



# WORLD BOOK

## Typical Course of Study: Grade 2

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### Grade 2 Math

#### Algebraic Thinking

- Represent (with equations, drawings, or objects) and solve 1- or 2-step addition and subtraction problems within 100
- Mentally add and subtract within 20 fluently
- Work with equal groups of objects to build foundations for multiplication
- Use addition to find total number of objects arranged in rectangular arrays of rows and columns

#### Measurement and Data

- Choose appropriate tools and units to measure lengths
- Measure and estimate lengths using inches, feet, centimeters, and meters
- Measure to compare lengths of objects
- Solve addition and subtraction word problems involving same-unit lengths
- Write an equation to represent a problem, using a symbol for the unknown number
- Represent whole numbers as lengths on a number line
- Represent sums and differences within 100 on a number line
- Tell and write time (using a.m. and p.m.) to the nearest five minutes
- Explain relationships between seconds, minutes, hours, and days
- Understand the values and relationships among dollar bills and coins (or local denominations)
- Solve word problems involving dollar bills and coins (or local denominations)
- Generate measurement data
- Represent data on a bar graph or circle graph
- Analyze and solve problems with data on line plots, picture graphs, or bar graphs

#### Geometry and Spatial Relationships

- Recognize and draw shapes with specified attributes
- Identify triangles, quadrilaterals, pentagons, hexagons, cubes
- Partition a rectangle into rows and columns of same size squares
- Describe a whole as two halves, three thirds, or four fourths

#### Number and Operations

- Read, write, count, and compare numbers up to 1,000
- Identify a number as odd or even
- Understand and explain place value through one thousands
- Understand 100 as a bundle of ten tens
- Understand 100 as referring to one hundred, 0 tens, and 0 ones
- Skip count by twos, fives, tens, and hundreds within 1,000
- Understand the concept of zero
- Write numbers up to four digits in expanded form to show place value (Example:  $1,234 = 1,000 + 200 + 30 + 4$ )
- Mentally add 10 to or subtract 10 from any given number 100-1,000
- Use understanding of place value and properties of operations to add and subtract
- Add and subtract within 1,000 using models, drawings, or place value strategies
- Estimate sums and differences with multiples of 10 or 100

# Grade 2 Language Arts

## Reading Literature and Informational Text

- Identify main topic, idea, or argument in grade-level text
- Show understanding of key details in a text
- Find evidence in the text to support the author's message or reader's responses
- Retell stories including tales from diverse cultures
- Describe main message, lesson, or moral from stories or other texts
- Describe actions and responses of characters in a story
- Determine meanings of words or phrases relevant to the topic
- Describe effects and uses of words and phrases in passages
- Describe overall structure of a passage and its effect on the message
- Find connections between a series of events, ideas, concepts, or steps in a text
- Identify differences in points of view of characters
- Explain how visual images and graphics contribute to and clarify a text
- Compare and contrast different versions of the same story or texts on the same topic
- Use texts to find information and answer questions following a step-by-step inquiry process
- Take part in shared research and writing projects, gathering information for a specific purpose
- Demonstrate the ability to discuss, clarify, and summarize
- By the end of the academic year, read and understand grade-level literary and informational text at grade level independently and with proficiency

## English Language Skills

- Use legible printing skills
- Correctly use collective nouns, regular and irregular plural nouns, reflexive pronouns, adjectives, and adverbs
- Produce complete simple and compound sentences
- Capitalize names, including holidays, product names, and geographic names
- Use end punctuation, commas, and apostrophes
- Use simple, common spelling rules for age level
- Use of beginning dictionaries and other reference materials
- Correctly use the English language when speaking, reading, or writing
- Know when to use formal and informal English

## Foundational Skills

- Apply grade-level phonics and word analysis skills in reading words
- Decode irregularly spelled grade-level words
- Read grade-level texts with purpose and understanding
- Orally read grade-level texts with accuracy, expression, and appropriate rate
- Confirm and self-correct words during oral reading

## Writing

- Write opinion, informative, or explanatory pieces that state a topic or purpose, supply relevant facts and reasons, and give a conclusion
- Write stories that include details, put events in order, and provide a conclusion
- Make improvements and needed changes to written work
- Use tools, including digital tools, to produce and publish writing
- Take part in shared research and writing projects
- Gather information from various sources to answer a question
- Create written and visual works to summarize and share information

## Speaking and Listening

- Express ideas and feelings clearly
- Speak clearly and audibly in sensible sentences
- Describe people, places, things, and events with relevant details

- Add illustrations, graphics, or other visual components) to a speech to clarify ideas, feelings, and thoughts
- Give and follow simple two-step directions
- Participate in conversations with diverse partners and groups
- Follow agreed-upon rules for discussions
- Listen to and respond to others with focus and care
- Ask and answer questions about key details in a text or in an oral presentation
- Tell an experience with appropriate facts, relevant details
- Create audio recordings of stories or poems

## Grade 2 Science

### Physical Science

- Different states of matter: solid, liquid, gas
- Description and classification of matter by observable properties
- Effects of temperature on matter
- Changes in states of matter
- Relative positions of objects
- Forces: push and pull
- Relationships between force and motion
- Characteristics and effects of gravity
- Life Science

### Biodiversity of living things in any region

- Plant needs, parts, functions, and structures
- Plant growth and pollination
- Plant reproduction
- Inherited traits in plants
- Plant life cycles and life spans
- Plant responses to environment
- Earth and Space Science

### History of planet Earth

- Changes in Earth and Earth's surface (slow and fast)
- Changes caused by wind and water
- Ideas about ways to slow or prevent changes from wind and water
- Roles, descriptions, and locations of water (including ice) on Earth's surface
- Formation, properties, components, and types of soil
- Physical properties and classifications of rocks

## Grade 2 Social Science

### History

- Native American tribes in various regions of North America (or indigenous peoples of home continent [Africa, Antarctica, Asia, Australia, Europe, South America, Oceania/Pacific Islands])
- Impact of European immigrants on Native American life (or impact of European and other immigrants on indigenous peoples of home continent [Africa, Antarctica, Asia, Australia, Europe, South America, Oceania/Pacific Islands])
- Reasons people came to America and the United States (or home country) throughout history
- Importance of Ellis Island and Statue of Liberty
- Current and continuing immigration to the United States (or home country)
- Cultural influences and contributions of immigrants
- Terms and measures of time sequence
- Origins and significance of community, state (or provincial, territorial), and national landmarks

- Sequencing events and using time period designations
- Using vocabulary related to chronology
- Key people, events, and developments in own community and region
- People in the past who have influenced community developments
- Comparison of local history to other communities or region
- Settling of people--why and where
- Time periods (decades, centuries, millennia)
- Creating and interpreting timelines for past and present events
- Key historical figures and their contributions to U.S. (home country) history
- Major inventions and their effects
- Local history and people
- Effects of science and technology through history

### Citizenship and Government

- Needs for rules, laws, and services in a community
- How groups solve problems and promote justice
- Appropriate and inappropriate uses of power
- Names and roles of some current public officials, including local leaders
- Characteristics (and practices) of responsible citizenship
- Reasons for and functions of government
- Government services in the community
- Ways groups resolve conflicts or differences
- Elections and the voting process; participation in voting
- Purpose and collection of taxes
- Symbols, individuals, events, and documents that represent the United States (or home country)
- Basic understandings of the purpose of the United States Constitution (or similar document in home country)
- Some principles of democracy in the United States (or home country)
- Rights in the United States (or home country) and guarantees of rights

### Community and Culture

- Elements of culture
- Culture as a reflection of the life, beliefs, and values of the people
- Significance of art, literature, dance, music in a culture
- Significance of various ethnic and cultural celebrations
- Contributions of various cultures to a society
- Effects of science and technology on human life and culture

### Geography

- Relative location of home and community in state (or province or territory), nation, and world
- Using geographic terms and tools to describe space and place
- Using, interpreting, and creating maps (including digital) and globes
- Using cardinal directions (north, south, east, west) to locate places
- Physical and human features of specific communities (including own)
- Labeling continents, oceans, North and South Poles, equator, and prime meridian
- Location of countries and major features in home continent (Africa, Antarctica, Asia, Australia, Europe, North America, South America, Oceania/Pacific Islands)
- Relationships between physical geography and people's lives and activities
- Settlement patterns and their connections to geography
- Population density
- Natural resources of a place, including human resources
- Ways people can conserve and replenish natural resources
- Urban, suburban, and rural communities

### Economics

- Limitation of resources leading to economic choices
- Supply of goods and services based on consumer demands

- National trade to exchange goods and services
- Personal costs and benefits of saving and spending
- Differences between producing and consuming
- Roles of producers and consumers in production of goods and services
- Value of work and reasons people work
- Tracing the development of a product from a natural resource to finished product
- Saving to reach financial goals
- Local businesses and their goods and services
- Identifying resources, including human resources
- Interdependence of people, regions, and nations in economic activities

## Grade 2 Health and Safety

- Concept of health goals and health choices and their consequences
- Influence of peers, media, family, and community on personal health choices
- Good personal hygiene
- Preventing the spread of disease
- Importance of proper nutrition, daily physical activity, and adequate sleep
- Participating regularly in active play and other physical activities (contingent on any physical or other limitations)
- Safe behavior in daily activities (bicycling, near water, riding in car, walking, strangers, etc.)
- Injury and poison prevention
- Common illnesses and diseases and body defenses against germs
- Basic structures and functions of the human body
- Stages of human growth and development
- Health services in own community
- Responding to emergencies and unsafe situations
- Fire, earthquake, and other disaster drills
- Practicing refusal skills to resist pressure to take part in behavior that is dangerous or hurtful to self or others, including such behaviors as the use of harmful substances and bullying
- Understand and show ways to interact safely with strangers
- Identify safe behaviors when uncomfortable or unsafe around another person
- Development of self-confidence and self-esteem
- Respect and consideration for all individuals and individual differences
- Appropriate expression and management of feelings
- Positive social practices with peers, in home, and community
- Bullying, including appropriate responses and alternate behaviors
- Solving conflicts with peers

## Grade 2 Arts

- Perform and create artistic movements and patterns
- Read, write, and perform simple patterns of sounds and rhythms
- Identify and represent musical sounds and ideas
- Respond to sounds with body movements
- Use voice to speak, chant, sing
- Improvise music with instruments
- Listen, describe, and respond to a variety of music
- Music representing different cultures
- Read and write patterns with musical notes
- Identify some common musical instruments by sight and sound
- Sing age-appropriate songs with accuracy from memory
- Demonstrate appropriate audience skills for live performances

- Improvise dramatizations of stories or ideas
- Take part in experiences in script writing, making props and sets, and acting
- Identify and discuss some well-known works of dance, drama, music, and visual arts and some artists, actors, writers, musicians, choreographers, or composers
- Observe patterns in nature and works of art
- Create original works of art in various media and dimensions
- Express observations, ideas, or feelings through music, drama, or visual art
- Learn and use vocabulary of dance, music, drama, and visual arts

## Grade 2 Technology

- Identify basic parts of technology systems (computer, tablet, mouse, keyboard, printer, etc.)
- Identify and use devices for word processing and running software
- Demonstrate beginning keyboard skills
- Know how to open, close, save, and store files and programs
- Demonstrate responsible care and use of digital equipment
- Identify uses of technology in daily living
- Use tools to access and retrieve information
- Design original works using digital tools
- Interact with peers, teacher, parents, or other students using digital tools
- Use digital tools to publish individual or group creations
- Increase awareness of other groups and cultures through technology use
- Identify and define a real-life problem or question to investigate
- Follow a plan to locate, process, and use information digitally
- Summarize and evaluate information gained digitally
- Understand and practice safe, responsible use of technology
- Practice a positive attitude toward using technology for learning
- Show openness to learning new technologies