a Bible

#### **Character Emphasis**

 Character traits used in application stories show students their need of Christ as Savior and demonstrate ways to apply biblical principles to personal-life situations.

#### **Christian Living Application**

 Discussion questions are used throughout to clarify understanding and aid in thoughtful application of biblical virtues. • Highlights heroes of the faith

# Bible Truths for Christian Growth

 89 of the complete set of 164 questions and answers correlated with appropriate biblical themes

#### **Memory Verses**

· 36 verses or passages

#### **Hymns and Songs**

 10 songs, each accompanying a unit theme; 20 more to choose from

## Science

3rd Edition



#### **GENERAL SCIENCE**

Process skills, science tools, scientific method

# EARTH SCIENCE Earth

- Parts of the earth: the surface, globes, volcanoes, earthquakes, layers
- Movement of the earth: sunrise, sunset, rotation, daytime, nighttime, revolution, seasons
- Natural resources: conservation, water, soil, erosion, fossil fuels; reduce, reuse, recycle

#### Space

• Earth in space: rotation; revolution, day and night, seasons

# LIFE SCIENCE Living Things

- Living things: living contrasted with nonliving things, basic needs (food, water, space, shelter), characteristics of living things, life cycles
- Fossils and dinosaurs: Creation, evolution, fossils, ways fossils form, dinosaurs, kinds of dinosaurs
- Plants: parts of a plant, what plants need, seeds, seed dispersal, plant life cycle
- Biomes: community, population, habitat, environment, desert, rainforest, tundra, forests, ocean, pond

### **Human Body**

- Systems of the body: skeletal, muscular, circulatory, respiratory, digestive
- · food and exercise

# PHYSICAL SCIENCE Motion

 Motion: forces, motion, friction, gravity, weight, magnetism

#### Energy

• Light and shadows: sources of light, reflection, colors, transparent, opaque, shadows

#### Matter

 Matter and heat: forms of matter (solid, liquid, gas), changing forms (freezing, melting), temperature, thermometer

## **Heritage Studies**

3rd Edition



#### **Focus**

 Developing a Christian perspective on United States history from Native Americans to the founding of the independent nation

#### Geography

- Map skills: compass rose, keys, landforms, bodies of water, landform map, map grid, globe
- Climate

#### American History

- Founding of the colonies
- Immigration
- Revolutionary War

#### Government

- Constitutional Convention
- Laws
- Leaders
- Rights and responsibilities of a citizen

- Constitution
- First President

#### **Economics**

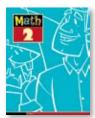
• Economics in a community and in the colonies

#### Culture

- Native American cultures
- Cultures in the colonies

#### Math

3rd Edition



#### Numeration

 Identify and write 0–9,999; number words: zero to nine hundred ninety-nine

#### **Number Sense**

- Place value: thousands/hundreds/tens/ones; 10 more/10 less; 100 more/100 less; even/odd numbers; round to the nearest ten and hundred; compare with < and >; expanded form
- · Ordinals: first-twentieth
- Patterns; sequencing: before, after, between; number line

#### Counting

• Count by 1s, 5s, 10s, and 100s; by 2s to 60; by 3s to 30; by 4s to 40

#### Addition

- 100 basic facts (using fact families and other strategies); 4-digit addends; vertical form addition; rename 10 ones as 1 ten, 10 tens as 1 hundred, 1 hundreds as 1 thousand; money; word problems
- Order Principle, Zero Principle, Grouping Principle
- Word problems
- Subtraction
- 100 basic facts (using fact families and other strategies); 3- and
   4-digit minuend and subtrahend
- Rename 1 ten as 10 ones; 1 hundred as 10 tens, 1 thousand as 10 hundreds; money
- Word problems: take-away, comparison, missing addend; strategies
- Zero Principle

#### Multiplication

- Repeated addition; array; number line; equation; vertical form; factors: 0–5, 10; word problems
- Order Principle, Identity Principle, Zero Principle

#### Division

Equal sets; equation; missing factor; divisor: 1–5; word problems

#### **Algebra Readiness**

 Equation; missing addend; missing factor; Order Principle, Grouping Principle, Zero Principle

#### **Fractions**

 Equal parts; halves to tenths; part of a set; fair share; compare with common denominators; compare with 1 as the numerator

#### **Decimals**

Money

#### Geometry

- Plane figures: circle, square, triangle, rectangle, pentagon, hexagon, oval; sides, vertices; similar, congruent; symmetry; slides, flips, turns
- Solid figures: sphere, cylinder, rectangular prism, cube, cone, pyramid; faces, edges, vertices, curves
- Lines: horizontal/vertical; parallel/ intersecting
- · Area; perimeter; patterns

#### **Estimation**

Round to nearest ten and hundred

- Length: inch, foot, yard; centimeter, meter
- Weight: more than/less than 1 pound, 1 ounce
- Mass: more than/less than 1 kilogram; about 1 gram/more than 1 gram
- Capacity: more than/less than
   1 cup, 1 pint, 1 quart, 1 gallon;
   more than/less than 1 liter

#### Measurement

- Length: inch, foot, yard; centimeter, meter
- Capacity: cup, pint, quart, gallon; liter
- Weight: ounce, pound
- · Mass: gram, kilogram
- Temperature: Fahrenheit; Celsius
- Measuring tools: ruler, scale, thermometer, cup, liter
- Time: to 5-minute interval;
   A.M./P.M.; elapsed time
- · Calendar: day, week, month, year
- Money: penny, nickel, dime, quarter, half-dollar, 1 dollar

#### **Problem Solving**

 Word problems; graphs; tables; charts; map skills; probability; money

#### **Statistics and Graphs**

 Pictograph; bar graph; coordinate graph; line graph; circle graph; tables; charts; tallies

#### Calculators

· Addition; subtraction

## **English**

Writing & Grammar Updated 2nd Edition



#### **Parts of Speech**

- Noun: common, proper, singular, plural, abbreviation
- Verb: action, linking, present and past tenses
- Pronoun
- Adjective

#### Sentence Structure

 Sentence; fragment; subject part and action part; types: telling, question, command, strong feeling

#### Mechanics

 Capitalization: proper nouns, titles, abbreviations, initials, book titles  Punctuation: period, question mark, exclamation point, comma, apostrophe in contractions

#### Usage

Homophones; pronoun reference; contractions; double negatives

#### Writing Skills

- · Using a thesaurus
- Planning: word web, time-order chart, story map, senses chart, note cards
- Revising; proofreading: proofreading marks; writing conference

#### **Writing Projects**

 Personal narrative; instructions; couplet; shape poem; book report; friendly letter; makebelieve story; description; research report

#### Study & Reference Skills

- Reference skills: patrs of a book: title page, table of contents; phone directory
- Dictionary skills: alphabetical order, guide words, parts of an entry
- · Study skills: taking notes

#### Listening & Speaking Skills

 Listening skills; speaking skills; listening for the main idea; phone messages; oral book report

## Grade 2 Reading 3rd Edition



#### **Phonics and Word** Recognition

- · Re-teaching of phonics: a review of the forty-four sounds of English with many of the variant spellings
- Open/closed syllables; counting syllables; syllable division: base words/prefixes/suffixes, VC/ CV pattern, compound words, consonant + -le
- Service words

#### Vocabulary

· Meaning from context; synonyms; antonyms; homophones; prefixes; suffixes; analogies; compound words; contractions

#### Comprehension

- · Literal, interpretive, critical, appreciative levels; biblical truth
- Interpret pictures: follow directions; sequence; classify; compare and contrast; cause and effect; problem and solution

- · Make inferences: draw conclusions; predict outcomes
- True/false statements; time/place relationships; relevant information; facts/opinions; main idea
- Punctuation; capitalization; abbreviations; comparatives/superlatives; possessives; pronouns; action words; describing words

#### Literature

- Reading a variety of genres: realistic fiction, historical fiction, fantasy, fable, folktale, tall tale, article, Bible account, biography, drama, mystery
- · Main character; character development, motives, traits
- · Setting; plot; point of view; fanciful elements; idioms; imagery; similes; figurative language
- Poetry: rhyme; rhythm; repetition; onomatopoeia; alliteration

#### Study Skills

- · Book parts: title, author, illustrator, contents, glossary
- Alphabetizing; books of the Bible; calendar; recipe; poem stanzas; hymn stanzas; captions; headings; maps; diagrams; graphs; graphic organizers

#### Fluency

- Silent Reading: read for understanding, specific information, biblical truth, author's message
- · Oral Reading: communicate message of the author; language-like flow; communicate meaning, mood; portray characters, emotion; respond to punctuation; convey dialogue

#### Composition

- · Writing in response to reading
- · Descriptions; personal experiences; poems
- · Alternate story ending

### Spelling 2nd Edition



#### 32 Weekly Word Lists

- · Words frequently used in writing
- Pattern words and irregular spelling words
- · Interactive study method
- · Weekly review of patterns

#### Generalizations

- Phonics Generalizations: Vowel patterns: short and long vowels, *r*-influenced vowels, diphthongs
- Consonant patterns: consonants, consonant blends and digraphs. soft c, soft g, silent consonants
- Two-syllable words ending in le, er, y, and reliable patterns
- Structural generalizations: Compound words

- Contractions
- Suffixes: s, es, ed, ing, er, est
- Suffix rules: no change to the base word, double the final consonant, drop the final e, change y to i

#### Word Study

- Word sort: classifying words based on shared features
- · Word building: making new words by adding or omitting letters
- · Phonics and structural analysis activities
- · Word-meaning activities: contexts, meaning clues, synonyms, antonyms, homophones

#### **Proofreading**

- · Spelling awareness; identifying and correcting misspelled words in sentences or passages
- Identifying the correct spelling for a given word
- Standardized-test practice

#### **Dictionary Skills**

- · Location skills
- · Alphabetical order to the first, second, and third letter
- · Entry words, guide words, word forms

#### **Writing Application**

• Dictation sentences in tests

# **Handwriting**

2nd Edition



- · Maintaining PreCursive alphabet and mastering cursive alphabet
- · Maintaining good handwriting skills: good posture, paper positioning, pencil hold, correctletter formation, slant, alignment, rhythm, spacing, neatness
- · Applying use in subject content areas: Bible, math, English skills, science, Heritage Studies
- Copying good cursive models that include Scripture, poetry, hymns, pledges, recipes, thankyou notes, invitations, and friendly letters



### **Bible Truths** Following Christ 4th Edition



#### **Bible Content**

- Integrated doctrine through a chronological and thematic study of the Bible emphasizing application
- Bible characters include Cain, Abel, Seth, Job, Lot's wife, Korah, Elijah, Jesus, the apostles, Peter, Philip, and Paul and his coworkers.
- Themes include sin and salvation, purity, life of Christ, willingness, friendships, obeying authorities,

cooperation, dedication, and thankfulness.

· Lessons for Thanksgiving, Christmas, and Easter

#### **Bible Study Skills**

- · Using cross references
- Reinforces using the Bible's contents page and glossary, interpreting meanings, sequencing events, reading maps

#### Character Emphasis

• Discussion questions throughout and application stories show

students their need of Christ as Savior and ways to apply biblical principles and commands to life situations.

#### **Bible Truths for Christian** Growth

• 164 questions/answers presented in 10 biblical themes aid understanding and facilitate discipleship

#### **Memory Verses**

- 36 verses or passages
- Emphasis on application

# Science

3rd Edition



#### **GENERAL SCIENCE**

· process skills, science tools, scientific method

#### **EARTH SCIENCE**

- · Rocks: how they form (igneous, sedimentary, metamorphic), weathering
- · Minerals: uses, characteristics of minerals
- · Soil: layers of soil, humus
- · Weather: atmosphere, temperature, precipitation, water cycle, weather instruments (rain gauge, weather vane, anemometer), drought, clouds, wind, meteorologist, weather forecast, storms (tornado, hurricane, blizzard)

#### Space

 Solar system: the sun, planets, asteroids and dwarf planets; constellations, astronomers, telescopes

#### **LIFE SCIENCE**

#### Living Things

- · Cold-blooded animals: fish, amphibians, reptiles
- · Warm-blooded animals: birds, mammals; instincts and learned behaviors
- · Plants: parts, photosynthesis, chloroplasts, chlorophyll, stomata, uses
- Ecosystems: characteristics of living things, environment, population, community, habitats, producers, consumers, decomposers, herbivores, omnivores, carnivores, food chains, food webs, predator, prey, changes in ecosystems, resources, balancing ecosystems
- · Cells: microscope, cell sizes and shapes, one-celled living things, parts of cells, tissues, organs, systems

#### **Human Body**

· Ear: parts of the ear, how sound travels through the ear

· Skin: epidermis, dermis, characteristics of skin, melanin, fingerprints, nerves, blood vessels, sweat glands, pores, oil glands, skin care

#### PHYSICAL SCIENCE

#### Motion

• Motion: forces, friction, gravity, weight, magnetism, motion, work, energy, kinds of energy

#### Energy

• Sound: vibrations, causes, sound waves, speed of sound through matter, reflected sound waves, echoes, absorbing sound waves, characteristics of sound (pitch, volume, quality), using sound

#### Matter

· Matter: properties of matter, mass, balance, volume, graduated containers, states of matter (solid, liquid, gas), changing states of matter (evaporation, condensation), properties of water, physical changes, mixtures, chemical changes

## **Heritage Studies**

3rd Edition



#### **Focus**

 Learning about the founding and growth of a new nation from a Christian perspective

#### Geography

Map skills: cardinal and intermediate directions, grids, globe, latitude and longitude, hemispheres, landforms, prime meridian, equator, and population map

#### Social Studies Skills

- Primary and secondary sources; renewable and nonrenewable resources
- Charts and graphs: timeline

Fact and opinion, cause and effect, compare and contrast

#### **American History**

- · America's beginning
- · Trail of Tears
- Wars: Revolutionary War, French and Indian War, War with Great Britain, and Civil War
- Communication and transportation
- Inventions
- Western Expansion

#### Government

- Constitutional Convention
- Bill of Rights
- · Article of Confederation

- Preamble
- · Political parties, Electoral College

#### **Economics**

- Cost and benefits
- Imports and exports
- · Planning a budget

#### Culture

- Songs: patriotic, folk, hymns
- Flag etiquette
- Food sampling

#### Math

3rd Edition



#### **Number Sense**

- Recognize and write 0–1,000,000 with numerals and words; Roman numerals I–XII
- Ordinals: first through ninetyninth; order; number line
- Place value: 10 more / 10 less; ones to hundred thousands; expanded form; round to the nearest ten, hundred, one thousand, compare with > and <</li>
- even/odd numbers

#### Counting

Count by 1s, 2s, 5s, 10s, 100s, 1,000s, 10,000s; count by 2s to 20, by 3s to 30, by 4s to 40, by 5s to 50, by 6s to 60, by 7s to 70, by 8s to 80, by 9s to 90

#### Addition

• 100 basic facts; fact families (with strategies); five-digit addends; vertical form; rename 10 ones as 1 ten to 10 one thousands as 1 ten thousand; money; strategies; word problems; Commutative Property, Associative Property, Identity Property

#### Subtraction

 100 basic facts; fact families; fivedigit minuend and subtrahend; word problems; rename 1 ten as 10 ones to 1 ten thousand as 10 one thousands; money; word problems; strategies; take-away, comparison; missing addend; Zero Principle

#### Multiplication

 110 basic facts; fact families; multiples; repeated addition; arrays; number line; equation; vertical form; 1 digit factors; 2 to 3 digits by 1 digit; renaming; strategies; word problems; Commutative Property; Associative Property; Identity Property; Zero Property

#### Division

 110 basic facts; fact families; equal sets; repeated subtraction; measurement; partition/strategies; equation; division frame; word problems; 2 and 3 digits by 1 digit; 1-digit remainders

#### Algebra Readiness

 Equation; missing addend; missing factor; negative numbers (temperature); addition & multiplication; Properties

#### Fractions

 Part of a whole; part of a set; equivalent fractions; compare; order; mixed numbers; add and subtract like fractions

#### Decimals

 Read and write tenths and hundredths; mixed numbers; compare; order; add and subtract; rename 10 tenths as 1 one and 10 hundredths as 1 tenth; word forms; money; word problems

#### Geometry

- Plane figures: circle, polygons, square, triangle, rectangle, pentagon, hexagon, octagon; edge, vertex; slides, flips, turns
- Solid figures: sphere, cube, cylinder, cone, rectangular prism, rectangular pyramid; faces; edges; vertices; curved surface
- Lines: horizontal/vertical; parallel/ intersecting; symmetry

• Area; perimeter; patterns

#### **Estimation**

- Round to nearest ten, hundred, and one thousand
- Length; distance; capacity; weight; mass

#### Measurement

- Length: ½ inch, foot, yard, mile; centimeter, meter, kilometer
- Capacity: cup, pint, quart, gallon; milliliter, liter
- · Weight: ounce, pound
- Mass: gram, kilogram
- Temperature: Fahrenheit; Celsius
- Time: to 1-minute interval; past and future elapsed time to 5-minute interval; before/after the hour; a.m./p.m.; noon/ midnight
- Calendar: date, future date; schedule
- Money: coins; five-dollar bill; ten-dollar bill; dollar sign; decimal point; addition, subtraction

#### **Problem Solving**

 Word problems; graphs; tables; charts; schedule; map skills; logic; probability; money; multistep problems; problems with too little information; Problem Solving Plan

#### **Data and Graphs**

 Bar graph, pictograph; line plot; line graph; coordinate graph; circle graph; tables and charts; tallies

#### Calculators

• Addition; subtraction

# English

Writing & Grammar 2nd Edition



#### Parts of Speech

- Noun: common, proper, singular, plural, possessive; abbreviation
- Verb: action, linking, helping; present, past, and future tenses
- Pronoun: subject, object, possessive
- · Adjective; adverb

#### Sentence Structure

- Sentence; fragment; run-on sentence; compound sentence
- Sentence parts: complete subject, complete predicate, simple subject, simple predicate
- Sentence types: declarative, interrogative, imperative, exclamatory
- Compound subjects; compound predicates; diagramming

#### Mechanics

- Capitalization: proper nouns, titles, abbreviations, initials, book titles
- Punctuation: period, question mark, exclamation point, comma, apostrophe, quotation marks

#### Usage

Homophones; pronoun reference; contractions; subject/verb agreement; prefixes; suffixes

#### Writing Skills

- Using a thesaurus
- Planning: word web, time-order chart, opinion chart, story map, plot pyramid, Venn diagram
- Revising; proofreading: proofreading marks; writing conferences

#### **Writing Projects**

 Game instructions; friendly letter with personal narrative; persuasive essay; realistic fiction story; book report; sound poem; research report; comparecontrast essay

#### Study & Reference Skills

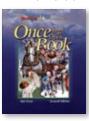
- Reference skills: parts of a book: title page, table of contents, index; library: electronic catalog; encyclopedia; atlas
- Dictionary skills: alphabetical order, guide words, parts of an entry, multiple definitions
- · Study skills: taking notes

#### Listening & Speaking Skills

• Listening skills; speaking skills: making an introduction

## Reading

2nd Edition



# Phonics and Word Recognition

- Phonics review; introduction of additional variant spellings
- Syllable division: base words/ prefixes/suffixes, VC/CV pattern, compound words, prefixes/suffixes, two-syllable words, words ending with -tion; consonants + le; schwa syllables
- Service words review

#### Vocabulary

 Meaning from context; synonyms; antonyms; analogies; compound words; contractions

#### Comprehension

- Literal, interpretive, critical, appreciative levels; biblical truth
- Sequence; classify; compare and contrast; cause and effect; problem and solution
- Make inferences; draw conclusions; predict outcomes
- Time/place relationships; relevant information; facts/opinions; main idea

 Punctuation; capitalization; abbreviations; comparatives/ superlatives; possessives; pronouns; verbs; adverbs; adjectives

#### Literature

- Reading a variety of genres: realistic fiction, historical fiction, fantasy, fable, folktale, tall tale, article, Bible account, biography, poetry, play, nonfiction, legend
- Main character; character development, motives, traits
- Setting; plot; conflict; point of view; foreshadowing; fanciful elements
- Idioms; imagery; personification; metaphor; simile; humor; sarcasm; suspense
- Poetry: rhyme; rhythm; onomatopoeia; alliteration; quatrains

#### **Study Skills**

- Book parts: contents; glossary
- Encyclopedia; Bible concordance; cross-references; biographical dictionary; newspaper; classified ad

- Skimming; scanning; PQ3R study method
- Calendar; maps; diagrams; graphs; timeline; schedule

#### **Fluency**

- Silent Reading: read for understanding, specific information, biblical truth, author's message
- Oral Reading: communicate message of the author; language-like flow; communicate meaning, mood; portray characters, emotion, motive; respond to punctuation; choral reading

#### Composition

- Poetry; simile; rhyming riddles; alliterative phrases
- News article; classified ad; personal experience; journal entry; friendly letter; persuasive essay; descriptive paragraph
- Story mapping; play writing; tall tale; research writing; decree/law; financial report

## Spelling

2nd Edition



#### 32 Weekly Word Lists

- · Words frequently used in writing
- Pattern words and irregular spelling words
- · Interactive study method
- Weekly review of patterns

#### Generalizations

- Phonics generalizations: vowel patterns: short- and long-vowels, r-influenced vowels, diphthongs
- Consonant patterns: consonants, consonant blends and digraphs, soft c, soft g, silent consonants
- Two-syllable words ending in *le*, *er*, *y*, and reliable patterns
- Structural generalizations: compound words
- Contractions
- Suffixes: s, es, ed, ing, er, est

 Suffix rules: no change to the base word, double the final consonant, drop the final e, change y to i

#### **Word Study**

- Word sort: classifying words based on shared features
- Word building: making new words by adding or omitting letters
- Phonics and structural-analysis activities
- Word meaning activities: contexts, meaning clues, synonyms, antonyms, homophones

#### Proofreading

 Spelling awareness; identifying and correcting misspelled words in sentences or passages

- Identifying the correct spelling for a given word
- Standardized-test practice

#### **Dictionary Skills**

- · Location skills
- Alphabetical order to the first, second, and third letter
- Entry words, guide words, word forms, definitions, sample sentences
- Syllable division: compound words; words with two middle consonants; words ending in le; open and closed syllables

#### **Writing Application**

- Dictation sentences in tests
- Real-life writing application

## Handwriting 2nd Edition



- Maintaining cursive alphabet: uppercase and lowercase
- Maintaining good handwriting skills using 3/8" writing lines
- Applying use in subject content areas—Bible, math, English skills, science, Heritage Studies
- Copying good cursive models that include Scripture, poetry, timelines, tables, diaries, logs, maps, quotations, character traits, and hymns



### **Bible Truths**

God and His People 4th Edition



#### **Bible Content**

- · Bible characters include Moses, Rahab, David, Solomon, Hezekiah, Elisha, Timothy, Stephen, Paul, and Jesus.
- Themes include attributes of God, Bible study and prayer, faithfulness, contentment, and the church.
- Lessons for Thanksgiving, Christmas, and Easter

#### **Bible Study Skills**

- · Using abbreviations of Bible books
- Using a concordance
- Reinforces using the contents pages of the Bible, interpreting meaning, using cross-references
- · Emphasis on character
- · Character traits used in application stories show students their need of Christ as Savior and ways to apply biblical principles to personal life situations.

#### **Bible Truths for Christian** Growth

• 164 questions correlated with 10 biblical themes

#### **Memory Verses**

• 36 verses or passages

#### **Hymns and Songs**

• 10 songs, each accompanying a unit theme; 20 more to choose from

# Science

3rd Edition



#### GENERAL SCIENCE

 Process skills, science tools, and scientific method

#### **EARTH SCIENCE** Earth

- Changes on the earth: volcanoes, earthquakes, frost, action, abrasion, weathering, erosion, deposition, landslides, avalanches
- · Landforms: deltas, dunes, glaciers
- · Soil: formation, conservation
- · Natural resources: renewable resources (soil, water, trees, conservation, pollution, hydroelectric energy, wind energy, solar energy), nonrenewable resources (fossil fuels); reduce, reuse, recycle
- Water and oceans: water cycle, tides, waves, deep ocean currents, surface currents, ocean

floor, ocean depths, ocean creatures

#### Space

- Moon: shape and size, atmosphere and temperature, mass and gravity, light, features (maria, mountains, craters, rilles), revolution, rotation, phases, eclipses
- · History of the moon: man's theories, science, age of the moon

#### LIFE SCIENCE **Living Things**

- · Insects: arthropods, body parts, protection, ways of eating, life cycles, metamorphosis, social insects
- · Spiders: webs, getting food
- Plants: flowering plants, parts of a flower, pollination, seeds, seed dispersal, seed parts, plantlife cycle, reproduction, methods of classification

- Ecosystems: environment, basic needs, resources, competition, partnerships, migration, hibernation, changes, pollution
- · Animal defenses: adaptations (camouflage, mimicry), protection (armor & horns)

#### **Human Body**

- Eyes: parts of the eye, path of light through the eye, vision
- Digestive system: digestive tract and digestive process
- · Nutrition: proteins, fats, carbohydrates, vitamins, minerals, healthy diet planning
- · Skeletal-muscular system: skeleton, parts of bones, marrow, joints, ligaments, cartilage, muscles, injuries

## **Heritage Studies**

3rd Edition



· Developing a biblical worldview through the study of American history

#### Geography

- · Map skills: hemispheres, equator, latitude/longitude, and prime meridian
- · Natural resources; climates
- Regions

#### **World History**

- World War I
- World War II

#### **American History**

Indians

- · The fifty states (states, history, landmarks)
- · Inventions: communication, transportation
- · American Industrial Revolution
- · Spanish-American War
- Civil War
- · Revolutionary War
- War of 1812
- Territories

#### Government

- · Branches of American government
- Voting
- Citizenship

#### **Economics**

- Stock market
- · Supply and demand

#### Culture

- Languages
- · Adjustment of immigrants in America
- Evangelism and missionary work

#### **Social Studies**

- Cause and effect
- Timeline
- Primary sources

### Math

3rd Edition



#### **Number Sense**

- Recognize and write 0–100,000,000 with numerals and words; Roman numerals I–XXXIX
- Ordinals; first through ninetyninth; order; number line; 10 more/10 less
- Place value: ones to hundred thousands; expanded form; even/ odd numbers; round to the nearest ten, hundred, one thousand; compare with > and <</li>

#### Counting

• Count by 1s, 2s, 5s, 10s, 100s, 1,000s, 10,000s; count by 2s to 20, by 3s to 30, by 4s to 40, by 5s to 50, by 6s to 60, by 7s to 70, by 8s to 80, by 9s to 90

#### Addition

- 100 basic facts; fact families; six-digit addends; vertical form; rename 10 ones as 1 ten to 10 one thousands as 1 ten thousand
- Strategies; word problems; money
- Commutative Property, Associative Property, Identity Property

#### Subtraction

- 100 basic facts (using strategies); fact families; six-digit minuend and subtrahend; rename 1 ten as 10 ones to 1 ten thousand as 10 one thousands
- Strategies; word problems; money; take-away, comparison; missing addend; unknown part
- · Zero Principle

#### Multiplication

110 basic facts; fact families; multiples; repeated addition; arrays; number line; equations; vertical form; 1-digit factors; 1 digit times 2-4 digits; 2 digits times 2-3 digits; renaming; strategies; word problems

Commutative Property,
 Associative Property, Identity
 Property, Zero Property,
 Multiplication, Addition Principle

#### Division

• 110 basic facts (using strategies); fact families; equal sets; repeated subtraction; measurement; partition/strategies; equation; division frame; word problems; computation: 2–4 digits by 1 digit; 2–3 digits by 2 digits; 1–2 digit remainders

#### **Algebra Readiness**

 Equations; missing addend; missing factor; negative numbers; function tables; variables

#### Fractions

- Part of a whole; part of a set; add and subtract like fractions and mixed numbers with like fractions; rename improper fractions
- Equivalent fractions; compare; order

#### **Decimals**

 Read and write tenths and hundredths; mixed numbers; compare; order; add and subtract; rename 10 tenths as 1 one and 10 hundredths as 1 tenth; word forms; money; word problems; round to nearest whole

#### Geometry

- Plane figures: circle, polygons, square, triangle, rectangle, pentagon, hexagon, octagon; edge, vertex; slides, flips, turns
- Solid figures: sphere, cube, cylinder, cone, rectangular prism, rectangular pyramid; face, edge, vertex, curved surface
- Lines: horizontal/vertical, parallel/ intersecting, segments; points; rays; angles: right, acute, obtuse
- Symmetry; similar; congruent
- · Circle: radius, diameter

• Perimeter; area; patterns

#### **Estimation**

- Round to nearest ten, hundred, and one thousand
- Round for addition, subtraction, multiplication, and division
- Length; distance; capacity; weight; mass

#### Measurement

- Length: ¼ and ½ inch, foot, yard, mile; centimeter, meter, kilometer, millimeter
- Capacity: cup, pint, quart, gallon; milliliter, liter
- Weight: ounce, pound, ton
- · Mass: gram, kilogram
- Temperature: Fahrenheit; Celsius
- Time: to 1-minute interval; past and future elapsed time to 5-minute interval; before/after the hour; a.m./p.m.; noon/ midnight
- Calendar: date, future date; schedule
- Money: coins; one-, five-, ten-, and twenty-dollar bills; dollar sign; decimal point; addition; subtraction; multiplication; division

#### **Problem Solving**

 Use a problem-solving plan: problems; graphs; tables; charts; schedule; map skills; logic; probability; money; multistep problems; problems with too little information

#### Data

- Pictograph; bar, line, circle, and coordinate graphs
- Tables; charts; tallies; line plot; stem-and-leaf plot
- Mean, median, mode, range, frequency

#### **Calculators**

· Addition; subtraction; division

## **English**

Writing & Grammar 2nd Edition



#### Parts of Speech

- · Noun: common, proper, singular, plural, possessive; abbreviation; as a subject, object, and predicate
- · Verb: action, linking, helping; present, past, and future tenses
- Pronoun: subject, object, possessive
- · Adjective: article, predicate adjective
- · Adverb; preposition

#### Sentence Structure

- · Sentence; fragment; run-on sentence; compound sentence
- · Sentence parts: complete subject, complete predicate, simple subject, simple predicate
- Compound subjects; compound predicates; clauses: independent, dependent; introductory

phrases; prepositional phrases; diagramming

#### Mechanics

- · Capitalization: proper nouns, titles, abbreviations
- Punctuation: period, question mark, exclamation point, comma, apostrophe

#### Usage

· Homophones, pronoun reference; contractions; often-confused verbs; double negatives; prefixes; suffixes

#### Writing Skills

- · Using a thesaurus
- · Planning: word web, time-order chart, opinion chart, character web, plot pyramid, events/details chart, T-chart, Venn diagram, outline

· Revising; proofreading: proofreading marks; writing conferences; writing a bibliography

#### **Writing Projects**

· Personal narrative; friendly letter with instructions; comparecontrast essay; book review; tall tale; research report; business letter; haiku; acrostic poem

#### **Study & Reference Skills**

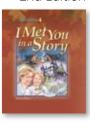
- Reference skills: parts of a book: title page, table of contents, glossary; library: electronic catalog; encyclopedia; atlas; periodicals
- · Dictionary skills: alphabetical order, guide words, parts of an entry, multiple definitions
- · Study skills: taking notes, outline

#### **Listening & Speaking Skills**

• Speaking skill: read a narrative aloud

# Reading

2nd Edition



#### **Word Recognition**

- Syllable division; accented syllables; primary/secondary accents; shift in accent; base words/ prefixes/suffixes; schwa syllables
- · Optional remedial phonics

#### Vocabulary

· Meaning from context; synonyms; antonyms; analogies; Greek and Latin roots; multiple meanings

#### Comprehension

- · Literal, interpretive, critical, appreciative levels; biblical truth
- · Sequence; classify; compare and contrast; cause and effect; problem and solution
- · Make inferences; draw conclusions; predict outcomes
- · Place/size/time relationships; relevant/irrelevant information; facts/opinions; main idea; dialect: discernment; sense of history

#### Literature

· Reading a variety of genres: fiction, realistic fiction, historical

- fiction, fantasy, folktale, tall tale, article, Bible account, biography, poetry, play, legend, regional realism
- · Main character; character motives, traits, growth, and change
- Setting: plot: conflict: crisis: point of view; foreshadowing; flashback; good/evil elements; moral; mood; suspense
- Idioms; imagery; personification; metaphor; simile; hyperbole; exaggeration
- · Poetry: rhyme; onomatopoeia; haiku

#### Study Skills

- Glossary; encyclopedia; types of dictionaries; Bible study; cross-references; card catalog; Dewey decimal system; captions; headlines; subtitles
- Skimming; scanning; PQ3R study method; outlining; paraphrasing
- · Maps; diagrams; graphs; charts; timeline; schedules

#### **Fluency**

- · Silent Reading: for information, entertainment, understanding, spiritual growth, author's message, biblical truth
- Oral Reading: communicate author's message; communicate mood and motive; convey emotion; portray character; convey meaning of Scripture; voice inflection; volume and pacing

#### Composition

- · Metaphor; simile; limerick; song; character sketch; fable; short story; tall tale; folktale; animal tales
- · Caption; dialogue; reading response; compare/contrast; problem/solution
- Descriptive paragraph; personal experience; journal entry; friendly letter; writing directions; map drawing; diagram description; research writing; interview

# Spelling

2nd Edition



#### 32 Weekly Word Lists

- Word lists: 16 pattern words, 2 challenge words, 2 review words
- · Interactive study method

#### Generalizations

- Phonics generalizations: long, short, and r-influenced vowel sounds; diphthongs; reliable patterns in two-syllable words; unstressed-syllable vowel patterns
- Structural generalizations: compound words, inflectional suffixes, prefixes, derivational suffixes
- Suffix rules: no change to the base word, doubling the final consonant, dropping the final e, changing y to i

#### **Word Study**

- Word sorting: classifying words based on shared features
- Word building: forming words by manipulating patterns, syllables, affixes
- Word meaning: using a word in the context of meaning (definitions, synonyms, antonyms, homophones, homographs, categories, analogies)

#### **Proofreading**

- Spelling awareness: identifying the correct spelling for a given word, identifying and correcting misspelled words in sentences or passages
- Standardized-test practice

#### **Dictionary Skills**

- Location skills
- Alphabetical order to the fourth letter: alphabetizing words between guide words
- Use of the pronunciation key
- Use of a dictionary entry: entry word, pronunciation, word forms, definitions, sample sentences
- Syllable division: base words and affixes, two-syllable vowelconsonant patterns, unstressed syllables
- Accenting syllables: words with affixes, syllable patterns

#### **Writing Activities**

- Dictation sentences in weekly tests
- Real-life writing application

### Handwriting 2nd Edition



- Maintaining cursive alphabet: uppercase and lowercase
- Maintaining good handwriting skills using 3/8" writing lines
- Applying use in subject content areas—Bible, math, English skills, science, Heritage Studies
- Copying good cursive models that include Scripture, poetry,

timelines, tables, diaries, logs, maps, quotations, character traits, and hymns



### **Bible Truths** Living in God's Love

4th Edition



#### **Bible Content**

- · Integrates doctrine into a chronological and thematic study of the Old and New Testaments
- · Bible characters include Levites, Samson, Deborah, Jonah, Rehoboam, King Asa, and Philip and the Ethiopian.
- Themes include sin and grace, obedience, holiness, my body as God's temple, evangelism and missions, and false teachers.

· Lessons for Thanksgiving, Christmas, and Easter

#### **Bible Study Skills**

- · Using a Bible dictionary, learning to outline Scripture
- Reinforces interpreting meaning, using cross-references, abbreviations, and a concordance

#### **Character Emphasis**

 Character traits used in application stories show students their need of Christ as Savior and

biblical principles to apply to personal-life situations.

#### **Bible Truths for Christian** Growth

• 164 questions correlated with 10 biblical themes

#### **Memory Verses**

· Verses or passages correlate with unit themes

# Science

4th Edition



#### **GENERAL SCIENCE**

· Process skills, science tools, scientific method

#### **EARTH SCIENCE Earth**

- · Layers of the earth: characteristics of the core, mantle, and crust
- · Soil: weathering, erosion, how soil is formed
- · Minerals: characteristics of minerals; uses of gems, metals, and other minerals; mining
- · Rocks: formation of igneous, sedimentary, and metamorphic
- · Fossils: contrasting Creation and evolution; Genesis Flood; fossil formation; excavating and restoring fossils; dating and interpreting fossils
- · Layers of the atmosphere: characteristics of the troposphere, stratosphere, mesosphere, thermosphere, exosphere, and ozone layer
- Weather: air; air pressure; temperature; air masses and fronts; winds; precipitation; clouds; storms; tornadoes; hurricanes; weather instruments; reading weather maps

#### Space

 Space technology: regulating heat in spacecraft

#### LIFE SCIENCE Living Things

· Dinosaurs: fossil evidence; extinction

- · Biomes: characteristics; plant and animal life in the tundra, coniferous forest, deciduous forest, grasslands, desert, tropical rainforest, mountains, marine and freshwater biomes, wetlands
- Ecosystems: environment; population; habitat; food chain; food web; predator and prey; energy pyramid; competition; adaptation; migration; hibernation; symbiosis; instincts; learned behaviors; cycles (seasons, carbon, nitrogen, water); stresses (fires, floods, droughts, man-made); succession; native and invasive species; extinction; endangered species

#### **Human Body**

- · Respiratory system: nose; pharynx; larynx; vocal cords; trachea; bronchi; lungs; inhaling; exhaling; breathing muscles; asthma and other breathing difficulties; dangers of smoking
- · Circulatory system: heart; arteries; veins; capillaries; blood cells; blood types; donation blood; excretory system

#### PHYSICAL SCIENCE Energy

· Heat: potential and kinetic energy; thermal energy; temperature; changing states of matter; thermal expansion; conduction; convection; radiation; fuel; unwanted heat; applications to space technology

- Sound: sound waves; frequency; speed; pitch; volume; timbre; echoes; ultrasound; music; acoustics
- Light: electromagnetic waves; properties of waves; visible spectrum: refraction: reflection: colors: mirrors; lasers; electromagnetic spectrum

#### Matter

- Measuring matter: volume; mass; weight; density
- · States of matter: solids, liquids, and gases
- · Physical changes: melting, freezing, vaporization, boiling, evaporation, condensation
- · Atoms and molecules: identifying atoms, molecules, elements, and compounds
- · Mixtures: evenly and unevenly mixed mixtures; characteristics of solutions

## **Heritage Studies**

3rd Edition



#### **Time Period**

• 1900 to 2009

#### Geography

- Map skills: hemispheres, latitude/ longitude
- Kinds of maps: Mercator projection, political, physical, historical, time zone, road
- Cartography
- · Cultural and natural boundaries
- Natural resources; climates

#### **World History**

World War I and World War II

- · Korean and Vietnam wars
- Afghanistan and Iraq wars

#### **American History**

- Contributions of states and regions to America's history
- Roaring Twenties
- Depression of the 1930s
- Events and personalities from 1900 to 2009
- War on Terror

#### Government

Communism, socialism, capitalism

#### **Economics**

- · Inventions: automobile, airplane
- Stock market
- Investments
- · Supply and demand

#### Culture

- Languages
- Religions
- Customs

## Math

3rd Edition



#### **Number Sense**

- Recognizing and writing 0–100,000,000,000 as numerals and words; Roman numerals I–C
- Place value: ones to hundred billions; comparing; expanded form; even/odd numbers; positive/ negative numbers; number line; expressions and equations

#### Addition & Subtraction

- Basic facts (fact families and other strategies); six-digit numbers; renaming to hundred thousands; inverse relationship; strategies; word problems; money; compensation
- Properties: Commutative, Associative, Identity; Zero Principle

#### Multiplication

- Basic facts (fact families and other strategies); multiples; repeated addition; arrays; equations; vertical form; 1–3 digits times 2–4 digits; renaming; strategies; word problems; money; factor trees; prime and composite numbers; GCF; LCM
- Properties: Commutative, Associative, Identity, Zero, Distributive over Addition

#### Division

 Basic facts (fact families and other strategies); equal sets; inverse of multiplication; measurement; partition; fraction form; equations; 2–4 digits by 1–2 digits; remainders; strategies; word problems; money

#### Fractions

- Part of a whole; part of a set; equivalent fractions; comparing; ordering; lowest terms; renaming improper fractions and mixed numbers
- Adding and subtracting like and unlike fractions; adding and

- subtracting mixed numbers with like and unlike fractions
- Multiplying a whole number times a fraction and a fraction times a whole number; multiplying a fraction times a fraction; multiplying a whole number times a mixed number; multiplying a mixed number times a mixed number
- Dividing a whole number by a fraction; dividing a fraction by a fraction; reciprocals

#### **Decimals**

- Reading and writing tenths, hundredths, one thousandths; writing as fractions and mixed numbers; comparing; ordering; renaming to thousandths; word forms; money; word problems; rounding to nearest hundredth
- Multiplying a decimal by a whole number, by a decimal, and by a power of 10
- Dividing a decimal by a 1-digit whole number; dividing a whole number by a whole number with a decimal quotient; dividing to rename a fraction as a decimal; dividing a decimal by a power of 10

#### Geometry

- Points; horizontal/vertical lines; parallel/intersecting/perpendicular lines; line segments; rays; angles: right, acute, obtuse; measuring angles
- Plane figures: circle, polygon, square, triangle, rectangle, pentagon, hexagon, octagon, quadrilateral, parallelogram, rhombus, trapezoid; edge, vertex; similar, congruent, symmetrical; translation, reflection, rotation; perimeter, circumference, area
- Solid figures: sphere, cone, cylinder, polyhedron, cube, prism, pyramid; face, edge, vertex, curved surface; nets; surface area; volume

- Circle: center point, radius, diameter, chord, central angles
- Triangles: sum of angles = 180°; acute, obtuse, right; isosceles, scalene, equilateral

#### **Estimation**

- Rounding to a given place
- Rounding for addition, subtraction, multiplication, and division
- Whole numbers; fractions; decimals
- Length; distance; capacity; weight; mass

#### Measurement

- Length; capacity; weight; mass; temperature
- Time: past and future elapsed time; equivalent units; converting units; adding and subtracting
- · Calendar; writing dates

#### **Problem Solving**

 Use a problem-solving plan: problems; graphs; tables; charts; schedule; map skills; logic; probability; money; multi-step problems; problems with too little or too much information

#### Data

- Tables; charts; tallies; frequency table; line plot; stem-and-leaf plot
- Pictograph; bar/double bar graph; line/double line graph; circle graph; coordinate graph
- Mean, median, mode; range; frequency; scale; interval

#### Ratios, Proportions, Percents

- Equivalent ratios; unit rate; scale drawings; map scale
- Writing percents as fractions and decimals; writing fractions as percents; comparing percents to decimals and fractions; finding the percent of a number

#### Calculators

Varied activities

## English

Writing & Grammar 2nd Edition



#### Parts of Speech

- Noun: common, proper, singular, plural, possessive; abbreviation; as a subject, object, and predicate noun
- Verb: action, linking, helping; present, past, future, perfect tenses
- Pronoun: subject, object, possessive, reflexive
- Adjective: article, demonstrative, proper, predicate adjective; adverb
- Preposition; conjunction: coordinating, subordinating

#### Sentence Structure

- Sentence: simple, compound, complex; fragment; subject part, simple subject, predicate, simple predicate
- Sentence types: declarative, interrogative, imperative, exclamatory
- Compound subjects; compound predicates; clauses: independent, dependent; phrases:

introductory, prepositional; diagramming; basic sentence patterns

#### Mechanics

- Capitalization: proper nouns, titles, abbreviations, initials
- Punctuation: period, question mark, exclamation point, comma, apostrophe

#### Usage

 Homophones, pronoun reference; subject/verb agreement; contractions; prefixes; suffixes

#### Writing Skills

- Using a thesaurus; avoiding dishonest tactics in persuasion
- Planning: word web, time-order chart, opinion chart, scene map, events/details chart, T-chart, Venn diagram, outline
- Revising; proofreading: proofreading marks; writing conferences; writing a bibliography

#### **Writing Projects**

 Compare-contrast essay; persuasive business letter; diamante; sense poem; personal narrative; book review; research report; imaginative instructions; play

#### Study & Reference Skills

- Reference skills: parts of a book: title page, table of contents, index, glossary, bibliography; encyclopedia; periodicals; library: electronic catalog; atlas; almanac; textbook
- Dictionary skills: guide words, parts of an entry, multiple definitions, multiple entries (homographs)
- · Study skills: taking notes, outline

#### **Listening & Speaking Skills**

 Speaking skills: oral-book review, presenting a play

# **Reading** 2nd Edition



#### **Word Recognition**

- Syllable division; accented syllables; primary/secondary accents; shift in accent; base words/ prefixes/suffixes; schwa syllables
- Optional remedial phonics

#### Vocabulary

 Meaning from context; synonyms; antonyms; analogies; Greek and Latin roots; adverbs; adjectives; acronyms; contractions

#### Comprehension

- Emphasis on critical and appreciative levels; biblical truth
- Sequence; classify; compare and contrast; cause and effect; problem and solution
- Draw conclusions; predict/evaluate outcomes; make judgments; allegorical comparisons
- Relevant/irrelevant information; facts/opinions; main idea; dialect; discernment; sense of history

#### Literature

 Reading a variety of genres: fiction, realistic fiction, historical fiction, science fiction, fantasy, folktale, fables, article, Bible

- account, biography, poetry, legend, narrative, parable
- Main and lesser characters; character motives, traits, growth and change
- Setting; plot; conflict; crisis; point of view; moral; mood; suspense; resolution; theme; symbols
- Author biographies; allegorical setting; propaganda
- Idiom; imagery; figurative language; metaphor; simile; hyperbole; allusion; understatement; humor
- Poetry: rhyme patterns; onomatopoeia; alliteration; assonance; enjambment

#### Study Skills

- Glossary; index; encyclopedia; dictionary; Bible study; crossreferences; card catalog; Dewey decimal system; atlas; captions; headlines; subheadings
- Skimming; scanning; PQ3R study method; outlining; paraphrasing; note taking; summarizing; topic sentence; listening strategy
- Maps; diagrams; graphs; charts; timeline, tables

#### **Fluency**

- Silent Reading: for information, entertainment, understanding, spiritual growth, author's message, biblical truth
- Oral Reading: communicate author's message; communicate mood, motive, meaning; convey emotion; portray character, voice expression; volume and rate

#### Composition

- Book review; character sketch; writing in response to reading; brainstorming ideas
- Plot; caption; dialogue; alliteration; assonance; simile; dialect
- Short story; fable; parable; play; folktale; legend; modern realistic fiction
- Biography; descriptive paragraph; note of apology; fact/opinion; journal entry; speech writing; a personal experience; friendly letter
- Summary; writing directions/process; advertisement; news article; tables/charts; research writing

## Spelling

2nd Edition



#### 32 Weekly Word Lists

- Word lists: 20 pattern words, 5 review words
- Interactive study method

#### Generalizations

- Phonics generalizations: review of long, short, and r-influenced vowel sounds; diphthongs; reliable patterns in multisyllable words; unstressed syllable vowel patterns
- Structural generalizations: compound words, inflectional suffixes, prefixes, derivational suffixes
- Suffix rules: no change to the base word, doubling the final consonant, dropping the final e, changing y to i

#### **Word Study**

- Word sorting: classifying words based on shared features
- Word building: forming words by manipulating patterns, syllables, affixes
- Word meaning: using a word in the context of meaning (definitions, synonyms, antonyms, homophones, homographs, categories, analogies)

#### **Proofreading**

- Spelling awareness: identifying the correct spelling for a given word, identifying and correcting misspelled words in sentences or passages
- Standardized-test practice

#### **Dictionary Skills**

Location skills

- Alphabetical order to the fourth letter: alphabetizing words between guide words
- Use of the pronunciation key
- Use of a dictionary entry: entry word, pronunciation, word forms, definitions, sample sentences, etymology
- Syllable division: base words and affixes, two-syllable vowelconsonant patterns, unstressed syllables
- Accenting syllables: compound words, words with affixes, syllable patterns, accent changes in homographs

#### **Writing Activities**

- Dictation sentences in weekly tests
- Real-life writing application

# Handwriting

2nd Edition



- Maintaining cursive alphabet: uppercase and lowercase
- Maintaining good handwriting skills using 3/8" writing lines
- Applying use in subject content areas—Bible, math, English skills, science, Heritage Studies
- Copying good cursive models that include Scripture, poetry, timelines, tables, diaries, logs, maps, quotations, character traits, and hymns



### **Bible Truths**

Redemption: God's Grand Design 4th Edition



#### **Bible Content**

- Integrates doctrine into a chronological and thematic study of the Old and New Testaments
- Bible characters include Adam and Eve, Noah, Abraham, Joseph, Ruth, David, Hezekiah, Jesus, Peter, and Paul.
- Themes include God's covenant, under the blood, God's providence, the Incarnate Word, the book of Revelation, and the history of the Bible.
- Lessons for Thanksgiving, Christmas, and Easter

#### **Bible Study Skills**

- · Using a Bible commentary
- Reinforces interpreting meaning, using cross-references, abbreviations, a concordance, and a Bible dictionary

#### Character Emphasis

- Walking with God segments cover 38 application topics for students to study what God says and then evaluate their attitudes and actions
- Character traits used in application stories and a novel show

students their need of Christ as Savior and application of biblical principles to personal life situations.

## Bible Truths for Christian Growth

• 164 questions correlated with 10 biblical themes

#### **Memory Verses**

• 36 verses or passages

#### Science

4th Edition



#### **GENERAL SCIENCE**

Process skills, science tools, scientific method

# EARTH SCIENCE Earth

- Earthquakes: faults, causes, recording and interpreting data from earthquakes
- Volcanoes: causes, locations, classifying by shape and eruption, effects and products of volcanoes
- Weathering and erosion: types and examples of mechanical and chemical weathering, agents of erosion, types of erosion
- Soil: particles and texture of soil, formation, horizons
- Natural resources: renewable and nonrenewable energy resources (fossil fuels, nuclear energy, hydroelectric energy, geothermal energy, wind energy, solar energy), minerals, metals, soil conservation, water; reduce, reuse, recycle

#### Space

- Stars: magnitude, size, distances between, kinds of stars, constellations, star groups, asteroids, meteoroids, comets, telescopes, spectroscopes
- Solar system: parts of the sun, solar storms, seasons, the planets, dwarf planets, eclipses, space exploration, satellites, probes

#### LIFE SCIENCE Living Things

- Cells and classification: characteristics of living things, cell theory, tissues, organs, systems, cell reproduction, six kingdoms of classification, scientific names, microscopes
- Animal classification: invertebrate phyla (Porifera, Cnidaria, echinoderms, mollusks, worms, arthropods), vertebrates (fish, amphibians, reptiles, birds, mammals)
- Plant classification: nonvascular plants (mosses and liverworts), seedless vascular plants (ferns, horsetails, and club mosses), gymnosperms, angiosperms, parts of a plant
- Plant and Animal Reproduction: parts of a flower, pollination and fertilization, types of fruit, seeds, spores, asexual reproduction, gestation, placental and marsupial mammals, eggs, parental care
- Genetics: heredity, traits, DNA structure, Mendel's experiments, dominant and recessive genes, Punnett squares, genetic disorders and diseases, genetic engineering

#### **Human body**

 Nervous system: central nervous system, the brain, the peripheral nervous system, neurons,

- reflexes, the five senses, memory, sleep, disorders, drug abuse, endocrine system
- Immune system: communicable and noncommunicable diseases, pathogens, vectors, epidemics, nonspecific responses, the immune response, functions of white blood cells, immunity, antibiotics, antibodies, autoimmune diseases, allergies, transfusions and transplants, immune deficiencies

## PHYSICAL SCIENCE Motion

 Motion and machines: velocity, acceleration, momentum, Newton's laws of motion, work, simple machines, compound machines

#### Energy

• Electricity: static and current electricity, types of circuits, measuring electricity, batteries, magnetism, electronics, integrated circuits, computers

#### Matter

 Chemistry: parts of an atom, atomic theory, classifying elements, periodic table of the elements, compounds, chemical formulas, chemical reactions, atomic bonds, acids and bases

## **Heritage Studies**

3rd Edition



#### **Focus**

 Developing a Christian worldview of ancient civilizations (Creation to AD 1500)

#### Geography

- Map skills
- · Climate; natural resources
- Topography
- Comparison of characteristics of ancient civilizations with the modern regions

#### **World History**

Historical events

- Conflicts between nations
- Archaeological findings

#### Government

- Empires and kingdoms
- Rulers
- Development of cities

#### **Economies**

- Trade
- Currency
- Job specialization

#### Culture

- Religions and philosophies
- Ancient customs and traditions

- Languages
- · Arts and music
- Food and clothing

#### **American History**

- Ancient influences on American government and economy
- World War II

#### **Social Studies and Skills**

- · Cause and effect
- Timeline
- Costs and benefits
- Primary sources

## Math

3rd Edition



#### **Number Sense**

- Recognize and write 0–100,000,000,000 as numerals and words; Roman numerals I–C
- Place value: ten thousandths to hundred billions; comparing; expanded form; even/odd, positive/negative, prime/composite numbers; number line; expressions and equations
- Part-whole relationships; inverse operations

#### **Addition & Subtraction**

- Basic facts (fact families and other strategies); nine-digit column addition
- · Mental compensation
- Properties: Commutative, Associative, Identity; Zero Principle

#### Multiplication

- Basic facts (fact families and other strategies); multiples; repeated addition; vertical form; 1–3 digits times 2–4 digits; renaming; factor trees; prime/composite numbers; GCF; LCM
- Properties: Commutative, Associative, Identity, Zero, Distributive

#### Division

 Basic facts (fact families and other strategies); equal sets; measurement/partition; fraction form; equations; mental division by 10; 2–4 digits by 1–2 digits; remainders; mixed number and decimal quotients; decimal equivalent for a fraction

#### **Equations**

 Inverse operations; compensation; simplify expressions; evaluate expressions; if-then statements; solve for an unknown

#### Pre-Algebra

 Missing addend/subtrahend/ minuend/factor; add, subtract, multiply, and divide integers; positive/negative numbers  Variables in expressions and equations; solve for a variable in an equation

#### Fractions

- Part of a whole; part of a set; equivalent fractions; comparing; ordering; lowest terms; renaming improper fractions and mixed numbers
- Add, subtract, multiply, and divide like and unlike fractions; cross-products; cancellation; pictorial representations or journal entries to express understanding of operations

#### Decimals

- Read and write tenths, hundredths, thousandths; write as fractions and mixed numbers; comparing; ordering; renaming to thousandths; word forms
- Add and subtract
- Multiply a decimal by a whole number, by a decimal, and by a power of 10
- Divide a decimal by a 1-digit whole number; divide a whole number by a whole number with a decimal quotient; divide to rename a fraction as a decimal; divide a decimal by a power of 10

#### Geometry

- Points; lines: parallel, intersecting, perpendicular; line segments; rays; symmetry; similar/congruent; constructions; angles: right, acute, obtuse; measure angles; sum of angles in a triangle = 180°
- Plane figures: regular/irregular; polygons; triangles: scalene, isosceles, equilateral; quadrilaterals; parallelograms; transformations: translation, reflection, rotation; perimeter; area
- Solid figures: sphere, cone, cylinder, polyhedrons, cube, prisms, pyramids; face, edge, vertex, curved surface; nets; surface area; volume
- Circle: center point, radius, diameter, chord, central angles, circumference

#### Estimating

- Round whole numbers and decimals to a given place; round fractions to the nearest ½ or whole; front-end estimation
- Round to estimate a sum, difference, product, and quotient

#### Measurement

- Length; capacity; weight; mass
- Temperature: Fahrenheit; Celsius
- Time: elapsed time; time zones; timeline; 24-hour clock; wages
- Rename within the metric and customary systems to add, subtract, multiply, and divide

#### **Problem Solving**

- Graphs; tables; charts; schedule; map skills; probability; money; Venn diagram
- Use a problem-solving plan: Multistep problems; problems with too little or too much information; group planning
- Strategies: patterns; logic; guess and check; diagram/model; simpler problem; formulas; work backwards; write an equation

#### **Statistics & Graphs**

- Pictograph; bar/double bar graph; line/double line graph; histogram; circle graph; coordinate graph
- Tables; charts; tallies; frequency table; line plot; stem-and-leaf plot; box-and-whisker plot
- Mean, median, mode; range; frequency; scale; interval

#### **Ratios, Proportions, Percents**

- Equivalent ratios; unit rate; scale drawings; map scale
- Percents as fractions and decimals; write fractions and decimals as percents; compare percents to decimals and fractions; find the percent of a number; determine the sales price given a discount as
- · Proportionate geometric figures

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## English

Writing & Grammar 2nd Edition



#### Parts of Speech

- Noun: common, proper, singular, plural; abbreviation; appositive; singular and plural possessive; English words from Greek root words; as subjects, objects
- Verb: principal parts; past, present, and future tenses; perfect tenses
- Pronoun: subject, object, possessive, reflexive, intensive, interrogative, demonstrative, indefinite; with antecedent
- Adjective: article, proper, demonstrative, as in the predicate
- Adverb: comparative, superlative
- Preposition; conjunction: coordinating, subordinating; interjection

#### Sentence Structure

- Sentence: fragment; run-on; simple, compound, complex; declarative, interrogative, imperative, exclamatory
- Complete subject and predicate; simple subject and predicate;

- compound subjects and predicates
- Dependent and independent clauses; introductory prepositional phrases; sentence patterns; diagramming

#### Mechanics

- Capitalization: proper nouns, proper adjectives, abbreviations, initials, titles
- Punctuation: period, question mark, exclamation point, comma, apostrophe

#### Usage

 Homophones; pronoun reference; subject/verb agreement; contractions; often-confused verbs; double negatives; misplaced modifiers; prefixes; suffixes

#### Writing Skills

- Using a thesaurus; avoiding propaganda tactics; bibliography; outline
- Planning: word web, plot diagram, Venn diagram, persuasion

- chart, time-order chart, events/details chart
- Revising; proofreading: proofreading marks; writing conferences

#### **Writing Projects**

 Personal narrative; newspaper editorial; instructions; research report; historical fiction; comparecontrast essay; limerick; free verse; cover letter

#### Study & Reference Skills

- Reference skills: parts of a book, title page, table of contents, index, glossary, bibliography
- Dictionary skills: guide words, parts of an entry, multiple definitions
- · Study skills: taking notes, outline

#### **Listening & Speaking Skills**

 Speaking skills: oral publishing for written instructions

## Reading

2nd Edition



#### **Word Recognition**

Syllable division and accented syllables review

#### Vocabulary

- · Vocabulary review and quizzes
- Meaning from context; synonyms; antonyms; prefixes; suffixes; analogies; Greek and Latin roots; etymologies; adjectives; adverbs

#### Comprehension

- Emphasis on critical and appreciative levels; biblical truth
- Sequence; classify; compare and contrast; cause and effect; problem and solution
- Draw conclusions; predict/ evaluate outcomes; making judgments; interpret information
- Relevant/irrelevant information; facts/opinions; main idea; discernment; sense of history

#### Literature

- Reading a variety of genres: fiction, realistic fiction, historical fiction, fantasy, folktale, fable, article, Bible account, biography, poetry, narrative
- Main and lesser characters; character, motives, traits, growth

- and change; flat/round, dynamic/ static characters; comparing and contrasting characters
- Setting; plot; conflict; crisis; point of view; foreshadowing; flashback; moral; mood; tone; suspense; denouement; cliffhanger; resolution; open/closed endings; theme; symbolism; good/evil
- Author biographies; propaganda, Caldecott and Newbery awards
- Idiom; personification; exaggeration; hyperbole; allusion; understatement; sarcasm; irony; dialect
- Poetry: rhyme, rhythm, alliteration, anaphora

#### **Study Skills**

- Glossary; encyclopedia; thesaurus; Bible study; catalog order;
   Dewey decimal system; nonprint media; periodical guide; atlas; headlines; primary/secondary sources; Venn diagram; graphic organizers
- Skimming; scanning; PQ3R study method; outlining; paraphrasing; note taking; summarizing; topic sentence; listening strategy
- Maps; diagrams; graphs; charts; timeline; tables

#### **Fluency**

- Silent Reading: for information, entertainment, understanding, spiritual growth, author's message, biblical truth
- Oral Reading: communicate author's message; communicate mood, motive, meaning, emotion; persuasive manner; interpret dialect; choral reading; voice expression; reading rate

#### Composition

- · Setting; plot; character sketch
- Advertisement; article; predictions; summary; compare and contrast; charting; report; time line; interview; research; brainstorming ideas
- Short story; play; tall tale; Biblical fiction; devotional; radio broadcast; personal experience; humorous incident letter; opinion; thank you note; friendly letter; descriptive paragraph
- Poem; riddles; haiku; cinquain; rhymes; choral reading
- Devices of style: imagery, hyperbole, allusion; theme; irony; pun; point of view; figurative language

### Spelling 2nd Edition



#### 32 Weekly Word Lists

- Word lists: 25 words (20 pattern words, 5 review words)
- · Interactive study method

#### Generalizations

- Phonics generalizations: reliable patterns in multisyllable words, including review of previously learned vowel and consonant patterns; unstressed syllable vowel patterns
- · Structural generalizations: compound words, inflectional suffixes, prefixes, derivational suffixes
- Suffix rules: no change to the base word, doubling the final consonant, dropping the final e, changing y to i
- Etymology: Greek word parts; Latin prefixes, roots, and suffixes

#### **Word Study**

- · Word sorting: classifying words based on shared features
- · Word building: forming words by manipulating patterns, syllables, affixes, word roots
- · Word meaning: using a word in the context of meaning (definitions, synonyms, antonyms, homophones, homographs, categories, analogies, derivations, and sentence completion)

#### Proofreading

- · Spelling awareness: identifying and correcting misspelled words in sentences or passages
- Standardized-test practice

#### **Dictionary Skills**

- Alphabetical order: alphabetizing words between guide words
- · Use of the pronunciation key

- Use of a dictionary entry: entry word, pronunciation, parts of speech, word forms, definitions, sample phrases or sentences, etymology
- Syllable division: base words and affixes, two-syllable vowelconsonant patterns, unstressed syllables
- Accenting syllables: compound words, words with affixes, syllable patterns, accent shifts in homographs and derivations

#### **Writing Activities**

- · Dictation sentences in weekly tests
- Real-life writing application

# **Handwriting**

2nd Edition



- Maintaining cursive alphabet: uppercase and lowercase
- Maintaining good handwriting skills using 3/8" writing lines
- Applying use in subject content areas—Bible, math, English skills, science, Heritage Studies
- Copying good cursive models that include Scripture, poetry, timelines, tables, diaries, logs, maps, quotations, character traits, and hymns



# Elementary Spanish

# Pasaporte al español Kit A



Equips teachers to meet the national standards set by the American Council on the Teaching of Foreign Languages in five areas:

#### Communication

 Presents over 250 Spanish words and phrases in context and numbers to 100; develops listeningcomprehension skills through read-aloud books; provides native-speaker recordings of conversations and total physical response commands for listening and modeling; leads students to move, point, color, read, and spell through a variety of worktext activities

#### Cultures

 Introduces cultural aspects of eight Spanish-speaking countries as well as useful facts about Hispanic culture in general

#### **Connections**

 Integrates interdisciplinary connections such as science, math, music, and drama; offers practice in grammar, vocabulary, and pronunciation through songs, Bible verses, and Bible truths

#### Comparisons

 Provides an opportunity to compare Hispanic culture with the students' own culture through recipes, music, and additional theme-related cultural information

#### **Communities**

 Arouses interest in missionary work; suggests community outreach activities; encourages parent participation with vocabulary clip-and-learn flashcards

# Pasaporte al español Kit B



Equips teachers to meet the national standards set by the American Council on the Teaching of Foreign Languages in five areas:

#### Communication

 Presents more than 500 Spanish words and phrases in context; develops listening-comprehension skills through read-aloud books, recorded conversations for listening and modeling, dictation exercises, and total physical response commands that lead students to move, point, pantomime, speak, read, and write through a variety of classroom and worktext activities

#### **Cultures**

 Highlights cultural aspects of eight Spanish-speaking countries; presents a variety of facts about Hispanic culture in general

#### Connections

 Makes interdisciplinary connections with Heritage Studies, science, math, geography, and other subjects; offers practice in grammar, vocabulary, and pronunciation through songs, Bible verses, and Bible truths

#### Comparisons

 Contrasts Hispanic culture with the students' own culture through recipes, music, and additional theme-related cultural information

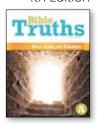
#### Communities

 Arouses interest in missionary work; encourages parent participation with vocabulary clip-andlearn flashcards



#### **Bible Truths**

4th Edition



#### **Bible Content**

- · A complete study of Christ's life, including events and topical studies of the Lord's teaching
- Includes brand new unit on the Sermon on the Mount

#### Applying the Bible to Life

· Focuses on the character traits Christ taught and embodied

#### **Special Studies**

• The Romans, Herod, Jewish leaders, Jewish holidays, the Crucifixion, Israel, Sea of Galilee

#### **Memory Verses**

84 verses

#### **Number of Lessons**

· Single-column; 7 units divided into continuous sections

## **Life Science**

4th Edition



- · Foundations of life science:
- definition of science, modeling, thinking scientifically, limitations of science, biblical vs. naturalistic worldview; scientific method; characteristics of life, cell theory, molecules and life; classification of life; cell structure and function, cellular respiration, photosynthesis
- Heredity and the origin of life: genes and cell division, mitosis and meiosis, asexual and sexual reproduction; DNA replication, RNA transcription, protein synthesis; Mendelian genetics, genetic crosses, variations on simple genetics; genetic disorders; gene mutations, chromosomal changes, genetic engineering, cloning, stem cell technology; biblical Creationism, nonliteral views of Creation, age of the earth, the Flood, fossils; history of evolutionary theory, mutations and evolution, evolutionary family trees, speciation
- Microbiology and plant biology: archaebacteria vs. eubacteria; bacterial structure, reproduction and importance; antibiotic resistance in bacteria; viruses; protozoan movement, nutrition, and reproduction; algal structure,

- nutrition, and reproduction; importance of protists; structure, nutrition, and importance of fungi; plant structure; water movement, gas exchange, and photosynthesis in plants; plant growth and hormones; plant tropisms, nastic movements, and photoperiodism; plant classification and life cycles; sexual and asexual reproduction in plants; flower structure, seeds, and pollination
- The animal kingdom: sponges, cnidarians, flatworms, roundworms, earthworms, mollusks, echinoderms, arthropods; endotherms and ectotherms, body systems in vertebrates; fish, amphibians, metamorphosis, reptiles; birds, mammals, classification of mammals: animal behavior, external and internal fertilization, egg structure and development, placental reproduction
- Interactions in the environment: ecosystems, biomes, abiotic environment, water cycle, succession; biotic community, populations, carbon and oxygen cycles, nitrogen cycle, limiting factors; circadian rhythms, seasonal rhythms; food chains, food webs,

- ecological pyramids; organism relationships, competition, camouflage, warning coloration, mimicry, predation, symbiosis, parasitism; natural resources, agriculture, endangered species, extinction, human population changes, conservation, pollution
- · The complex design of the human body: structure and function of skin, burns; structure and function of skeletal system, fractures, joints; types of muscles, muscle physiology; homeostasis, types of blood cells, blood clotting, blood types, blood plasma; blood vessels, heart structure, flow of blood through heart, blood pressure; immune system, organ transplants; allergies, autoimmune diseases, and AIDS; excretory system; anatomy, physiology, and disorders of the respiratory system; anatomy and physiology of the digestive system, chemical digestion; nervous system, reflexes, brain anatomy, sense organs; hormones and endocrine glands, puberty; metabolism, nutrition; psychoactive drugs, smoking, addiction; spread of disease, protection against disease

#### **World Studies**

3rd Edition



#### Topic

· World cultures (Creation to the present)

#### Geography

• Influence of geography on the development of civilizations

 Chronological and cultural approach to world studies

#### Government

 Comparative world governments in history

#### **Economics**

· Comparative economics historically and geographically

#### Religion

· Historical comparison of world religions (especially Islam) to Christianity

#### Culture

· Arts; sciences; ways of life in the past and the present

# Fundamentals of Math

2nd Edition



- Whole numbers: comparing and ordering; estimating; operations; exponents; roots of perfect squares
- Decimals: comparing and ordering; rounding; approximating square roots; operations; estimating square roots; scientific notation
- Number theory: divisibility; factors; prime and composite numbers; GCD and LCM; converting to and adding in other number bases
- Fractions: equivalent fractions; mixed numbers; comparing and ordering; operations; order of operations
- Rational numbers: ratio and proportion; solving proportions; scale drawings; decimals as rational numbers; finding a percent (part) of a number; finding the percent; finding the whole amount

- Using percents: enlargement and reduction; sales tax; discounts; sale price; simple interest; commission; percent change
- Measurements: customary units of length, capacity, and weight; SI (metric) units of length, capacity, and mass; renaming metric units; time zones; temperature conversions; precision
- Geometry: measuring angles; pairs of angles; perpendicular and parallel lines; transversal of parallel lines; polygons; circle; perimeter and circumference; Pythagorean theorem; congruent and similar figures
- Area and volume: area of quadrilaterals, triangles, and circles; areas of similar figures; surface area of prisms, cylinders, and pyramids; volume of prisms and cylinders
- Probability and statistics: fundamental principle of counting;

- permutations; probability; mean, median and mode; circle, bar, and line graphs; histograms; boxand-whisker plots; stem-and-leaf diagrams
- Integers: ordering; operations; applying order of operations; expansion to and properties of the real numbers
- Algebra: evaluating expressions; solving one- and two-step equations; solving one- and two-step inequalities
- Relations and functions: coordinate plane; functions and function rules; graphing linear functions; slope; translation of figures in a plane
- Logic and set theory: statements and negations; compound and conditional statements and negations; truth tables; sets and subsets; union and intersection of sets; finite and infinite sets

# **Pre-Algebra**2nd Edition



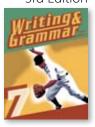
- Integers: absolute value; operations; exponents; order of operations; scientific notation
- Expressions: real-number properties; evaluating and simplifying expressions; translating word phrases; rounding and estimating results of operations
- Equations: solving two-step equations; removal of parentheses; subsets of the real numbers; irrational numbers; solving linear inequalities; applying equations and inequalities
- Number theory: prime factorization; GCD and LCM; arithmetic and geometric sequences; number bases other than 10, including hexadecimal; operations in other bases
- Rational numbers: forms of; ordering fractions and decimals; decimal equivalents of fractions; conversion of repeating decimals to fractions; ratios and proportions; subsets and properties of real numbers

- Operations on rational numbers: operations; evaluating and simplifying expressions; solving equations involving rationals; operations in scientific notation
- Percents: solving percent equations; applying percents; scales; discount, markup, commissions, tips, and interest (including compound); percent change
- Applications: equations with variables on both sides; writing and solving equations and inequalities
- Relations and functions: coordinate plane; functions; graphing linear functions and linear inequalities; slope; direct variation
- Statistics and probability: population and sample; mean, median, and mode; scatterplot; quartiles; box-and-whisker; stem-and-leaf; histograms; choosing the correct type of graph; permutations; combinations; probability
- Radicals: square roots; radical equations; equations with

- radicals; equations of the form  $ax^2+b=c$ ; Pythagorean theorem; operations with radicals; cube roots
- Geometry: pairs of angles; polygons; perimeter and circumference; congruence and similarity; 30–60 and 45–45 right triangle ratios; distance and midpoint formulas; symmetry and transformation
- Areas and volumes: areas of quadrilaterals, triangles, and circles; relation of lengths and areas of similar regions; surface areas of prisms, cylinders, pyramids, cones, and spheres
- Polynomials: definition of a polynomial; operations with polynomials, including multiplying binomials and dividing a polynomial by a monomial

## **Writing & Grammar**

3rd Edition



#### Parts of Speech (and Verbals)

 Noun; pronoun; verb; simple and perfect tenses; adjective; adverb; preposition; conjunction; interjection

#### Sentence Structure

Sentence patterns: S-InV,
 S-TrV-DO, S-TrV-IO-DO, S-LV-PN,
 S-LV-PA; introduction to dependent clauses; sentence types: declarative, interrogative, imperative, exclamatory; clause structure: simple, compound, complex; sentence errors: fragments, comma splices, fused sentences

#### Mechanics

Capitalization; punctuation; spelling

#### Usage

 Subject/verb agreement; pronoun/antecedent agreement; pronoun reference; troublesome words (homophones, homonyms, etc.)

#### Writing Skills

Writing process: planning, drafting, revising and proofreading, publishing; paragraph development: fact, example, statistic, incident/anecdote, sensory detail, reason; paragraph organization: chronological, spatial, order of importance; style: precise words, showing; not telling

#### **Examples of Writing Projects**

- Description: biographical sketch
- Exposition: in-class essay, science report evaluation

- Narration: family tradition report, drama scene
- Persuasion: letter to editor
- Poetry: sound poem

#### Study & Reference Skills

 Dictionary: guide words, entry word, syllabification, pronunciation, definition, function label, etymology; library: types of materials, call number, alphabetizing, Dewey decimal system, Library of Congress system, card catalog, computer catalog; reference tools; parts of a book; scheduling study time; memory techniques; reading comprehension: definitions, restatements, examples, word parts; test-taking strategies: classroom tests, standardized tests

# **Explorations** in Literature

4th Edition



#### Approach

Thematic

#### Organization

 Six themes: courage, nature and man, generosity, our land, humility, family

#### Content

 Genres represented: fables, drama, poetry, hymns, Scripture, short story, biography, autobiographical accounts, historical essays, essays • Cultures represented: American, English, Russian, New Zealand

#### Features

• The book contains introductory essays that acquaint the student with the unit themes. Selections within each of the units require reading with discernment, a goal toward which all literature teachers hope to direct their students. "Thinking Zone" question pages introduce students to terms and concepts used in literary analysis. Questions progress from literal

to interpretive to critical to appreciative and guide the students in evaluating the literature and applying the associated concepts. Unit Review pages ask questions about key terms and concepts. The text also includes short biographical sketches of individual authors.

# Vocabulary: Level A

3rd Edition



#### Approach

 The texts use context as a major means of learning.

#### Plan

 Each text includes fifteen two-part lessons, fifteen cumulative reviews, and a supplement containing various means of reinforcement and vocabulary-building exercises (games, puzzles, contests, etc.).

#### Content

 These texts focus on Latin prefixes and roots, synonyms, antonyms, homonyms, word families, concise words, denotation, and connotation.

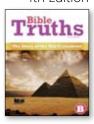
#### Features

 The texts use a variety of learning methods, including word stories and spelling helps. Lessons incorporate biblical stories with a focus on character building and are often related to other subjects students may be learning.



#### **Bible Truths**

4th Edition



#### **Bible Content**

- Takes students on a journey through the story of the Old Testament
- Points students to Jesus Christ, the name whispered throughout the OT
- Asks critical-thinking questions about Bible and textbook readings

 Supports biblical-worldview thinking by explaining how Creation-Fall-Redemption constitutes the narrative of the Bible

#### **Special Studies**

 Special "Ketuvim" sections cover Job, Psalms, Proverbs, Ecclesiastes, and Song of Solomon

#### **Memory Verses**

 Every section requires a Scripture reading and at least one memory verse

#### **Number of Lessons**

• 44 sections in 7 units

### **Earth Science**

4th Edition



• Introduction to Earth science: Earth science and exercising biblical dominion, worldviews and science, the structure of science, scientific models, what earth science is; maps and cartography, geographic information systems (GIS); introduction to physical sci-

ence, matter, forces, energy, and

measuring

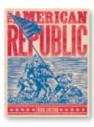
- The restless earth: Earth as a special place designed for life, a brief history of geology, operational and historical geology, the earth's interior structure, natural resources; old- and young-earth origin theories of the earth, evidences for catastrophic changes in earth's history, models for geologic tectonics; tectonic forces, faults and earthquakes, earthquakes and seismology, effects of earthquakes; mountains and hills, tectonic mountains and landforms, non-tectonic mountains and landforms; volcanic emissions, volcano activity and classification, intrusive volcanism
- Earth's rocky materials: describing minerals, identifying and classifying minerals, minerals as resources; classifying rocks, igneous rocks, sedimentary rocks,

- metamorphic rocks, critiquing the uniformitarian rock cycle; the process of fossilization, paleontology, fossil fuels; weathering, erosion and deposition, soils and soil formation
- The water world: ocean basins and landforms, seawater composition, ocean environments; tides, currents, waves; history of oceanography, methods and instruments, deep sea exploration, underwater habitats, research vehicles; stream characteristics, lakes and ponds, limnology; groundwater reservoirs, groundwater chemistry, water as a resource, solution caves and karst topography
- The atmosphere: composition and thermal structure of the atmosphere, special regions; energy in the atmosphere; measurable weather data, causes of wind, global wind patterns, sources of local winds, cloud formation, classifying clouds, precipitation, dew and frost; air masses and weather fronts, causes of precipitation, winter storms, thunderstorms, tornadoes, hurricanes, weather forecasting, weather maps,

- applications of GIS in weather modeling; describing climate and climate zones, climate data and interpretation, observed short-term climate changes from volcanism and oceanic cycles, climate models, worldviews and long-term climate change, environmentalism and biblical stewardship of the environment
- The heavens: the sun-Earthmoon system—the sun's structure, composition and energy, the solar spectrum; the moon's structure and surface, origin theories; Earth's orbit, seasons, timekeeping, lunar phases, eclipses, tidal effects; models of the solar system, Kepler's laws, classification and brief description of the planets, dwarf planets, small solar system bodies, evidences for a young solar system, constellations and star properties, stellar classification and the H-R diagram, stellar aging, classification of galaxies, non-stellar objects, cosmology and worldviews; challenges of space exploration, rocketry, principles of satellite and space probes, challenges and need for manned space exploration

## The American Republic

3rd Editior



#### Topic

· American history

#### Geography

 Geographic development of the United States through land acquisition; profiles of major geographic regions

#### History

 Introduction to the history of America

#### Government

 Republican form of government under the Constitution

#### **Economics**

 Development and effects of inventions and industries; successes and problems of the free market

#### Religion

 Influence of Christianity on American history; influences of religious diversity

#### Culture

Interaction of people, ideas, and cultures in America

## Pre-Algebra

2nd Edition



- Integers: absolute value; operations; exponents; order of operations; scientific notation
- Expressions: real-number properties; evaluating and simplifying expressions; translating word phrases; rounding and estimating results of operations
- Equations: solving two-step equations; removal of parentheses; subsets of the real numbers; irrational numbers; solving linear inequalities; applying equations and inequalities
- Number theory: prime factorization; GCD and LCM; arithmetic and geometric sequences; number bases other than 10, including hexadecimal; operations in other bases
- Rational numbers: forms of; ordering fractions and decimals; decimal equivalents of fractions; conversion of repeating decimals to fractions; ratios and

proportions; subsets and properties of real numbers

- Operations on rational numbers: operations; evaluating and simplifying expressions; solving equations involving rationals; operations in scientific notation
- Percents: solving percent equations; applying percents; scales; discount, markup, commissions, tips, and interest (including compound); percent change
- Applications: equations with variables on both sides; writing and solving equations and inequalities
- Relations and functions: coordinate plane; functions; graphing linear functions and linear inequalities; slope; direct variation
- Statistics and probability: population and sample; mean, median, and mode; scatterplot; quartiles; box-and-whisker; stem-and-leaf; histograms; choosing the correct

type of graph; permutations; combinations; probability

- Radicals: square roots; radical equations; equations with radicals; equations of the form ax²+b=c; Pythagorean theorem; operations with radicals; cube roots
- Geometry: pairs of angles; polygons; perimeter and circumference; congruence and similarity; 30–60 and 45–45 right triangle ratios; distance and midpoint formulas; symmetry and transformation
- Areas and volumes: areas of quadrilaterals, triangles, and circles; relation of lengths and areas of similar regions; surface areas of prisms, cylinders, pyramids, cones, and spheres
- Polynomials: definition of a polynomial; operations with polynomials, including multiplying binomials and dividing a polynomial by a monomial

# Algebra 1 3rd Edition



- Operations: review of the real number system, number lines, absolute value, arithmetic operations of integers and rational numbers, exponents, and order of operations
- Variables and equations: using variables, algebraic expressions, and formulas; writing and solving linear equations
- Using algebra: solving literal equations and proportions; applying equations to applications involving similar figures, percentages, money, motion, and mixtures
- Solving inequalities: linear inequalities, including conjunctions, disjunctions; absolutevalue equations and inequalities
- Relations and functions: representing relationships between

- data, using graphs, equations, and tables; direct and inverse variations; graphing absolutevalue functions
- Linear functions: graphs, slopes, and intercepts of linear equations; determining the equation of a line; parallel and perpendicular lines; correlation and lines of fit; graphing linear inequalities
- Systems of equations and inequalities: solving systems graphically, by substitution, and by elimination; applications of systems
- Exponents: products, quotients, and powers of exponential expressions; scientific notation; graphing exponential functions; exponential growth and decay
- Polynomials: classification, evaluation, operations, special patterns

- Factoring: common monomials, trinomials, special patterns
- Radicals: simplification and operations with radicals;
   Pythagorean theorem, distance and midpoint formulas; solving radical equations and graphing radical functions; applications
- Quadratic equations: solving by factoring, taking roots, completing the square, and the quadratic formula; graphing parabolas and finding zeros; applications
- Rational expressions and equations: simplification and operations with rational expressions; solving rational equations; applications (Each chapter includes a feature on sequences and graphing calculator tips.)

## Writing & Grammar

3rd Edition



#### Parts of Speech (and Verbals)

• Review of all from Grade 7 plus the following new material: pronoun—relative; verb—progressive tense, passive voice; conjunction—correlative; verbals—participle, infinitive, gerund, verbal phrases with modifiers, functions as different parts of speech

#### Sentence Structure

 Review of all from Grade 7 plus the following new material: dependent clause—adjective clause

#### Mechanics

Capitalization; punctuation; spelling

#### Usage

• Review of all from Grade 7

#### Writing Skills

 Review of all from Grade 7 plus the following new material: essay—thesis statement, outlining; introductory and concluding paragraphs

#### **Examples of Writing Projects**

- Description: travel brochure, character profile
- Exposition: news story, business letter
- Narration: autobiography, fable
- Persuasion: debate script, print advertisement

#### Study & Reference Skills

 Review of all from Grade 7 plus the following new material: dictionary—usage label

## Excursions in Literature

3rd Edition



#### Approach

Thematic

#### Organization

 Six themes: friends, choices, heroes, discoveries, adventurers, viewpoints

#### Content

- Genres represented: short fiction, novel, drama, poetry, hymns, folktale, personal essay, humorous essay, diary
- Cultures represented: American, English, French, Japanese,

Norwegian, Cuban, Chinese, Irish, Czech, New Zealand, Greek, Burmese, South African, German, Dutch, Yiddish, Polish

#### **Features**

• The book contains introductory essays that acquaint the student with the unit themes. Selections within each of the units require reading with discernment, a goal toward which all literature teachers hope to direct their students. "Thinking Zone" question pages introduce students to terms and

concepts used in literary analysis. Questions progress from literal to interpretive to critical to appreciative and guide the students in evaluating the literature and applying the associated concepts. Unit Review pages ask questions about key terms and concepts. The text also includes short biographical sketches of individual authors.

# **Vocabulary:** Level B 3rd Edition



#### Approach

 The texts use context as a major means of learning.

#### Plan

• Each text includes fifteen twopart lessons, fifteen cumulative reviews, and a supplement containing various means of reinforcement and vocabularybuilding exercises (games, puzzles, contests, etc.).

#### Content

 These texts focus on Latin prefixes and roots, synonyms, antonyms, homonyms, word families, concise words, denotation, and connotation.

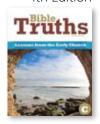
#### Features

 The texts use a variety of learning methods, including word stories and spelling helps. Lessons incorporate biblical stories with a focus on character building and are often related to other subjects students may be learning.



### **Bible Truths**

4th Edition



#### **Bible Content**

 In-depth studies of the books of Acts, 1 and 2 Thessalonians, 1 and 2 Corinthians, Galatians, and Romans

#### Applying the Bible to Life

 Focuses on practical principles derived from Paul's life and epistles

#### **Special Studies**

 Gamaliel, Herod's Temple, Roman gods, New Testament sports, the Jewish War

#### **Additional Resources**

- Detailed map of Paul's missionary journeys
- A program for Bible reading that teaches students to recognize major biblical themes

#### **Memory Verses**

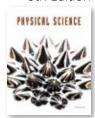
• 78 verses

#### **Number of Lessons**

• 56 lessons in 9 units

## **Physical Science**

5th Edition



- · Foundations: presents science as the primary means of creating models to explain and describe phenomena in a fallen and broken world, framed as an engaging forensics investigation into a recent passenger air crash; Christian versus secular worldview aspects of science; definition of key elements of scientific knowledge—laws, theories, and hypotheses; "dominion science" as a key aspect of obedience to the Creation Mandate; methodologies of science; introduction to the nature and classification of matter and energy; changes matter undergoes; scientific measurement; the metric system; accuracy, precision, and repeatability in measurements; introduction to significant digits and scientific notation
- Mechanics: describing motion; frames of reference; Newton's laws of motion; gravity; free-fall;

- momentum; kinetic and potential energy; energy transformations and conservation; mechanical work; levers and other simple machines; law of moments and efficiency; fluid mechanics, including basic hydraulic theory; Charles's and Boyle's gas laws; thermodynamics—thermal energy, temperature, and heat
- Electromagnetism: static electricity; electric fields; measuring and storing charges; electric current and Ohm's law; batteries; electrical safety; magnets and magnetism; geomagnetism; AC and DC generators and motors; transformers; electromagnets and their uses
- Periodic phenomena: description of periodic motion; pendulums; waves and wave phenomena; sound and its properties; infrasound and ultrasound; the human voice and hearing; applications of sound; bands of

- the electromagnetic spectrum; radio-frequency technology; the properties of visible light; the nature of color; reflection and mirrors; refraction and lenses.
- The structure of matter: historical development of the atomic model, structure of the atom; radiation and nuclear changes; origin of the periodic table; elements and their symbols; classification of the elements; periodic trends
- Introduction to chemistry:
  electronegativity and valence
  electron structure; covalent, ionic,
  and metallic bonds; compounds
  classified according to bond-type;
  chemical formulas and equations; oxidation numbers; types
  of chemical reactions; classifying mixtures; solutions and the
  solution process; measuring
  concentration; acids, bases; salts
  from acid-base reactions; pH
  system and measurement

## **Cultural Geography**

4th Edition



#### Topi

Physical, political, and cultural geography

#### Geography

Complete survey of geographic principles and regions; map skills

#### History

 Geographic approach to key historic events

#### Government

Overview of types of governments; current issues

#### **Economics**

• Influence of land, climate, and resources on national economics

#### Religion

 Stewardship of resources; status of Christianity; geography of Bible lands; comparative world religions; world missions

#### Culture

 Eight culture regions and their influence on lifestyles, language, arts, and culture

## Algebra 1

3rd Edition



- Operations: review of the real number system, number lines, absolute value, arithmetic operations of integers and rational numbers, exponents, and order of operations
- Variables and equations: using variables, algebraic expressions, and formulas; writing and solving linear equations
- Using algebra: solving literal equations and proportions; applying equations to applications involving similar figures, percentages, money, motion, and mixtures
- Solving inequalities: linear inequalities, including conjunctions, disjunctions; absolutevalue equations and inequalities
- Relations and functions: representing relationships between

- data, using graphs, equations, and tables; direct and inverse variations; graphing absolutevalue functions
- Linear functions: graphs, slopes, and intercepts of linear equations; determining the equation of a line; parallel and perpendicular lines; correlation and lines of fit; graphing linear inequalities
- Systems of equations and inequalities: solving systems graphically, by substitution, and by elimination; applications of systems
- Exponents: products, quotients, and powers of exponential expressions; scientific notation; graphing exponential functions; exponential growth and decay
- Polynomials: classification, evaluation, operations, special patterns

- Factoring: common monomials, trinomials, special patterns
- Radicals: simplification and operations with radicals;
   Pythagorean theorem, distance and midpoint formulas; solving radical equations and graphing radical functions; applications
- Quadratic equations: solving by factoring, taking roots, completing the square, and the quadratic formula; graphing parabolas and finding zeros; applications
- Rational expressions and equations: simplification and operations with rational expressions; solving rational equations; applications (Each chapter includes a feature on sequences and graphing calculator tips.)

# Geometry 3rd Edition



- Incidence geometry: sets; definitions; incidence theorems; sketches and constructions
- Subsets of lines, planes, and space: betweenness; curves; circles; polygons; polyhedra
- Segment measures: real number properties; segment measures and bisectors; perimeter; circumference; polygons; constructions
- Angle measures: inequality properties; angle measure and bisectors; polygons; angle constructions
- Preparing for proofs: statements; quantifiers; truth tables; proof types; deduction

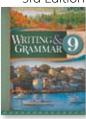
- Congruence: segments; angles; polygons; parallel lines cut by transversal; postulates; triangles
- Polygons: right triangles; exterior angles; triangle inequality; parallelograms; constructions
- Area: postulates; polygons; Pythagorean theorem; regular polygons; circles; surface area formulas
- Circles: chords; tangents; arcs; inscribed angles; sectors; constructions
- Space: perspective; separation; perpendiculars; parallels; polyhedra; spheres; earth; non-Euclidean geometry

- Volume: postulates; prisms; cylinders; pyramids; cones; polyhedra; spheres
- Transformations: reflections; translations; rotations; dilations; invariants; applications; symmetry
- Similarity: triangles; right triangles; proportions; problem solving; chords and tangents of circles; golden ratio
- Trigonometry: ratios; special triangles; solving right triangles; identities; applications; regular polygons

(Each chapter also has a feature on analytic geometry.)

## Writing & Grammar

3rd Edition



#### Parts of Speech (and Verbals)

Review of all from Grade 8
 plus the following new material: noun—collective; verb—
 indicative and imperative
 moods; adjective—determiner;
 adverb—qualifier, relative; preposition—phrasal; conjunction—subordinating; verbals—verbal
 phrases with objects

#### Sentence Structure

Review of all from Grade 8
 plus the following new material: dependent clause—
 adverb clause; clause
 structure—compound-complex

#### Mechanics

Capitalization; punctuation; spelling

#### Usage

 Review of all from Grade 8 plus the following new material: modifier placement—misplaced modifier, two-way modifier, dangling modifier

#### **Writing Skills**

• Review of all from Grade 8 plus the following new material: paragraph development—comparison/contrast; style—conciseness, smoothness, fresh words; sentence variety—length and complexity, sentence patterns, sentence beginnings; sentence expansion and reduction—dependent clauses, phrases, single words; sentence logic—misplaced and dangling modifiers; parallelism; avoiding biased language

#### **Examples of Writing Projects**

- Description: comparison/contrast paper
- Exposition: five-paragraph research essay, storyboard (public service announcement)
- Narration: personal experience
- Persuasion: devotional
- Poetry: quatrain, diamante

#### Study & Reference Skills

• Review of all from Grade 8 plus the following new material: dictionary—inflected forms, variant spellings, field label, stylistic label; library—Cutter number; reference tools—New York Times Index, subject index, yearbook, Bible commentary; reading comprehension—comparison and context; test-taking strategies—analogy

## Fundamentals of Literature

2nd Edition



#### **Approach**

Critical

#### Organization

 Six unit divisions: conflict, theme, character, structure, point of view, moral tone

#### Content

- Range of selections: classic to contemporary
- Genres represented: fiction, nonfiction, poetry, drama

- Cultures represented: American, English, French, Russian, Swedish, Japanese
- Supplementary material: Cyrano de Bergerac (video)

#### **Features**

 The introductory essays focus on six basic elements of literature.
 These elements lay the foundation for the student's understanding of interpretive literature and prepare him for the more detailed literary analysis in the tenth-grade text. In addition, the text uses Scripture passages to illustrate and clarify literary concepts. The unit introduction, as well as the headnotes and end questions for each story, encourages the student to use the information gleaned from reading to find meaning, to analyze that meaning in light of Scripture, and to apply the lessons to life.

## **Vocabulary:** Level C 3rd Edition



#### Approach

 The texts use context as a major means of learning.

#### Plan

• Each text includes fifteen twopart lessons, fifteen cumulative reviews, and a supplement containing various means of reinforcement and vocabularybuilding exercises (games, puzzles, contests, etc.).

#### Content

 These texts focus on Latin prefixes and roots, synonyms, antonyms, homonyms, word families, concise words, denotation, and connotation.

#### **Features**

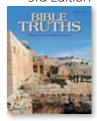
 The texts use a variety of learning methods, including word stories and spelling helps. Lessons incorporate biblical stories with a focus on character building and are often related to other subjects students may be learning.



## Grade 10

#### **Bible Truths**

3rd Edition



#### **Bible Content**

 Book and topical studies develop theological themes in Old Testament prose, poetry, and prophecy

#### Applying the Bible to Life

Focuses on honoring and obeying God in every area of life

#### **Special Studies**

 Mummies, geography of Palestine, archaeology, music and warfare in the Old Testament, priests

#### **Additional Resources**

 A chart grouping all Old Testament books by genre, listing authors and themes  A program for Bible reading that teaches students to recognize major biblical themes

#### **Memory Verses**

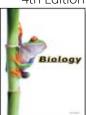
• 72 verses

#### **Number of Lessons**

• 51 lessons in 3 units

## Biology

4th Edition



· Science of life: God and science, truth, types of reasoning, faith, modeling, scientific method, limits of science, controlled experiments, attributes of life, study of life, measurement, microscopes, elements, thermodynamics, solutions, basic chemistry, organic chemistry, cell structure, organelles, levels of cellular organization, living state of cells, homeostasis, membrane transport, photosynthesis, aerobic and anaerobic cellular respiration, metabolism and protein synthesis, mitosis, meiosis, sexual reproduction, Mendelian genetics, genetic crosses, sex-linked traits, chromosome and gene changes, gene expression, gene mutations, cancer, population genetics, eugenics, Christian approach to biotechnology, cloning, genetic engineering, stem-cell technology, gene therapy, genetically modified crops, worldviews, philosophy of evolution, biological

evolution, biblical Creationism, intelligent design, Noah's Flood, fossils, dating methods, age of the earth

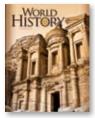
• Science of organisms: classification, binomial nomenclature, use of dichotomous keys, comparison of species and kind, speciation, phylogenetic trees, bacterial structure, bacterial reproduction, control of bacteria, viruses and related organisms, human diseases and disorders, disease detection and control, aging and death, protozoan classification and structure, algal structure and reproduction, algal classification, fungus-like protists, fungi classification and structure, plant classification, plant tissues and anatomy, plant physiology, conduction in plants, plant hormones, tropisms, plant reproduction, flower structure, animal characteristics and anatomy, sponges, cnidarians, flatworms, roundworms, segmented worms,

mollusks, echinoderms, arthropod characteristics, crustaceans, arachnids, insects, chordate characteristics, vertebrate life processes, vertebrate behavior, fish, amphibians, reptiles, birds, mammals, ecology, ecosystems, animal rights, pollution, Creation Mandate

· Study of human life: human distinctions; tissues, organs, and systems; diseases and disorders; integumentary, skeletal, muscular, respiratory, digestive, circulatory, lymphatic, excretory, nervous, endocrine, and reproductive systems; bone structure and growth; muscle structure and contraction; breathing; nutrition and digestion; blood; immunity; neurons and nerve function; brain; senses; hormones; smoking, alcohol, and other drugs; addiction; female cycles; human embryology and birth; human relationships; abortion and euthanasia; sexual purity

## **World History**

4th Edition



#### Topic

World history

#### Geography

 Chronological survey of physical and political geography

#### History

 Chronological survey of world history from Creation to the present

#### Government

 The relationship between Christians and the world's political systems

#### **Economics**

 Comparative economics from both a historical and a geographical perspective

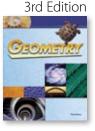
#### Religion

 Focus on western, Judeo-Christian heritage and Islam, while also surveying the religions of Asian, African, and Latin American cultures

#### Culture

 Examination of how individuals have carried out the Creation Mandate, including the development of their God-given talents in the fields of art, music, literature, and science

## Geometry



- Incidence geometry: sets; definitions; incidence theorems; sketches and constructions
- Subsets of lines, planes, and space: betweenness; curves; circles; polygons; polyhedra
- Segment measures: real number properties; segment measures and bisectors; perimeter; circumference; polygons; constructions
- Angle measures: inequality properties; angle measure and bisectors; polygons; angle constructions
- Preparing for proofs: statements; quantifiers; truth tables; proof types; deduction

- Congruence: segments; angles; polygons; parallel lines cut by transversal; postulates; triangles
- Polygons: right triangles; exterior angles; triangle inequality; parallelograms; constructions
- Area: postulates; polygons; Pythagorean theorem; regular polygons; circles; surface area formulas
- Circles: chords; tangents; arcs; inscribed angles; sectors; constructions
- Space: perspective; separation; perpendiculars; parallels; polyhedra; spheres; earth; non-Euclidean geometry

- Volume: postulates; prisms; cylinders; pyramids; cones; polyhedra; spheres
- Transformations: reflections; translations; rotations; dilations; invariants; applications; symmetry
- Similarity: triangles; right triangles; proportions; problem solving; chords and tangents of circles; golden ratio
- Trigonometry: ratios; special triangles; solving right triangles; identities; applications; regular polygons

(Each chapter also has a feature on analytic geometry.)

## Algebra 2 3rd Edition



**Operations:** real and complex numbers; polynomial; matrix; function

Linear equations: solving equations and inequalities; absolute value equations and inequalities; distance on number lines; word problems; compound inequalities Linear relations: graphs of linear functions; slopes; special functions; linear inequalities; distances and midpoints; modeling with linear regressions

**Systems:** solved graphically and algebraically; systems of inequalities; systems of three variables; problem solving; linear programming

Matrices: organizing data; operations; determinants; solving systems using Cramer's rule and inverse matrices; transformations **Quadratic Equations:** solving by factoring, taking roots, completing the square, and the quadratic formula; using the discriminant; complex roots; quadratic inequalities

Polynomial Functions: roots, graphing, and modeling with quadratic and polynomial functions; problem solving; rational root, remainder, and factor theorems; fundamental theorem of algebra

Radicals, Exponents, and Logarithms: rational exponents; inverse functions, simplifying expressions; solving equations, graphing and modeling with radical, exponential, and logarithmic functions; natural and common logarithms

Rational Expressions: simplifying; solving equations; graphing; variations **Trigonometry:** right triangle and coordinate plane trigonometry; special triangles and the unit circle; radians; graphs of trigonometric functions, inverse functions

**Trigonometric Identities:** Law of Sines; Law of Cosines; problem solving; proving identities; trigonometric equations

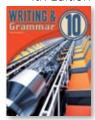
Sequences and Series: explicit and recursive formulas; arithmetic and geometric sequences and series; summation notation

Probability and Statistics: counting principles; theoretical and experimental probabilities; independent, dependent, and mutually exclusive events; binomial distribution, descriptive statistics, representing data; normal distributions; making inferences

**Analytic Geometry:** circles; parabolas; ellipses; hyperbolas; systems of quadratic relations

### **Writing & Grammar**

4th Edition



#### Parts of Speech (and Verbals)

Review of all from Grade 9
 plus the following new material: verb—subjunctive mood;
 pronoun—indefinite, relative,
 reciprocal; adverb—conjunctive;
 verbals—perfect gerund, passive
 infinitive

#### Sentence Structure

 Review of all from Grade 9 plus the following new material: sentence patterns—S-be-Advl, S-TrV-DO-OC; dependent clause—noun clause

#### Mechanics

Capitalization; punctuation; appendix of spelling rules

#### Usage

• Review of all from Grade 9 plus the following new material:

modifier placement—split infinitive

#### Writing Skills

Review of all from Grade 9
 plus the following new material: essay—choosing a mode;
 sentence variety and emphasis—
 choosing between constructions,
 coordination and subordination;
 sentence energy—action verbs,
 details, accuracy, figurative language; sentence logic—logical
 comparison, clear comparison,
 subject placement

#### **Examples of Writing Projects**

- Description: eyewitness report
- Exposition: research essay, causeand-effect essay
- Narration: short story, oral anecdote

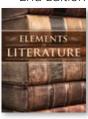
- Persuasion: persuasive speech, editorial
- Poetry: poetry and metaphor
- Multimedia: webpage design

#### Study & Reference Skills

 Review of all from Grade 9 plus the following new material: library—website, bibliography, online databases; reading comprehension—grammatical context; test-taking strategies essay questions

## Elements of Literature

2nd Edition



#### **Approach**

Critical

#### Organization

 Eight units divided into two parts: marks and modes of literature and genres of literature

#### Content

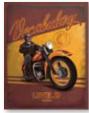
- Marks and modes of literature: imaginative comparison, sound and syntax, allusion and symbol, irony
- Genres of literature: folktale and epic, essay and short story, poetry, drama

#### Features

This textbook builds on the critical foundation provided in the ninth-grade text. Having mastered the six fundamental components of literature, students are ready to focus on those literary elements that define and distinguish lasting artistic literature. Introductory essays, "Thinking Zones," and criticalthinking questions deepen students' understanding of key elements of style and expression as well as major forms important

to past and present literature. A firm grasp of these details will aid in developing essential skills in literary analysis and appreciation, skills that can be profitably applied to a study of Scripture. In addition, careful evaluation of worldview as expressed in an author's writing trains students to exercise biblically based moral discernment.

## **Vocabulary:** Level D 3rd Edition



#### Approach

• The texts use context as a major means of learning.

#### Plan

• Each text includes fifteen twopart lessons, fifteen cumulative reviews, and a supplement containing various means of reinforcement and vocabularybuilding exercises (games, puzzles, contests, etc.).

#### Features

 The texts use a variety of learning methods, including word stories and spelling helps. Lessons incorporate biblical stories with a focus on character building and are often related to other subjects students may be learning.

#### Content

 This text focuses on Greek prefixes and roots, clipped words, compounds, blends, diminutives, reduplication, and onomatopoeia words.



# Grade 11

### **Bible Truths**

3rd Edition



#### **Bible Content**

 Studies of the prison and pastoral epistles, general epistles, and prophecy from Revelation

#### Applying the Bible to Life

 Focuses on practical principles derived from epistles and prophecies

#### **Special Studies**

 Character studies on Cerinthus, Mark, Peter, and John; study of each New Testament city

#### **Additional Resources**

 A chart listing author, date, origin, recipients, and themes of each book

#### **Memory Verses**

• 94 verses

#### **Number of Lessons**

• 57 lessons in 4 units

## Chemistry

3rd Edition



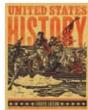
- Chemistry for Life: history, role, and potential of chemistry; a biblical perspective on studying science
- Matter: states of matter, interactions with energy, phase changes
- Measuring and calculating: measurement systems, SI units, significant digits in measurement and calculation, organized problem solving
- Atomic structure: historical development of atomic models; subatomic particles, orbitals, quantum numbers, orbital notation, electron configuration, isotopic notation
- Elements: development of the modern periodic table, descriptive chemistry; periodic trends of atomic and ionic radius, electronegativity, electron affinity, ionization energy
- Chemical bonds: causes and types of bonding; Lewis structures, formula units, properties of different kinds of compounds
- Bond theories and molecular geometry: valence bond theory, molecular resonance, molecular orbital theory, valence shell electron pair repulsion theory,

- molecular shapes, polar covalent bonds
- Chemical composition and reactions: oxidation numbers, writing formulas, chemical nomenclature, polyatomic ions, balancing chemical equations, types of reactions
- Chemical calculations: the mole; structural, molecular, and empirical formulas; percent composition; stoichiometric conversions; limiting reactants; percent yield
- Gases: properties of gases, measuring pressure, gas laws, partial pressures, stoichiometric conversions with gases
- Solids and liquids: intermolecular forces, properties of solids and liquids, phase changes, crystalline solids, phase diagrams
- Solutions: solution types, solvation, solubility, rate of solution, measuring concentration, colligative properties, colloids
- Chemical thermodynamics: thermochemistry, enthalpy, specific heat, reaction tendency, entropy, free-energy change
- Chemical kinetics: energy diagrams, rates of reactions, reaction mechanisms, rate laws

- Chemical equilibrium: reversible and irreversible reactions, equilibrium concentrations, equilibrium constants, Le Châtelier's principle, applications of equilibrium chemistry
- Acids, bases, and salts: properties of acids and bases, acid and base definitions, pH and pOH scales, neutralization, titrations, buffers
- Oxidation and reduction: redox reactions, electrochemistry, electrolytic cells, electrolysis, voltaic cells
- Organic chemistry and biochemistry: organic compounds, hydrocarbons, functional groups, organic reactions, carbohydrates, proteins, lipids
- Materials chemistry: ceramics, semiconductors, polymers, plastic recycling, nanotechnology
- Nuclear chemistry: nuclear stability; measuring radiation; alpha, beta, and gamma decay; nuclear reactions

## **United States History**

4th Edition



#### Topic

• United States history

#### Geography

 Influence of physical geography on American history

#### History

 Chronological survey of American history from European discovery to the present

#### Government

Structure of American government; the Constitution

#### **Economics**

 Development of free-enterprise system and effects of government interference

#### Religion

 Contributions of various religions, especially Christianity, to America's heritage

#### Culture

• Integration of various facets of American culture; cultural change

## Algebra 2

3rd Edition



**Operations:** real and complex numbers; polynomial; matrix; function

Linear equations: solving equations and inequalities; absolute value equations and inequalities; distance on number lines; word problems; compound inequalities Linear relations: graphs of linear functions; slopes; special functions; linear inequalities; distances and midpoints; modeling with linear regressions

Systems: solved graphically and algebraically; systems of inequalities; systems of three variables; problem solving; linear programming

Matrices: organizing data; operations; determinants; solving systems using Cramer's rule and inverse matrices; transformations Quadratic Equations: solving by factoring, taking roots, completing the square, and the quadratic formula; using the discriminant; complex roots; quadratic inequalities

Polynomial Functions: roots, graphing, and modeling with quadratic and polynomial functions; problem solving; rational root, remainder, and factor theorems; fundamental theorem of algebra

Radicals, Exponents, and Logarithms: rational exponents; inverse functions, simplifying expressions; solving equations, graphing and modeling with radical, exponential, and logarithmic functions; natural and common logarithms

**Rational Expressions:** simplifying; solving equations; graphing; variations

Trigonometry: right triangle and coordinate plane trigonometry; special triangles and the unit circle; radians; graphs of trigonometric functions, inverse functions

Trigonometric Identities: Law of Sines; Law of Cosines; problem

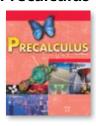
**Trigonometric Identities:** Law of Sines; Law of Cosines; problem solving; proving identities; trigonometric equations

Sequences and Series: explicit and recursive formulas; arithmetic and geometric sequences and series; summation notation

Probability and Statistics: counting principles; theoretical and experimental probabilities; independent, dependent, and mutually exclusive events; binomial distribution, descriptive statistics, representing data; normal distributions; making inferences

**Analytic Geometry:** circles; parabolas; ellipses; hyperbolas; systems of quadratic relations

#### **Precalculus**



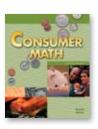
- **Trigonometry:** reference angles; Law of Sines; Law of Cosines
- Polynomials: linear, quadratic, and polynomial functions; factoring higher-degree polynomials; zeros; graphing
- Functions: power; exponential; piece; periodic; trigonometric; reciprocal; rational
- Inverse functions: increasing and decreasing functions; checking and finding inverses; radical functions; inverse trigonometric functions; logarithms
- Equations: polynomial; rational; radical; logarithmic; exponential functions; identities; trigonometric equations
- Conic sections and polar graphs: circles; ellipses; parabolas; hyperbolas; variation; polar coordinates; polar equations
- Complex numbers: graphs; polar form; powers and roots; vectors; dot products; applications
- Matrix algebra: Gaussian elimination; determinants; Cramer's rule; inverses

- Statistics: central tendency; variability; bell curve; linear correlation; hypothesis testing
- Sequences: recursive and explicit formulas; arithmetic and geometric sequences; mathematical induction; summation
- Limits and calculus: limits of sequences; series; limits of functions; continuous functions; asymptotes; limit theorems
- Differential calculus: definition; graphs, properties; chain rule; quotient rule; motion applications

## **Consumer Math**

2nd Edition

• See page 45 for the description.



## **Vocabulary:** Level E 3rd Edition



#### Approach

 The texts use context as a major means of learning.

#### Plan

 Each text includes fifteen twopart lessons, fifteen cumulative reviews, and a supplement containing various means of reinforcement and vocabularybuilding exercises (games, puzzles, contests, etc.).

#### **Features**

 The texts use a variety of learning methods, including word stories and spelling helps. Lessons incorporate biblical stories with a focus on character building and are often related to other subjects students may be learning.

#### Content

 This text focuses on sources of English words, coined words, French words, Greek and Latin Ioan words, allusions, backformation, and folk etymology.

## Writing & Grammar

3rd Edition



#### Parts of Speech (and Verbals)

Review of all from Grade 10
 plus the following new material:
 verb—verb-adverb combinations; adverb—indefinite relative,
 interrogative; conjunction—
 phrasal subordinating; verbals—
 perfect participle, passive gerund,
 perfect infinitive, progressive
 infinitive, elliptical infinitive

#### Sentence Structure

 Review of all from Grade 10 plus the following new material: sentence patterns—retained object in passive sentence

#### Mechanics

Capitalization; punctuation; appendix of spelling rules

#### Usage

 Review of all from Grade 10 plus the following new material: pronoun shift; verb tense consistency and sequence

#### Writing Skills

Review of all from Grade 10 plus the following new material: paragraph organization—cause-and-effect order, comparison-and-contrast order; sentence energy—pauses for breath; parallelism—clarity; sentence logic—direct expression, logical predication, avoiding mixed constructions, using noun clauses when needed, ending in strength, linking with new information

#### **Examples of Writing Projects**

- · Description: interview
- Exposition: formal research paper, analytical essay, critical response to literature
- Narration: narrative poem, folktale
- · Persuasion: letter to editor
- Poetry: hymn

#### Study & Reference Skills

 Review of all from Grade 10 plus the following new material: reference tools—literary index, literary sources

## American Literature

Updated 2nd Edition



#### Approach

Historical

#### Organization

 Four major literary divisions: early American literature, American romanticism, American realism and naturalism, modern American literature

#### Content

- Early American literature: settlement, religious experience, revolution
- American romanticism:
   Knickerbockers, New England
   School, transcendental optimists,
   transcendental pessimists

- American realism and naturalism: regionalists, realists, naturalists, anti-naturalists
- Modern American literature: modern poetry, modern prose, short fiction, essay; drama

#### **Features**

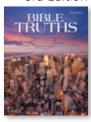
 The units are arranged according to major literary periods. The material provided through the unit introductions, headnotes, and timelines enables the student to analyze individual authors and their works in a historical and cultural context. Such analysis serves to broaden the student's world, enabling him to understand the ideas and writings of noted literary and historical figures and to apply biblical criteria when evaluating the beliefs espoused by such figures. The questions for thought and discussion, which follow the selections, progress from factual to evaluative and are valuable both for class discussion and for providing students with an opportunity to develop further literary and moral discernment.



# Grade 12

#### **Bible Truths**

3rd Edition



#### **Bible Content**

 Biblical worldview; studies on Christian life topics

#### Applying the Bible to Life

 Focuses on biblical love in the home, the church, and the world

#### Special Studies

 Teacher's Edition includes many suggested special studies and discussion topics.

#### **Memory Passages**

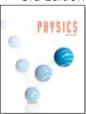
53 verses

#### **Number of Lessons**

• 53 lessons in 6 units

## **Physics**

3rd Edition



- A framework: the Christian worldview in which we do science in obedience to God's commandment to exercise good stewardship over the earth for His glory and for the benefit of our fellow humans; the structure and limitations of science; overview of physics; scientific methodology and modeling; the metric (SI) system of measurement as well as principles of measurement; rules for determining and using significant digits in measurements and calculations
- Classical mechanics: mathematical description of motion in one and two dimensions (kinematics of motion); vectors and scalars in graphical and analytical solutions; forces and the causes of motion according to Newton's laws (dynamics); friction; motion in a plane, including circular motion; motion of multi-body
- systems; work, energy, and total mechanical energy; conservation of energy and simple machines; momentum and its conservation, collisions, center of mass, and angular momentum; periodic and simple harmonic motion, the pendulum, damped and driven oscillations, and physical waves
- Thermodynamics and matter: Kinetic-molecular theory of matter and the states of matter; thermal properties of matter, measuring temperature, and the gas laws; theories of heat, thermal energy, mechanisms for heat transfer; the four laws of thermodynamics; entropy and its consequences; fluid mechanics (hydrostatics and hydrodynamics)
- Electromagnetics: electrostatics and charges; electric fields and capacitors; current, voltage, resistance, and basic DC circuits; transistor theory; magnetism and

- its relationship to current and conductors; electromagnetism and alternating currents; AC circuit characteristics
- Geometric optics and light: the electromagnetic spectrum, sources and propagation of light; reflection and mirrors; refraction and lenses; wave interference, diffraction, and polarization; intensity and color of light; optical instruments (telescopes, microscopes, etc.)
- Modern physics: relativity: Galilean, special, and general relativity; quantum physics: quantum theory, quantum mechanics, the atom, and modern atomic models; nuclear physics: radiation and radioactivity, radioactive decay, nuclear reactions, and elementary/subatomic particles

## American Government

3rd Edition



#### Topic

American government

#### Geography

• References to political geography

#### History

 Historical perspective of the phases of American government

#### Government

 Thorough analysis of all levels and all branches of American government

#### **Economics**

 Taxation, bureaucratic funding, and foreign policy impact on U.S. economy

#### Religion

 Scriptural foundation for law and government; influence of Christianity in early America

#### Culture

 Interest groups; mass media; American political behavior

#### **Economics**

2nd Edition



#### Topic

Economics

#### Geography

• Case studies of economic issues in eighteen nations

#### History

· Biographies of eighteen influential economists

#### Government

 Comparative economic systems; business and competition; money and banking; national economic concerns, such as productivity, unemployment, and inflation

#### **Economics**

- · Survey of basic economic topics, including supply and demand and the circular flow of income and products
- · Promotes free-market ideals

#### Religion

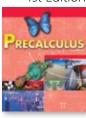
• Scriptural principles applied to all areas of economics

#### Culture

 Analysis of personal economic concerns, such as budgeting, managing credit, saving, and financial planning

## Precalculus

1st Edition

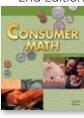


- Trigonometry: reference angles; Law of Sines; Law of Cosines
- · Polynomials: linear, quadratic, and polynomial functions; factoring higher-degree polynomials; zeros; graphing
- Functions: power; exponential; piece; periodic; trigonometric; reciprocal; rational
- · Inverse functions: increasing and decreasing functions; checking and finding inverses; radical functions: inverse trigonometric functions; logarithms
- Equations: polynomial; rational; radical; logarithmic; exponential functions; identities; trigonometric equations
- · Conic sections and polar graphs: circles; ellipses; parabolas; hyperbolas; variation; polar coordinates; polar equations
- Complex numbers: graphs; polar form; powers and roots; vectors; dot products; applications
- · Matrix algebra: Gaussian elimination: determinants: Cramer's rule: inverses

- Statistics: central tendency; variability; bell curve; linear correlation; hypothesis testing
- Sequences: recursive and explicit formulas; arithmetic and geometric sequences; mathematical induction; summation
- · Limits and calculus: limits of sequences; series; limits of functions; continuous functions; asymptotes; limit theorems
- · Differential calculus: definition; graphs, properties; chain rule; quotient rule; motion applications

#### **Consumer Math**

2nd Edition



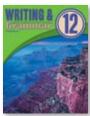
- · Math skills: fractions, decimals, integers; problem solving using proportions and percent; solving linear equations; negative exponents to prepare for finance formulas
- Measurement: Customary and SI (metric) units; conversion within and between systems using dimensional analysis; perimeter, circumference, area, volume, and capacity
- Income: calculating hours worked from clock times, gross pay, including overtime; payroll deductions, including FICA and federal withholding; buying and selling stocks and bonds, including brokerage fees
- · Budgeting: a standardized budget; an annual budget; reducing annual budget to monthly or weekly; emergency adjustments; revising the annual budget
- · Banking: checking accounts and deposits; overdraft penalties and protection; service charges; reconciling a bank statement; simple interest; compounding interest; interest on savings using the minimum balance or daily interest methods; effective interest rate; savings programs with regular deposits

- Borrowing: simple interest loans; add-on loans and annual percentage rate; discount loans; amortized loans; how credit cards work; how interest is calculated and payments are applied to credit accounts
- Transportation: calculating the finance charge and monthly payment for a new car; depreciation; leasing costs, residual value, mileage penalty; car insurance; cost of gas, oil, and tires; scheduled maintenance and repair costs
- Food: store specials and coupons; unit prices; calculating freezer payback periods; consumer price index; calorie counting; finding the calories expended in activities
- Clothing: planning for seasonal buying; calculating discounts including multiple ones; filling out catalog orders; internet buying tips; savings from making clothing; retail marketing of clothing, returns, net-profit and grossprofit margin; markup rate and breakeven point for retailer
- · Housing: renting; buying a house, including down payments, closing costs, points, and monthly payments; owner's equity; building a house, including converting

- dimensions to scale for a set of plans; finding the area of rectangular lots in acres; calculating the amount of shingles needed from a house plan, allowing for pitched roofs
- Maintaining a home: real-estate tax based on millage rates; homeowner's insurance; calculating utility charges for electricity, gas, water, and sewer; residential and cell-phone usage; calculating house repairs, maintenance, and home improvements
- · Life and health insurance: mortality tables; term, whole-life, and universal-life insurance; health insurance, including payout of benefits; social-security retirement benefits
- Income taxes: general principles of calculating federal-income taxes; 1040EZ, 1040A, and 1040, including extra schedules A and B and Form 2441 for child care benefits
- · Vacations: costs of food and lodging; cost of transportation; getting around at the site; travel times across time zones; economizing admissions

### **Writing & Grammar**

3rd Edition



#### Parts of Speech (and Verbals)

• Review of all from Grade 11 plus the following new material: verbals—passive participle

#### Sentence Structure

 Review of all from Grade 11 plus the following new material: absolute phrase

#### Mechanics

Capitalization; punctuation; appendix of spelling rules

#### Usage

 Review of all from Grade 11 plus the following new material: idiomatic use of prepositions

#### **Writing Skills**

 Review of all from Grade 11 plus the following new material: paragraph development—quotation, visual aid

#### **Examples of Writing Projects**

 Description: descriptive essay, comparison/contrast essay

- Exposition: research report, response to a dramatic scene (literary analysis)
- Narration: dramatic scene, interior monologue
- Persuasion: persuasive essay
- · Poetry: sonnet
- Multimedia: video report

#### **Study & Reference Skills**

• Review of all from Grade 11

## **British Literature**

Updated 2nd Edition



#### Approach

Historical

#### Organization

 Four major literary divisions: the Middle Ages, the Renaissance, the Age of Revolution, the Age of Reform

#### Content

- The Middle Ages: the Old English period, the Middle English period
- The Renaissance: the Tudor period, the Stuart period
- The Age of Revolution: the Neoclassic period, the Romantic period

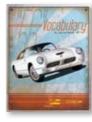
- The Age of Reform: the Victorian period, the Modern period
- Supplementary material: Macbeth (video)

#### **Features**

• The units are arranged according to major literary periods. The material provided through the unit introductions, headnotes, and timelines enables the student to analyze individual authors and their works in a historical and cultural context. Such analysis serves to broaden the student's world, enabling him to understand the ideas and writings of noted

literary and historical figures and to apply biblical criteria when evaluating the beliefs espoused by such figures. The questions for thought and discussion, which follow the selections, progress from factual to evaluative and are valuable both for class discussion and for providing students with an opportunity to develop further literary and moral discernment.

## **Vocabulary:** Level F 3rd Edition



#### Approach

 The texts use context as a major means of learning.

#### Plan

• Each text includes fifteen twopart lessons, fifteen cumulative reviews, and a supplement containing various means of reinforcement and vocabularybuilding exercises (games, puzzles, contests, etc.).

#### **Features**

 The texts use a variety of learning methods, including word stories and spelling helps. Lessons incorporate biblical stories with a focus on character building and are often related to other subjects students may be learning.

#### Content

 This text focuses on changes in word meanings (broadening and narrowing, strengthening and weakening, etc.), words from other languages, native English words, and number words (e.g., semi-, bi-, prime, decimate).



# **Bible Modules**

## The Bible Modular Series

These six- to eight-week courses focus on a variety of issues; they are designed for teens and adults.



#### How Firm a Foundation!

 Discusses how we got the Bible, how we know which books belong in the Bible, and how the Bible was transmitted and translated; focuses on inspiration, canonicity, and authority

#### Why the Bible Matters

 Discusses the Bible's design and function, focusing on how the Bible relates to science, history, and literature; explains how the Bible can help us make decisions and evaluate ideas

## Personal Evangelism and Discipleship

 Offers a biblical foundation and practical methods for personal evangelism and discipleship; focuses on the doctrines of man, sin and salvation, the Great Commission, and discipleship

#### The Way of the Word

 Teaches methods of Bible study, including principles of interpretation and application; includes exercises that study a passage according to genre and context and apply Scripture to contemporary situations

#### A Workman Not Ashamed

Prepares young men for the possibility of a future preaching ministry; discusses the call to preach,

the importance of standing for Christ, methods of preparing and delivering Bible messages, and the best methods of training for the ministry

#### In God's Presence

 Presents in story format the principle of Christian music as it relates to God's holiness; uses a study of Chronicles to illustrate the nature of music and to show how Scripture guides musical choices

#### **Publish Great Things**

 Presents the biblical teaching on world missions and includes practical methods for teen involvement in missions; focuses on key biblical doctrines supporting God's desire to save all from sin; provides activities to motivate students to reach the world for Christ

## Martyrdom: The Final Triumph of Faith

 Inspires students to live Godcentered lives and to see God's purpose in suffering and persecution; encourages them to triumph through adversity

#### Beyond the Sun

 Presents an expositional view of Ecclesiastes, revealing God's perspective on the meaning of life in a fallen world

#### **God and His Ways**

 Surveys the biblical teaching on the doctrines of God, man, Christ, salvation, and the church, focusing on their relevance to everyday life

#### That I May Know Him

 Presents aspects of Christ's character and focuses on His relationships with various groups of people in the Gospel of Mark

#### What Is Truth?

 Contrasts the Christian worldview with the basic tenets of Hinduism, Buddhism, secular humanism, and postmodernism

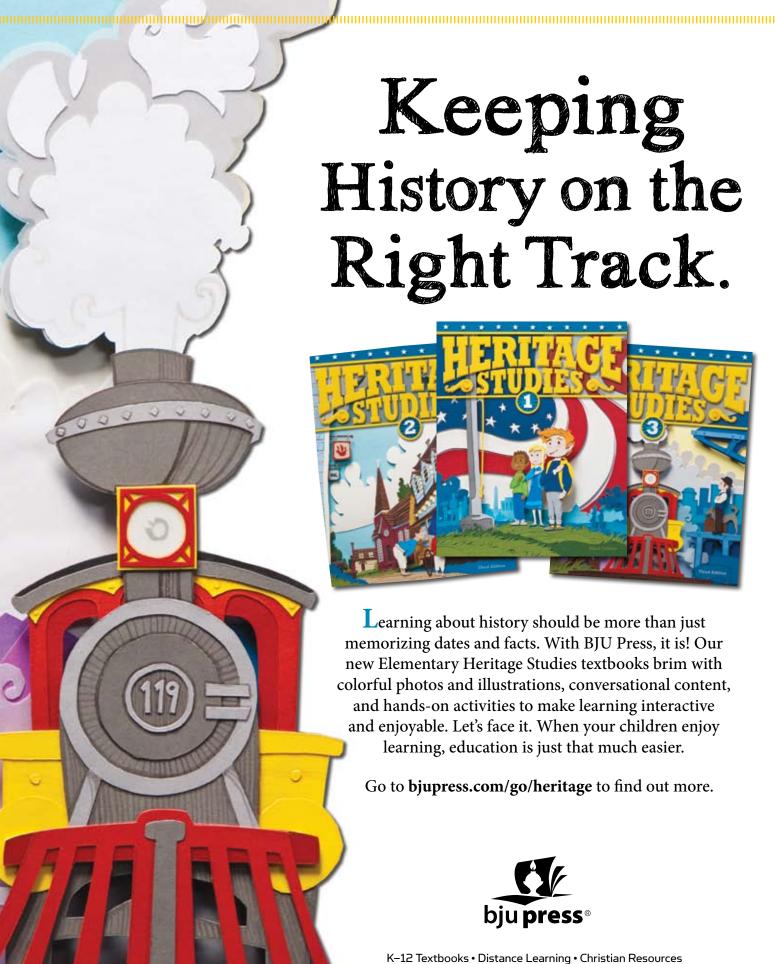
#### Walking by the Spirit

 Surveys the Person and work of the Holy Spirit in the Old and New Testaments, focusing on the Spirit's role in salvation and sanctification

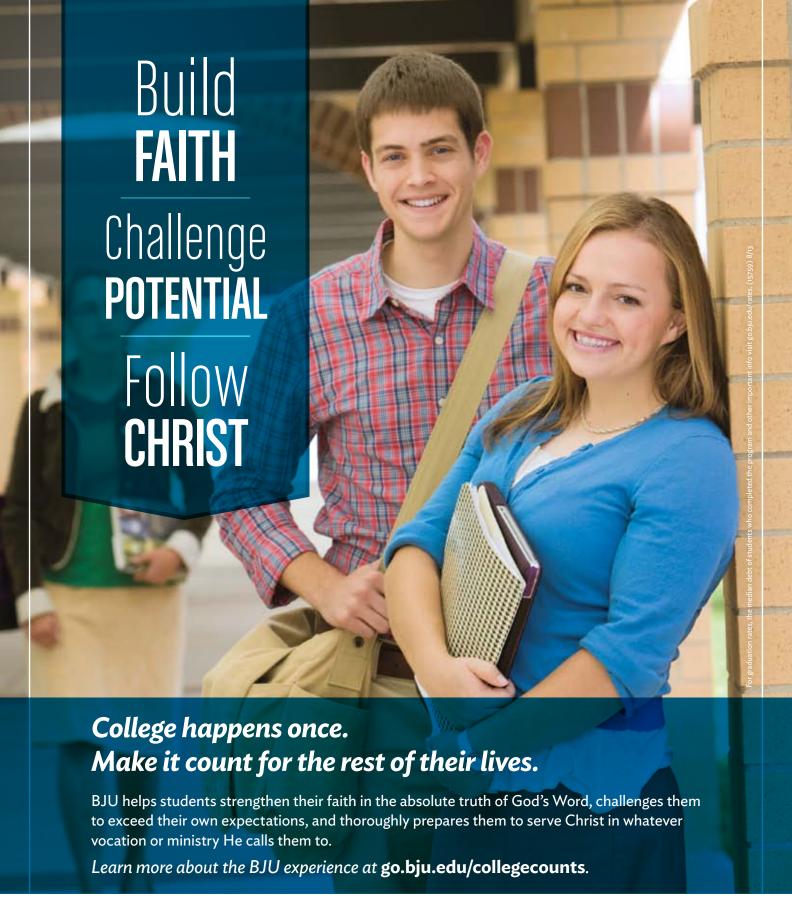
#### Who Is This Jesus?

 Teaches students to defend Christian beliefs against the errors of other religions and heretical sects, including Judaism, Islam, Mormonism, and the Jehovah's Witnesses

For Electives, see pages 45–47 of the **Subject** side of the Scope & Sequence.



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