

SECOND GRADE

MATH

NUMBER CONCEPTS AND OPERATIONS

- 2.1 Apply number concepts and operations to real world situations.
 - 2.1.1 Create sets of hundreds, tens and ones to represent, compare, and order whole numbers (through 999).
 - 2.1.2 Read and write whole numbers to 999 to describe sets of objects.
 - 2.1.3 Record comparisons of whole numbers using the symbols.
 - 2.1.4 Use fraction names and symbols to describe fractional parts of whole objects or sets of objects (denominators of 12 or less).
 - 2.1.5 Recall and apply basic addition facts (sums to 18).
 - 2.1.6 Recall and apply basic subtraction facts (below 18).
 - 2.1.7 Solve addition and subtraction problems using two-digit numbers with regrouping.
 - 2.1.8 Select addition or subtraction to solve problems.
 - 2.1.9 Model, create, and describe multiplication situations in which equivalent sets of concrete objects are joined (2 rows of 6 eggs =12).
 - 2.1.10 Model, create, and describe multiplication situations in which a set of concrete objects is separated into equivalent sets (25 pennies equals 5 stacks of 5).
 - 2.1.11 Determine the value of a collection of coins less than one dollar.
 - 2.1.12 Select an appropriate problem-solving strategy including drawing a picture, looking for a pattern, estimating and checking, or acting it out.
 - 2.1.13 Use tools such as objects, manipulatives, calculators and other technology to solve problems.

PROBABILITY AND STATISTICS

- 2.2 Gather, organize, display, and interpret data.
 - 2.2.1 Construct picture graphs and bar graphs.
 - 2.2.2 Draw conclusions and answer questions based on picture graphs, bar graphs and circle graphs.
 - 2.2.3 Use data to predict events as more likely or less likely to happen based on data from picture graphs and bar graphs.

PATTERNS, FUNCTIONS, AND ALGEBRAIC THINKING

- 2.3 Use patterns as a tool for problem solving.
 - 2.3.1 Describe patterns and relationships of numbers (as in a table of related number pairs, in a 100s chart, or fact families).
 - 2.3.2 Use patterns to develop strategies to remember basic addition and subtraction facts.

GEOMETRY AND SPATIAL REASONING

- 2.4 Apply principles of geometry to the environment.
 - 2.4.1 Identify attributes of any shape or solid.
 - 2.4.2 Use attributes to describe differences or similarities in two shapes or two solids.
 - 2.4.3 Use whole numbers to locate and name points on a line.

MEASUREMENT

- 2.5 Interpret real world situations using measurement concepts.
 - 2.5.1 Identify concrete models that approximate standard units of length, capacity, and weight.
 - 2.5.2 Estimate length, capacity, and weight using concrete models that approximate standard units.
 - 2.5.3 Measure length, capacity, and weight using standard units.
 - 2.5.4 Describe activities that take approximately one second, one minute, and one hour.
 - 2.5.5 Read a thermometer to gather data.
 - 2.5.6 Describe time on an analog and digital clock using hours and minutes.

READING/LANGUAGE ARTS

READING

- 2.1 Use strategies to decode and comprehend more advanced text.
 - 2.1.1 Use a variety of decoding strategies (syntax, semantics, picture clues, phonetic analysis, re-reading, words within words, structural analysis, etc.)
 - 2.1.2 Activate and use background information and prior experience to enhance comprehension.
 - 2.1.3 Apply an expanded sight vocabulary to meaningful contexts (stories, rhymes, written directions, etc.).
 - 2.1.4 Apply knowledge of punctuation to adjust rate, volume and inflection when reading orally.
 - 2.1.5 Analyze literary characters by comparing the experiences and feelings of the character to personal background and feelings.
 - 2.1.6 Make, analyze and revise predictions before, during and after reading (using background knowledge, pictures, titles, previous information in story, key words, headings, table of contents, index, etc.).
 - 2.1.7 Establish purpose for reading (i.e., gain information, directions, pleasure, research, etc.).
 - 2.1.8 Monitor comprehension and self correct using a balance of cueing systems including syntactical cues, semantic cues, graphophonic cues, and visual cues.
 - 2.1.9 Read and retell by sequencing key points and main ideas.
 - 2.1.10 Draw conclusions from printed information.
 - 2.1.11 Infer meaning from context.
 - 2.1.12 Discuss story elements and structure as characteristics of specific genre (i.e., fairy tales, folk tales, fables, fantasy, realistic fiction).
 - 2.1.13 Distinguish between various forms of fiction and non-fiction.
 - 2.1.14 Demonstrate an appreciation for reading and increase fluency through frequent, regular independent practice.
 - 2.1.15 Set and monitor personal reading goals with teacher guidance.
 - 2.1.16 Recognize literature as an expression of human experience (cultural awareness and appreciation, diversity, family structures, interpersonal relationships, etc.).
 - 2.1.17 Demonstrate a basic familiarity with selected fiction and poetry.
 - 2.1.18 Demonstrate a basic familiarity with selected works of non-fiction.

WRITING

- 2.2 Write for a variety of purposes and in a variety of forms.
- 2.2.1 Apply the writing process to develop a written product (prewriting, composing, revision, editing, publishing).
- 2.2.2 Use correct grammar (subject/verb agreement), punctuation and capitalization in daily writing.
- 2.2.3 Incorporate correct spelling of core high frequency words in daily writing.
- 2.2.4 Adapt writing style to address a variety of audiences and purposes (fiction/non-fiction, journals, stories, letters, reports, poetry, etc.)
- 2.2.5 Organize sentences to include central idea (main idea is evident) with supporting information (informational paragraph).
- 2.2.6 Write a selection with a beginning, middle, and end including supporting details.
- 2.2.7 Write in a variety of modes (narrative, descriptive, expository).
- 2.2.8 Write in a variety of forms (lists, letters, stories, research reports, creative expression).
- 2.2.9 Revise and edit writing using checklists and conferences with peers and teacher.
- 2.2.10 Apply revision/editing process to create final products.
- 2.2.11 Share writing in a variety of ways.
- 2.2.12 Use writing to respond to a variety of information (oral, print, media, etc.)
- 2.2.13 Develop an appreciation for writing and increase fluency through regular frequent independent practice (journal writing, writing workshops, cross curricular writing experiences).
- 2.2.14 Demonstrate legible manuscript handwriting in daily writing.
- 2.2.15 Demonstrate legible cursive handwriting in daily writing.

LISTENING

- 2.3 Display purposeful listening by paraphrasing orally presented information.
- 2.3.1 Demonstrate attentiveness for extended periods of time.
- 2.3.2 Distinguish between relevant and irrelevant information.
- 2.3.3 Verbalize main ideas in orally presented information.
- 2.3.4 Identify speaker's purpose for orally presented information.
- 2.3.5 Follow three and four-step oral directions.
- 2.3.6 Identify purposes of media presentations.

SPEAKING

- 2.4 Use correct conventions of spoken language.
- 2.4.1 Demonstrate positive expressive body language (posture, eye contact, etc.).
- 2.4.2 Use appropriate rate, volume and clarity.
- 2.4.3 Orally present information with extended details (report sharing, Readers' Theater, personal experiences, etc.)
- 2.4.4 Respond to orally presented information with relevant comments. (oral reading, guest speakers, classroom presentations, etc.).
- 2.4.5 Demonstrate respect for the perspectives of others in discussions.
- 2.4.6 Participate in dramatic activities (reciting poetry, plays, Readers' Theater, etc.).
- 2.4.7 Retell selections.

SCIENCE

Please see the [Core Knowledge Sequence](#) that is used in this area for additional curriculum standards and information.

LIFE SCIENCE

- 2.1 Understand the characteristics of living things, the diversity of life, and how living things interact with each other and with their environment.
 - 2.1.1 Compare the basic needs of animals and plants.
 - 2.1.2 Describe the interdependence of plants and animals.
 - 2.1.3 Describe beneficial and detrimental changes to the environment that are caused by living things, including people.
 - 2.1.4 Explain how environmental changes affect plants and animals (i.e., survival, reproduction, migration).

EARTH SCIENCE

- 2.2 Understand the composition of the earth, its history, the natural processes that shape it, and its place in the universe.
 - 2.2.1 Compare fossil records to one another and to living things to observe differences and similarities.
 - 2.2.2 Compare characteristics of extinct animals and plants to one another and to living organisms to record differences and similarities.
 - 2.2.3 Describe environmental changes and adaptive characteristics that contribute to the extinction of species.

PHYSICAL SCIENCE

- 2.3 Understand common properties, forms, and changes in matter and energy.
 - 2.3.1 Identify sources of light.
 - 2.3.2 Demonstrate how light travels (in a straight line unless it strikes an object.)
 - 2.3.3 Identify colors of the spectrum (primary, secondary) and demonstrate color mixing.
 - 2.3.4 Classify objects according to properties of matter (solids, liquids, and gases).

HEALTH

- 2.4 Understand how to maintain and promote personal health.
 - 2.4.1 Explain ways in which germs are transmitted, methods of preventing the spread of germs, and the importance of immunizations.
 - 2.4.2 Identify causes of disease other than germs (i.e., allergies, heart disease).
 - 2.4.3 Explain how the body provides protection from disease.
 - 2.4.4 Demonstrate practices to control the spread of germs in daily life (hand washing, skin care, etc.).

Focus: Community

SOCIAL STUDIES

Please see the [Core Knowledge Sequence](#) that is used in this area for additional curriculum standards and information.

HISTORY

- 2.1 Understand the concept of time and chronology.
 - 2.1.1 Describe the order of events by using designations of time periods such as ancient times and modern times.
 - 2.1.2 Use vocabulary related to chronology, including past, present, and future.

- 2.1.3 Create and interpret time lines (i.e., past, present, and future events in the local community).
- 2.2 Understand the history of the local community.
 - 2.2.1 Explain the contributions and significance of historical figures of the local community.
 - 2.2.2 Describe changes in community life over time (i.e.: changes in goods and services, changes in architecture and landscape; changes in jobs, schooling, transportation, communication, religion, recreation).
 - 2.2.3 Identify and explain the significance of various community, state, and national landmarks such as the county courthouse and state and national capitol buildings.
 - 2.2.4 Compare/contrast daily life in communities past and present.

GEOGRAPHY

- 2.3 Compare and contrast different types of maps.
 - 2.3.1 Use symbols, find locations, and determine directions on maps and globes.
 - 2.3.2 Create maps to show places, routes, land forms, bodies of water, and natural resources.
 - 2.3.3 Use a map scale to determine real distances.
- 2.4 Understand the locations and characteristics of places and regions.
 - 2.4.1 Identify major land forms and bodies of water, including continents and oceans, on maps and globes.
 - 2.4.2 Locate the community, state, nation and selected countries on maps and globes.
 - 2.4.3 Compare information from different sources about places and regions.
- 2.5 Understand how physical characteristics of places and regions affect settlement and population patterns.
 - 2.5.1 Describe the effect of climate (weather patterns, natural resources, seasonal patterns, etc.) on human activities and settlement patterns.
 - 2.5.2 Explain the importance of the physical environment and natural resources for providing for basic human needs.
 - 2.5.3 Identify ways in which people have changed the physical environment to accommodate human activities and settlement (i.e., building roads, clearing land for urban development, mining activities, etc.).
 - 2.5.4 Identify consequences of human modification of the physical environment (i.e.: use of irrigation to improve crop yields, altering ecological systems through depletion of rain forests, etc.).
 - 2.5.5 Identify ways people can conserve and replenish natural resources.

ECONOMICS

- 2.6 Understand the role of producers and consumers in the production of goods and services.
 - 2.6.1 Explain how jobs provide income to purchase goods and services.
 - 2.6.2 Explain the choices provided to people through the free enterprise system (how to earn, spend, and save money; where to live and work; how to choose from a variety of products, etc.).
 - 2.6.3 Define and distinguish between producing and consuming.
 - 2.6.4 Describe the process of the development of a product from a natural resource to a finished product.

CIVICS/GOVERNMENT

- 2.7 Understand the purpose of governments.
 - 2.7.1 Identify the three branches of the United States government and the functions of each.
 - 2.7.2 Identify functions of community government.
 - 2.7.3 Identify governmental services in the community (libraries, schools, parks, etc.) and explain the value to the community.
 - 2.7.4 Explain the responsibility of citizens in a community.
 - 2.7.5 Describe the process for selecting government officials, including elections and appointments.
 - 2.7.6 Identify the historical documents on which our government was founded.
- 2.8 Understand that individuals contribute to the well-being of the community in which they live.
 - 2.8.1 Know that someone who volunteers to help improve a community is being a good citizen.
 - 2.8.2 Understand the importance of voting and majority rule in decision making.
 - 2.8.3 Understand the importance of free and open debates of public issues.

SOCIOLOGY/ANTHROPOLOGY

- 2.9 Understand the importance of neighborhoods and communities.
 - 2.9.1 Compare/contrast size and structure of neighborhoods and communities.
 - 2.9.2 Explain the importance of transportation in linking communities.
 - 2.9.3 Describe traditions and customs of the local community.
 - 2.9.4 Explain the significance of selected stories, poems, statues, paintings, historic places, and other examples of the local cultural heritage.

MUSIC

Please see the [Core Knowledge Sequence](#) that is used in this area for additional curriculum standards and information.

- 2.1 The student describes and analyzes musical sound and demonstrates musical artistry. The student is expected to:
 - 2.1.1 Identify instruments visually and aurally.
 - 2.1.2 Use musical terminology to explain sounds and performances.
 - 2.1.3 Identify music forms such as AB and ABA
- 2.2 The student performs a varied repertoire of music. The student is expected to:
 - 2.2.1 Sing or play classroom instruments independently or in groups.
 - 2.2.2 Sing songs from diverse cultures and styles.
- 2.3 The student reads and writes music notation. The student is expected to:
 - 2.3.1 Read and write simple music notations, using a system (letters, numbers, syllables).
 - 2.3.1 Read and write music that incorporates basic rhythmic patterns in simple meters.
- 2.4 The student relates music to history, to society, and to culture. The student is expected to:
 - 2.4.1 Identify music from various periods of history and culture.
 - 2.4.2 Sing songs and play musical games from diverse cultures.
 - 2.4.3 Identify relationships between music and other subjects.
- 2.5 The student responds to and evaluates music and musical performance. The student is

expected to:

- 2.5.1 Distinguish between beat/rhythm, higher/lower, louder/softer, faster/slower, and same/different in musical performances.
- 2.5.2 Show appropriate audience behavior during live performances.

PHYSICAL EDUCATION

The three basic concepts addressed in the physical education standards are movement, physical activity /health and social development.

- 2.1 The student demonstrates competency in fundamental movement patterns and proficiency in a few specialized movement forms. The student is expected to:
 - 2.1.1 Travel independently in a large group while safely and quickly changing speed and direction.
 - 2.2.2 Demonstrate skills of chasing, fleeing, and dodging to avoid or catch others.
 - 2.2.3 Demonstrate mature form in walking, hopping, and skipping.
 - 2.2.4 Demonstrate simple stunts that exhibit personal agility such as jumping – one and two foot takeoffs and landing with good control.
 - 2.2.5 Demonstrate the ability to mirror a partner.
 - 2.2.6 Walk in time to a 4/4 underlying beat.
 - 2.2.7 Jump a self-turned rope repeatedly
 - 2.2.8 Demonstrate key elements of manipulative skills such as; of hand dribble, foot dribble, kick and strike such as striking a balloon or ball with hand.
 - 2.2.9 Perform rhythmical sequences such as simple folk, creative, and ribbon routines.
- 2.2 The student applies movement concepts and principals to the learning and development of motor skills. The student is expected to:
 - 2.2.1 Recognize that attention to the feeling of movement is important in motor skill development.
 - 2.2.2 Identify similar movement concepts and terms in a variety of skills such as straddle position, ready position, and bending knees to absorb force.
- 2.3 The student exhibits a health enhancing, physically–active lifestyle that improves health and provides opportunities for enjoyment and challenge. The student is expected to:
 - 2.3.1 Describe and select physical activities that provide opportunities for enjoyment and challenge;
 - 2.3.2 Participate in moderate to vigorous physical activities on a daily basis that cause an increased heart rate, breathing rate, and perspiration;
 - 2.3.3 Lift and support his/her own weight in selected activities that develop muscular strength and endurance of the arms, shoulders, abdomen, back, and legs such as hanging, hopping, and jumping;
- 2.4 The student knows the benefits from being involved in daily physical activity and factors that affect physical performance. The student is expected to:
 - 2.4.1 Identify how regular physical activity strengthens the heart, lungs, and muscular system.
 - 2.4.2 Describe how the blood carries oxygen and nutrients through the body.
 - 2.4.3 Explain the needs for foods as a source of nutrients that provide energy for physical activity.
 - 2.4.4 Describe the negative effects of smoking on the lungs and the ability to exercise.

- 2.4.5 Describe the need for rest and sleep in caring for the body.
- 2.5 The student understands safety practices associated with physical activity and space. The student is expected to:
 - 2.5.1 Use equipment and space properly.
 - 2.5.2 Select and use appropriate protective equipment in preventing injury such as helmets, elbow/knee pads, wrist guards, proper shoes, and clothing.
 - 2.5.3 List the effects the sun has on the body and describe protective measures such as sunscreen, hat, and long sleeves.
 - 2.5.4 Describe appropriate reactions to emergency situations common to physical activity settings such as calling 911.
 - 2.5.5 Identify safe cycling and road practices.
- 2.6 The student understands basic components such as strategies and rules of structured physical activities including, but not limited to, games, sports and dance. The student is expected to:
 - 2.6.1 Identify strategies in simple games and activities such as dodging to avoid being tagged.
 - 2.6.2 Identify goals to be accomplished during simple games such as not getting tagged.
- 2.7 The student develops positive self-management and social skills needed to work independently and with others in physical activity settings. The student is expected to:
 - 2.7.1 Display good sportsmanship.
 - 2.7.2 Treat others with respect during play.

VISUAL ARTS

Please see the [Core Knowledge Sequence](#) that is used in this area for additional curriculum standards and information.

- 2.1 Develop perceptions to increase visual awareness and sensitivity to surroundings. The student develops and organizes ideas from the environment. The student is expected to:
 - 2.1.1 Identify variations in objects and subjects from the environment, using the senses.
 - 2.1.2 Identify art elements, such as color, texture, form, line, and space and art principles such as emphasis, pattern, and rhythm.
- 2.2 Expresses ideas through original artworks, using a variety of media with appropriate skill. The student is expected to:
 - 2.2.1 Express ideas and feelings in artwork, using a variety of colors, forms, and lines.
 - 2.2.2 Identify and practice skills necessary for producing drawings, paintings, prints, constructions, and modeled forms, using a variety of art materials.
 - 2.2.3 Create effective compositions, using design elements and principals.
- 2.3 Demonstrate an understanding of art history and culture as records of human achievement. The student is expected to:
 - 2.3.1 Identify stories in a variety of artworks.
 - 2.3.2 Compare ways individuals and families are depicted in different artworks.
 - 2.3.3 Identify different kinds of career in art.
- 2.4 Makes informed judgments about personal artworks and the works of others. The student is expected to:
 - 2.4.1 Defines reasons for preferences in personal artworks.

- 2.4.2 Identify ideas in original artworks, portfolios, and exhibitions by peers and artists.

FOREIGN LANGUAGE

Language study is best begun in kindergarten (or earlier) and continued without interruption through grade 12 and beyond. Research confirms that children easily and naturally acquire language at an early age. The degree of proficiency is directly proportional to the amount of time spent by students in meaningful study. The student develops insight into the nature of language and culture by comparing the student's own language and culture to another.

- 1.1 The student communicates in a language other than English using the skills of listening, speaking, reading, and writing.
- 1.1.1 Students listen to and derive meaning from a variety of foreign language sources. In order to meet this standard the student will:
- Recognize common expressions;
 - Obtain meaning from diverse listening sources;
 - Demonstrate comprehension through appropriate responses; and
 - Engage in a variety of listening situations.
 - Comprehend common memorized words, expressions, and cognates (a word related to one in another language) when hearing the foreign language spoken from a variety of sources;
 - Demonstrate comprehension of everyday conversations including familiar situations and simple instructions.
- 1.1.2 Students speak in a foreign language for a variety of purposes and for diverse audiences. In order to meet this standard, a student will:
- Apply pronunciation rules and intonation patterns;
 - Use vocabulary, grammatical forms, and structures of the target language to convey meaning;
 - Apply knowledge of cultural practices to spoken language;
 - Express needs, tell stories, obtain and convey information, explain concepts and procedures, and persuade; and
 - Interact with speakers of the language in a variety of venues: personal, business, dramatic presentations.
 - Use learned pronunciation and intonation patterns;
 - Speak in predictable, familiar situations using learned vocabulary and phrases;
 - Express personal opinions and desires with learned phrases;
 - Describe everyday topics using appropriate vocabulary and grammatical structures;
 - Ask and answering simple questions.
- 1.1.3 Students read and derive meaning from a variety of materials written in a foreign language. In order to meet this standard, students will:
- Recognize words, phrases, idiomatic expressions, and grammatical structures;
 - Demonstrate comprehension of reading materials written for a variety of purposes;
 - Use and apply the information gained from reading;
 - Respond to the cultural elements contained in reading materials of the language.
 - Recognize and understand cognates (a word related to one in another

language) and expressions;

- Infer meaning of unfamiliar words from context;
- Show comprehension of reading materials;
- Identify cultural elements found in reading materials.

1.1.4 Students write in a foreign language for a variety of purposes and for diverse audiences. In order to meet this standards students will

- Write for purposes such as relating personal experiences, obtaining and conveying information, explaining ideas and opinions, and persuading;
- Write for audiences such as peers, teachers, and community members;
- Plan, draft, revise, proof read, and edit written communications;
- Use correct grammar, sentence structure, vocabulary, spelling, punctuation, and capitalization to convey meaning;
- Write about everyday topics and express personal opinions and desires using learned vocabulary phrases and grammatical structures;
- Obtain and report information for a variety of audiences
- Proofread and rewrite their own work;
- Use appropriate grammar, spelling, capitalization, and punctuation;

2.1 The student gains knowledge and understanding of other cultures. The student is expected to:

- Demonstrate knowledge of aspects of foreign cultures such as daily life, education, history, geography, government, economics, and the arts;
- Apply knowledge of cultural practices when communicating in a foreign language;
- Use the foreign language to access cultural information available only in that language.
- Observe and identify everyday cultural practices (what people do).
- Use culturally appropriate gestures and oral expressions for common or familiar classroom interactions.
- Listen to or read materials in the language from the cultures being studied.