

First Grade History

COURSE OVERVIEW

The first grade history program begins an overview of world history, spanning grades 1–4, from the Stone Age to the Space Age.

Through lively stories and activities, students will:

- Understand how geography influences the rise of civilizations, and develop spatial sense through regular work with maps and globes
- Explore the recurrent themes of civilization: settling down and surviving, innovating and inventing, building cities and empires, establishing laws and government, and preserving knowledge and works of the imagination
- Become familiar with mythologies, traditions, and belief systems of various cultures
- Identify important figures, events, and concepts related to the historical origins of major world religions
- Recognize lasting contributions in ideas (for example, democracy, republican government, civil service) from various civilizations

COURSE OBJECTIVES

Getting Around This Great Big World

- Reinforce basic geographic awareness using simple maps and globes
- Learn about the work of historians and archaeologists

Early Civilizations

- Understand how nomadic people settled down and started villages and cities
- Recognize achievements of early kingdoms in Mesopotamia and ancient Egypt

The Rise of Ancient Empires

- Become familiar with the historical origins of Judaism
- Learn more about civilization in Mesopotamia

Ancient Kingdoms Rise and Fall

- Become familiar with the rise and fall of Mesopotamian, Israeli, and Egyptian empires

Ancient Greece, Part I: The Land and the Myths

- Become familiar with the geography, people, and myths of ancient Greece

Ancient Greece, Part II: From Athens to Alexander

- Recognize the significance of democracy
- Recognize the contrast between Greek and Spartan culture
- Follow the life and campaigns of Alexander the Great

Ancient India

- Learn about the geography and history of Ancient India
- Become familiar with the historical origins of Hinduism and Buddhism

Ancient China

- Learn about the geography of China
- Study early leaders in Chinese history
- Learn about the discoveries of silk and paper, the building of the Great Wall, and the development of Chinese writing

First Grade Language Arts

COURSE OBJECTIVES

PHONICS

Using magnetized letter tiles and multisensory activities, the advanced *PhonicsWorks* program builds decoding skills and

helps students become confident, independent readers. Handwriting Without Tears focuses on careful practice at a pace that matches your student's development of fine motor skills.

LANGUAGE SKILLS

Composition—Students progress from writing words and sentences to writing a paragraph.

Grammar, Usage, and Mechanics—Students learn basic rules of usage, as well as sentence structure and types, parts of speech, punctuation, and capitalization

Primary Analogies—Students develop test-taking and critical thinking skills as they connect words and ideas

Public Speaking—Reciting a poem or reading a literary passage helps students learn to address a group confidently

LITERATURE

Literature lessons focus on classic folk tales, fairy tales, fables, and poetry, such as "The Elves and the Shoemaker,"

"The Lion and the Mouse," and "The Tortoise and the Hare." Read-aloud and guided reading lessons help students apply and extend the skills introduced in Phonics.

COURSE OUTLINE

PHONICS

Introduction to Advanced Phonics

- Review Letters and Vowel Sounds

Introducing Ending Blends

- Ending Consonant Blends *nd, ft, lk, and ct*
- Ending Consonant Blends *lp* and *lt*
- Ending Consonant Blends *mp* and *sp*
- Ending Consonant Blends *sk, st, nt, and nch*
- Review Ending Blends *sk, st, nt, and nch*

Introducing Beginning Blends

- Beginning Blends *bl, cl, fl, gl, pl, and sl*
- Review Blends *bl, cl, fl, gl, pl, and sl*
- Blends *br, cr, dr, fr, gr, pr, and tr*
- Digraph Blends *shr* and *thr*
- Blends *sc, sp, st, sw, sk, sm, sn, and tw*
- Blends *spr, str, squ, scr, and spl*

More Advanced Phonics

- Words Ending in *ank, ink, onk, and unk*
- Words Ending in *ang, ing, ong, and ung*
- Blends, Digraphs, and Ending Sounds

Long Vowel Sounds

- Long Vowel Sounds for *a, i, o, and u*
- Long *u*
- Blends and Super *e*

Building on Advanced Phonics

- Contractions and Another Sound for *s*
- Two-Syllable Words and the *schwa* Sound
- *ck* and *ed*
- *le* and *ph*
- *c, g, and dge*

Mastering Long Vowel Sounds

- Long *a*
- Long *i*
- Long *o*
- Long *e*
- Long *u*

- Double *o*
 - Long Vowels and Double *o*
- Mastering Advanced Phonics**
- *er, ir, ur,* and *-ear*
 - Short *e* Spelled *ea*
 - *oi* and *oy*
 - *au* and *aw*
 - *ou* and *ow*
 - *ow*, as in *grow*

LITERATURE AND LANGUAGE SKILLS

Read Aloud

- Listen to and discuss literature read aloud from a variety of genres
- Recall details of a story read aloud
- Sequence events from a story read aloud
- Ask and respond to questions about the text
- Predict what will happen next in stories

Junior Great Books

- Listen attentively for different ideas and details
- Support opinions with reasoning and evidence, citing specific passages from the text
- Build vocabulary through exposure to rich literary language
- Understand and appreciate literature through writing, dramatization, and art activities

Poetry

- Listen to, memorize, and recite poetry from classical and contemporary authors
- Identify words that rhyme
- Make up original rhymes
- Write simple rhyming poems

Grammar/Usage/Mechanics

- Demonstrate knowledge of the mechanics of language in written work
- Identify and use effective sentence construction in speech and writing
- Identify nouns, verbs, and adjectives in sentences

Analogies

- Solve and create analogies
- Make connections and use information and skills to identify relationships

Composition

- Use prewriting strategies
- Compose paragraphs that follow the conventions of mechanics and usage
- Write for a variety of purposes and audiences, for example, friendly letters, invitations, personal narratives, and brief book reports

Shared Reading

- Begin to use decoding strategies with texts beyond decodable readers
- Ask and respond to questions about the text
- Predict what will happen next in stories

Guided Reading

- Discuss literature from a variety of genres
- Discuss main idea, plot, cause and effect, and characters
- Relate stories to personal experience
- Make predictions about what will happen next and why
- Recall and retell a story

HANDWRITING

- Write legibly when printing uppercase and lowercase letters on standard-ruled paper
 - Write legibly and with proper spacing when printing words and sentences
 - Copy sentences neatly and accurately
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First Grade Math

COURSE OBJECTIVES

First grade Math provides experiences to help students develop a formal understanding of numbers and mathematical concepts. Physical models still play a fundamental role in linking the real world to symbolic expressions. Students will:

- Work with patterns and sequences
- Practice addition and subtraction
- Learn to tell time and count money
- Identify place values to hundreds
- Practice measuring length, capacity, and weight
- Work with geometric shapes
- Become familiar with the concept of symmetry
- Solve problems using logical reasoning, drawings, and models
- Begin to develop intuitions about probability and fractions

COURSE OUTLINE

Numbers to 12

- Count, read, write, compare, and order whole numbers to 12
- Compare and order ordinals first through tenth
- Identify one more than and one less than a given number
- Count forward and back on a number line
- Solve problems by drawing pictures and finding patterns

Understanding Addition: Facts to 6

- Show the meaning of addition (joining, putting together, increasing)
- Know the addition facts to 6
- Write addition number sentences
- Understand that numbers can be added in any order
- Identify and extend simple numeric patterns for addition
- Solve problems by using graphs and acting out problem situations

Understanding Subtraction: Facts to 6

- Show the meaning of subtraction (taking away, separating)
- Know the subtraction facts to 6
- Write subtraction number sentences
- Understand addition and subtraction as inverse operations
- Add and subtract with zero
- Identify and extend simple numeric patterns for subtraction
- Solve problems by choosing the operations and writing number sentences

Addition Facts to 12

- Learn the addition facts to 12
- Develop an understanding of addition strategies such as using a number line, addition patterns, and doubles and near doubles
- Add three one-digit numbers
- Understand that the order in which the addends are grouped does not affect the sum
- Solve problems by asking questions and choosing the operations

Subtraction Facts to 12

- Learn the subtraction facts to 12
- Develop an understanding of subtraction strategies such as using a number line and identifying and using subtraction patterns
- Use addition to check subtraction
- Identify addition and subtraction fact families
- Solve problems by drawing pictures and using models

Place Value to 100

- Read, count, write, compare, and order whole numbers to 100
- Understand place value by representing numbers to 100 as tens and ones

- Understand and describe skip counting to 100 by twos, fives, and tens
- Solve problems by using the guess-and-test strategy and by using logical reasoning

Money and Time

- Learn the value of pennies, nickels, dimes, and quarters
- Sort, count, and find the value of a group of coins
- Show different combinations of coins that equal the same value
- Tell time to the nearest half hour
- Relate time to events
- Determine the duration of elapsed time
- Solve problems using logical reasoning and hidden information

Geometry, Fractions, and Probability

- Identify common plane and solid figures and describe their attributes
- Recognize line symmetry as equal parts of plane figures
- Recognize congruent figures as those with the same size and shape
- Recognize, name, and write $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{4}$ as part of a whole or part of a set
- Explore the arrangement of objects and understand the likelihood of simple events
- Solve problems using logical reasoning, drawings, and models

Add and Subtract Two-Digit Numbers

- Add and subtract ones and tens
- Add and subtract two-digit whole numbers and money amounts without regrouping
- Estimate two-digit whole numbers to the nearest ten
- Use models to add and subtract two-digit whole numbers with regrouping
- Solve problems by choosing operations and using logical reasoning

Measurement

- Measure an object by identifying a unit of measure and using the appropriate tools
- Measure, compare, and estimate length, capacity, and weight/mass in English and metric units
- Measure perimeter using nonstandard units
- Read a thermometer to find temperature in degrees Fahrenheit
- Solve problems by using maps and logical reasoning

Addition and Subtraction Facts to 18

- Learn addition and subtraction facts to 18
- Identify fact families
- Add and subtract using strategies including related facts, the order of property, doubles, and making ten
- Solve problems by drawing pictures and knowing when to ignore extra information

Moving On in Math

- Strengthen understanding of numeration, place value, and regrouping concepts and skills
- Identify function rules
- Find missing numbers or unknown operations
- Explore regrouping in addition and subtraction of two-digit numbers
- Add three two-digit numbers
- Understand numbers to 999 as hundreds, tens, and ones
- Solve problems by making tables and using the guess-and-test strategy

First Grade Science

COURSE OVERVIEW

Students learn to perform experiments and record observations, and understand how scientists see the natural world. They germinate seeds to observe plant growth, and make a weathervane. Students will explore topics such as:

Matter—states of matter; mixtures and solutions

Weather—cloud formation; the water cycle

Animal Classification and Adaptation—insects; amphibians and reptiles; birds; mammals

Habitats—forests, deserts, rain forests, grasslands, and more; naturalist John Muir and conservation

Oceans—waves and currents; coasts; coral reefs and kelp forests; oceanographer Jacques Cousteau

Plants—germination, functions of roots, stems, flowers, chlorophyll, and more
Human Body—major systems; Elizabeth Blackwell, the first woman doctor
Light—how light travels; reflections; inventor Thomas Edison

COURSE OBJECTIVES

Acting Like a Scientist

- Learn how to use tools and equipment to measure distance in centimeters, mass in grams, volume in milliliters, and temperature in degrees Celsius
- Follow steps in the scientific process
- Compile data in tables, draw graphs, and interpret results

Matterland

- Identify matter as a solid, liquid, or gas
- Explain the properties of each type of matter
- Learn about the relative motion of molecules in each state
- Demonstrate that matter can change states by heating or cooling
- Become familiar with mixtures, solutions, and surface tension

Everyday Weather

- Understand what causes the seasons
- Construct a rain gauge and weather vane to measure weather conditions
- Use equipment to record observations on a weather calendar
- Learn about cloud formation, cloud type, precipitation, condensation, evaporation, and the water cycle

Animal Classification

- Classify major animal groups according to their identifying characteristics
- Study mammals, birds, reptiles, amphibians, insects, and fish

Adaptations

- Discover how animals use their characteristics to thrive in their environment
- Learn how to infer what animals eat from the shapes of their teeth
- Study animal defense and behavior

Light Up Your Life

- Explore how light behaves
- Investigate how light reflects off different surfaces
- Demonstrate how light travels in straight lines
- Classify objects according to how much light the objects transmit
- Learn about Thomas Edison's life and his major achievements

Our Green World

- Study the functions of roots, stems, leaves, flowers, fruits, and seeds
- Examine fibrous and tap roots
- Observe stems transporting water from roots to leaves
- Dissect and germinate seeds
- Match fruits to seeds
- Learn that flowers turn into fruit
- Learn that chlorophyll is the substance that allows plants to manufacture food

Habitats

- Learn to recognize plants and animals common to a variety of habitats
- Study food chains
- Learn about endangered plants and animals
- Read about John Muir's tireless work to preserve the wilderness

Oceans and Undersea Life

- Discover the diversity and dangers of the oceans
- Explore tide pools and the depths
- Find out how waves and currents move
- Read about the life and major accomplishments of Jacques Cousteau

The Human Body

- Become familiar with the major systems of the human body
- Learn about Elizabeth Blackwell's determination to become the first woman to earn a medical degree