

# Pinewood School

## Course Catalog 2017–2018

*Grades K–6*

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## **GRADES K–6**

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## GRADES K–6

### *Mission Statement*

*At Pinewood, we shape our students' growth through a more intentional way of learning:*

- **ensuring all students learn from passionate experts**  
so that they delve far deeper than textbook coverage, inspired by the enthusiasm and leadership of educators who have achieved mastery in their fields
- **creating a disciplined yet joyful culture of public self-expression**  
by teaching presentation skills onstage and in the classroom, helping students blossom into dynamic, self-confident communicators
- **upholding high academic expectations**  
to build the kind of intellectual stamina that leads students to think critically and engage actively in their studies
- **setting grounded examples for moral behavior**  
so that the core values of our school family—respect, service, honesty, kindness, citizenship—inspire our students to make good choices in all their endeavors
- **leading students through a proven curriculum that fosters creativity, passion for learning, and further exploration**  
while allowing students to uncover new talents and investigate their potential in a supportive environment that unleashes possibilities

*Through this more intentional way of learning, Pinewood students grow as considerate, adventurous, expressive, self-aware young people, prepared for their top-choice colleges and for meaningful and productive lives.*

## GRADES K–6

### *Technology Policy*

*Our goal is to utilize technology to personalize and deepen the educational experience of our students by developing critical thinking and problem solving skills. We aim to enhance the way students learn, communicate, and connect with the world around them by promoting innovation, creativity, and collaboration.*

*At Lower Campus (grades K–2), technology is readily available for teacher and student use and is woven throughout the curriculum as developmentally appropriate. AppleTVs help enrich our curriculum, as do Smartboards in the first and second grade classrooms. At the kindergarten level, the primary modality of instruction focuses on invaluable kinesthetic and tangible experiences. All of our students work with iPads as tools to deepen understanding, reinforce course content, explore topics through a new lens, and to record and share work and performances.*

*At Middle Campus (grades 3–6) we embrace our responsibility to educate our students to be life-long learners as well as safe and responsible digital citizens. The role that critical thinking skills and technology play in that success is extremely important. Technology at Middle Campus is readily available for teacher and student use. Applications for technology are woven throughout the curriculum to enrich the learning environment as our teachers actively pursue new 21st century strategies for increasing student engagement and enhancing learning outcomes. All 3rd through 6th grade students work with iPads as tools, have access to Apple laptops, and classrooms are equipped with Smartboards and AppleTVs.*

## GRADES K–6

# Language Arts Curriculum

The Language Arts curriculum develops a mastery of skills in reading, spelling, writing, and speaking the English language proficiently. Daily oral reading in small groups with the teacher provides training in reading accuracy and meaningful expression. Students learn principles and components of English grammar as it is essential for writing skills as well as for comprehension of spoken and written language. The foundations of reading, spelling and grammar instruction culminate in the writing program. Students understand each stage of the writing process and gain the capacity to work diligently on every phase of creating a fine written piece through studying and practicing the Six Traits of Writing.

## Kindergarten Language Arts

### Oral Communication

- Use full sentences when responding to open-ended questions.
- Expressively recite nursery rhymes and poems from memory.
- Verbalize the steps in the process of forming letters as the letters are written.
- Orally summarize material that has been read.
- Speak with appropriate volume and articulate phonemes clearly and accurately.

### Penmanship

- For ease and neatness in printing, use the correct grip for crayons and pencils.
- Use penmanship as kinesthetic reinforcement of letters and sounds for spelling and reading.

### Phonics for Spelling and Reading

- Know the names and order of the letters in the alphabet and be able to alphabetize word by first letter.
- Identify names and all sounds of 72 English phonograms.
- Perceive separate sounds in sequential order in syllables and words.
- Explain the differences between consonants and vowels.
- Identify and label the rules that determine vowel sounds in syllables.
- Consistently identify the specific rule(s) that govern the spelling of a word.
- Identify, label, and explain open and closed syllables.
- After hearing a word, identify the sequence of phonograms as s/he writes that word, sound by sound, using best penmanship.

### Reading and Auditory Comprehension

- Create and verbalize vivid mental images when reading words, sentences, and paragraphs without the aid of pictures.
- Respond orally to comprehension questions after reading words or sentences.
- Develop a rich vocabulary including words needed for following directions.
- Use grammar as a tool of comprehension by identifying the action (verb) and words that tell “who”, “doing,” “what or whom” “how,” “when,” or “where.”
- Identify “key words” in sentences, the words that are most pertinent to the meaning.
- From the selected key word(s), create a “title” for sentences that accurately identifies the main idea of the sentences.
- Recall and retell from memory sentences and poetry that have been read and studied.

- Identify reading materials as “narrative,” or “informative.”
- Identify and describe characters, settings, plot.
- Predict outcomes.
- Summarize reading material (by a word, by a sentence, by a paragraph).
- Build vocabulary and comprehension by listening to works read aloud by the teacher that are above reading level but appropriate for comprehension level.

#### *Literature*

- Enjoy and recite (from memory) classic nursery rhymes.
- Read appropriate level fiction and non-fiction out loud and independently.
- Understand and follow left-to-right direction for reading using index finger to keep place and retain focus when reading.
- Read sentences “rhythmically” and expressively thereby revealing comprehension of content.
- In all literature activities, discuss new vocabulary, recall content, and experience the lives of others vicariously.
- To build character, discuss the virtues and vices that each fine literature piece provides.
- Some samples of books and authors they read include: Flyleaf Reading Series, Dr. Seuss, *The Runaway Bunny*, and *The Little Rabbit Who Wanted Red Wings*.

#### *Writing*

- Learn proper punctuation for sentences.
- Compose original sentences orally.
- Write original sentences.
- Read written compositions aloud to the class.
- Recognize and know the labels for comma and end punctuation—“period,” “question mark,” and “exclamation point.”

### **1st Grade Language Arts**

#### *Oral Communication*

- Read aloud expressively each day in oral reading groups.
- Answer questions and speak using full sentences.
- Learn and apply techniques for excellence in oral presentation.

#### *Penmanship*

- Produce neat printing with correctly formed letters and appropriate spacing between words.

#### *Phonics for Spelling and Reading*

- Recognize, recite, and produce examples of the patterns and rules that govern English and use these to encode (spell) and decode (read).
- Drill phonetic patterns daily with auditory, visual, kinesthetic, and verbal activities.
- Spell and read daily the most commonly used words for K-3rd grade to achieve accuracy in spelling and automatic recognition in reading.
- Exercise visual and short-term memory by recalling the words on spelling lists.

#### *Grammar and Punctuation*

- Define, identify, and label in a sentence nouns (common/proper, singular/plural), verbs (action/linking, present/past tense), adjectives, and pronouns.
- Recognize, label, and diagram simple sentences.
- Identify, label, and produce examples of subject, verb, direct object, and predicate nominative.

- Use capitals and correct ending punctuation in daily writing.

#### *Literature and Comprehension*

- Read aloud from challenging text each day and participate in a teacher-led discussion to enhance comprehension and appreciation of the classics.
- Strengthen comprehension skills with activities that enhance mental imagery, improve recall, build vocabulary, and increase ability to analyze and summarize.
- Read and enjoy poetry.
- Participate in an out-of-class reading program (AR) that provides choices (fiction/nonfiction) grouped by comprehension level and personal interest.
- Listen to works read aloud by the teacher that are above students' reading level but appropriate for auditory comprehension level.
- Read and discuss books and authors including: *The Story About Ping* by Marjorie Flack, *The Tale of Peter Rabbit* by Beatrix Potter, and *My Father's Dragon* by Ruth Stiles Gannett.

#### *Writing*

- Create sentences and simple paragraphs and receive instruction to correct spelling and grammar.
- Organize sentences in logical sequence within the paragraph.
- Enjoy creating personal narratives, stories, poems and informative writing and receiving input from teacher and peers.
- Compose opinion paragraphs (topic and support) with teacher support.

### **2nd Grade Language Arts**

#### *Oral Communication*

- Read aloud expressively each day in oral reading groups.
- Answer questions and speak using full sentences.
- Give oral presentations.

#### *Penmanship*

- Produce neat cursive with correctly formed letters at a fluent pace.

#### *Phonics for Spelling and Reading*

- Recognize, recite, and produce examples of the letter patterns and rules that govern English and use these to encode (spell) and decode (read).
- Drill phonetic patterns daily with auditory, visual, and kinesthetic activities.
- Spell and read the most commonly used words for K-4th grades.
- Exercise visual memory by recalling words in spelling lists.

#### *Grammar and Punctuation*

- Analyze and label the eight parts of speech.
- Experience, identify, and produce examples of regular and irregular verbs in present and past tenses.
- Practice subject/verb and pronoun/antecedent agreement.
- Distinguish between subjective and objective pronouns.
- Recognize, label, and diagram predicate adjectives and adverbial prepositional phrases.
- Use commas after each word in a series, in letter greetings and closings, and dates.
- Correctly use apostrophes in possessive nouns, contractions, and quotation marks in basic sentences.
- Correctly use quotation marks.

### *Literature and Comprehension*

- Read aloud from a challenging work of literature each day and participate in a teacher-led discussion to enhance comprehension and appreciation of the classics.
- Strengthen comprehension skills with activities that practice mental imagery, improve recall, build vocabulary, and increase ability to summarize and analyze.
- Read and enjoy poetry.
- Participate in an out-of-class reading program (AR) that provides choices (fiction/nonfiction) grouped by comprehension level and personal interest.
- Label genres and types of literature.
- Listen to works read aloud by teacher that are above reading level but appropriate for auditory comprehension level.
- Learn and discuss new vocabulary words from works of literature.
- Read and discuss books and authors including: *Mirette on the High Wire* by Emily Arnold McCully, *Old Mother West Wind* by Thornton W. Burgess, and *Mr. Popper's Penguins* by Richard and Florence Atwater.

### *Writing*

- Produce clear, interesting, creative sentences using correct spelling and grammar.
- Write simple paragraphs that stay on topic and support the main idea.
- Enjoy creating personal narratives, stories, poems, and informative writing and receiving input from teacher and peers.
- Experience expository, descriptive, narrative, and persuasive writing.
- Learn the correct format of a business letter.
- Write summaries and poetry.
- Create an animated book combining technology, art, and language arts skills.

## **3rd Grade Language Arts**

### *Oral Communication*

- Read aloud expressively each day in oral reading groups.
- Give oral presentations in all subject areas.
- Learn and apply techniques for excellence in oral presentation.

### *Spelling, Grammar, and Conventions*

- Exercise visual memory by recalling the order of words in spelling lists and poems.
- Memorize and apply knowledge of all phonograms and their sounds.
- Identify patterns in morphology and synthesize and describe these in spelling rules and apply these rules to reading and writing.
- Understand types of nouns, adjectives, and verbs.
- Experience, identify, and produce examples of regular and irregular verbs in the past, present, and future tenses.
- Recognize, label, and diagram simple sentence types including words that modify each part.
- Reinforce ability to label the parts of a sentence, adding adverbial prepositional phrases.
- Use commas in addresses and dates, and in a series.
- Identify the four purposes of a sentence: declarative, interrogative, exclamatory, and imperative.

### *Literature and Comprehension*

- Read aloud from a challenging work of literature each day and participate in teacher-led discussion to enhance comprehension and appreciation.

- Strengthen comprehension skills with activities that develop mental imagery, improve recall, build vocabulary, and increase ability to summarize and analyze.
- Read and enjoy poetry and memorize and recite two poems a month.
- Write and respond to questions that elicit comprehension, analysis, and creative thinking about literature.
- Produce answers and take quizzes on vocabulary words from a formal vocabulary program that encourages students to experience each word in various forms and to use contextual clues to apply the word accurately and effectively.
- Read and discuss books and authors including: *Charlotte's Web* by E.B. White, *The Adventures of a Brownie* by Dinah Mulach, and *Misty of Chincoteague* by Marguerite Henry.

#### *Writing*

- Learn and practice the writing process.
- Write paragraphs and essays that have a main idea, supporting details, transitions, and a conclusion.
- Organize sentences in logical sequence within the paragraph and learn to vary sentence structure.
- Produce examples of informative, narrative, and informative-narrative genres.
- Enjoy creating personal narratives, stories, and poems and receiving input from teacher and peers.
- Write a research paper in conjunction with the history and geography class.

### **4th Grade Language Arts**

#### *Oral Communication*

- Read aloud expressively each day in oral reading groups.
- Give oral presentations in all subject areas.
- Learn to use expression, cadence, intonation, volume, and body language effectively in oral presentations and reading.

#### *Spelling, Grammar, and Conventions*

- Exercise visual memory by recalling words in spelling lists and poems.
- Memorize and apply knowledge of all phonograms and their sounds.
- Identify patterns in morphology and synthesize and describe these in spelling rules and apply these rules to reading and writing.
- Understand types of nouns and pronouns and their function in a sentence.
- Experience, identify, and produce examples of linking, transitive, and intransitive verbs.
- Study adjectives and their degrees of comparison including irregular forms.
- Study modifiers, including adjectives, adverbs, and prepositional phrases. Identify their role within the sentence and label and diagram accordingly.
- Recognize, label, and diagram simple and compound sentences and words that modify each part.
- Categorize all sentences into one of four groups: declarative, interrogative, imperative, and exclamatory.
- Use commas after introductory words, phrases, and clauses, and compound and complex sentences.

#### *Literature and Comprehension*

- Read aloud from a challenging work of literature each day and participate in teacher-led discussion to enhance comprehension and appreciation.
- Strengthen comprehension skills with activities that develop mental imagery,

- improve recall, build vocabulary, and increase ability to summarize and analyze.
- Read and enjoy poetry and memorize and recite two poems a month.
- Write and respond to questions that elicit comprehension, analysis, and creative thinking about literature.
- Produce answers and take quizzes on vocabulary words from a formal vocabulary program that encourages students to experience each word in various forms and to use contextual clues to apply the word accurately and effectively.
- Learn different genres of literature through book reports, projects, and presentations.
- Read and discuss books and authors including: *Pinocchio* by Carlo Collodi, *Where the Red Fern Grows* by Wilson Rawls, *Black Beauty* by Anna Sewell, and interdisciplinary literary and nonfiction works that engage students with history.

### *Writing*

- Trains students to use strong and pertinent ideas organized with a clear beginning, middle, and end.
- Improve fluency and voice by writing sentences that flow smoothly, are easy to read, and have carefully chosen words.
- Use clear and grammatically correct writing conventions.
- Produce examples of expository, descriptive, narrative, and persuasive writing.
- Respond to literature through writing summaries and essays.
- Work collaboratively with the history and geography teacher to write a research paper that includes identifying and summarizing trustworthy nonfiction resources, fact-finding, organizing data, and presenting information in an effective and organized manner.

## 5th Grade Language Arts

### *Oral Communication*

- Read aloud expressively each day in oral reading groups.
- Give oral presentations in all subject areas.
- Learn to use expression, cadence, intonation, volume, and body language effectively in oral presentations and reading.

### *Spelling, Grammar, and Conventions*

- Exercise visual memory by recalling the order of words in spelling lists and poems.
- Understand correct use of indefinite and relative pronouns.
- Learn active and passive voice of verbs.
- Study adjectives and adverbs and their degrees of comparison.
- Recognize, label, and diagram simple, compound, and complex sentence types.
- Reinforce ability to label the parts of a sentence, adding indirect objects.
- Use commas for appositives, after introductory elements, and after noun of direct address.

### *Literature and Comprehension*

- Read aloud from a challenging work of literature each day and participate in teacher-led discussion to enhance comprehension and appreciation.
- Strengthen comprehension skills with activities that develop mental imagery, improve recall, build vocabulary, and increase ability to summarize and analyze.
- Read and enjoy poetry and memorize and recite two poems a month.
- Write and respond to questions that elicit comprehension, analysis, and creative thinking about literature and informational texts.
- Produce answers and take quizzes on vocabulary words from a formal vocabulary program that encourages students to experience each word in various forms and

- to use contextual clues to apply the word accurately and effectively.
- Read and discuss books and authors including: *Island of the Blue Dolphins* by Scott O'Dell, *Wind and the Willows* by Kenneth Grahame, and *The Adventures of Robin Hood* by Howard Pyle.

#### *Writing*

- Experience expository writing in response to literary and informational texts.
- Continue to produce examples of expository, descriptive, narrative, and persuasive writing including creative writing and poetry writing.
- Respond to literature and informational texts through writing and be able to write summaries.
- Write two research reports on history related topics, which could include Mesoamerican cultures, shapers of history, or major explorers.

### **6th Grade Language Arts**

#### *Oral Communication*

- Read aloud expressively each day in oral reading groups.
- Give oral presentations in all subject areas in front of a variety of audiences.
- Learn to use expression, cadence, intonation, volume, and body language effectively in oral presentations and reading.

#### *Spelling, Grammar, and Conventions*

- Combined vocabulary and spelling program that includes weekly quizzes and monthly tests.
- Define, label, and identify the parts of speech in all of their functions and parts of a sentence.
- Review dependent clauses and learn to identify noun clauses.
- Practice subject/verb agreement with sentences having indefinite pronouns, intervening phrases, and compound subjects.
- Recognize, label, and diagram simple, compound, complex, and compound-complex sentence types.
- Identify and label verbals.
- Review use of commas and practice using them with nonessential elements and sentence interrupters.
- Construct complete sentences in order to establish written and verbal skills that can effectively communicate information in all subjects.

#### *Literature and Comprehension*

- Read aloud from a challenging work of literature each day and participate in teacher-led discussion to enhance comprehension and appreciation.
- Strengthen comprehension skills with activities that develop mental imagery, improve recall, build vocabulary, and increase ability to summarize and analyze.
- Read and enjoy poetry and memorize and recite two poems a month.
- Write and respond to questions that elicit comprehension, analysis, and creative thinking about literature and informational texts.
- Produce answers and take quizzes on vocabulary words from a formal vocabulary program that encourages students to experience each word in various forms and to use contextual clues to apply the word accurately and effectively.
- Read and discuss books and authors including: *Number the Stars* by Lois Lowry, *The Adventures of Tom Sawyer* by Mark Twain, *The Bronze Bow* by Elizabeth George Speare, *The Call of the Wild* by Jack London, and primary and secondary sources and essays deepening understanding of history and science.

### *Writing*

- Develop a clear topic and establish its validity by providing relevant details.
- Identify and use reference materials for research reports and data based questions.
- Develop an outline that shows the relationship of details to main ideas.
- Apply the conventions of the English language and organizational structure to writing.
- Collaborate with the history and geography teacher to respond to informational texts through expository writing.
- Become a competent, confident writer with a distinctive personal style.
- Practice and perfect different genres of writing including, expository, compare and contrast, research report, descriptions, narratives, persuasion, poetry, and literary analysis.

## **GRADES K–6**

### **Math Curriculum**

*The mathematics curriculum focuses on students acquiring strong basic computational skills, developing an understanding and proficiency in core concepts, and sharpening logic reasoning and problem solving skills. The students also learn to understand how math relates to everyday life. Through teacher-directed class instruction and opportunities for independent trial and group activities, students are able to show logical steps in their written work, compare strategies for finding solutions, and develop an understanding of each concept. Student review previously studied material for retention and automaticity which improves speed and accuracy while also mastering the fundamentals which supports an understanding of new concepts.*

#### **Kindergarten Math**

- Add/Subtract to 12.
- Place value—tens and ones.
- Order and compare 2-digit numbers.
- Identify basic patterns and improve spatial sense.
- Understand whole and parts.
- Identify plane shapes.
- Introduce skip counting by 2's, 5's, and 10's.
- Introduce telling time on whole and half hours.
- Increase understanding and retention of basic skills and vocabulary through songs, games, movement, manipulatives, and simulated experiences.
- Apply math facts and skills to problem solving and critical thinking challenges.
- Use and read graphs.
- Introduce money.

#### **1st Grade Math**

- Place value—hundreds, tens, and ones.
- Add/Subtract to 20.
- Regroup with 2-digit numbers
- Order and compare 3-digit numbers
- Identify patterns and improve spatial sense
- Tell time on whole, half, and quarter hours.
- Practice skip counting by 2 through 11.
- Learn to identify plane and solid shapes.
- Increase understanding and retention of basic skills and vocabulary through songs, games, movement, manipulatives, and simulated experiences.
- Apply math facts and skills to problem solving and critical thinking challenges.

#### **2nd Grade Math**

- Place value up to ten thousands.
- Multiply 1,2, and 3 digits by single digit numbers.
- Add and subtract with regrouping 3- and 4-digit numbers.
- Order and compare 4-digit numbers.
- Identify patterns and improve spatial sense.
- Practice identifying, sorting, classifying, and measuring plane and solid shapes.
- Learn about elapsed time.
- Begin learning the concept of division with related facts.

- Increase understanding and retention of basic skills and vocabulary through songs, games, movement, manipulatives, and simulated experiences.
- Apply math facts and skills to problem solving and critical thinking challenges.

## 3rd Grade Math

### *Whole number operations*

- Understand place value through one hundred million.
- Compare, order, round, add and subtract whole numbers and money.
- Know multiplication and division facts to 12 fluently.
- Identify factors and multiples, primes and composites.
- Divide with remainders and re-grouping.
- Follow order of operations in whole number calculations.
- Identify, generate, explain patterns in arithmetic and problem solve.

### *Fractions and Decimals*

- Work with equivalent and improper fractions and mixed numbers.
- Understand decimal notation and place value to thousandths.
- Compare, add, subtract and order fractions, decimals and mixed numbers.

### *Measurement and Data*

- Use customary and metric units of length, weight and capacity.
- Solve problems with time, calendar and elapsed time.
- Work with temperature using positive and negative numbers.
- Collect, organize and interpret data using line plots, stem-and-leaf plots, line, bar and circle graphs.
- Calculate the mean, median, mode and range of a set of numbers.

### *Geometry*

- Measure angles using a protractor.
- Recognize and classify triangles, quadrilaterals, polygons and circles.
- Identify congruence, rotations, reflections, translations and line symmetry.
- Compute simple perimeter and area.

## 4th Grade Math

### *Whole Numbers Operations*

- Understand place value through one billion.
- Compare, order, and round whole numbers, integers and decimals.
- Add and subtract whole numbers to 5 digits.
- Multiply and divide by 1- and 2-digit numbers and powers of 10.
- Follow order of operations in whole number calculations.
- Identify primes, composite numbers and prime factorization.
- Find greatest common factors and least common multiples.
- Assess reasonableness of answers using estimation.
- Write and solve simple equations.

### *Fractions and Decimals*

- Recognize and simplify equivalent fractions.
- Work with fractions, decimals and repeating decimals.
- Use the four operations on fractions, mixed numbers and decimals.
- Compute ratios, rates, and proportions.
- Calculate percents of numbers.

### *Measurement and Data*

- Use and convert between units of length, weight and capacity within the same measurement system.
- Collect, organize and interpret data including mean, median and mode.
- Draw and interpret bar graphs, histograms, line graphs, stem-and-leaf plots.
- Calculate simple probabilities.

### *Geometry*

- Identify points, lines, and angles.
- Name plane shapes and solid figures.
- Identify rotations, reflections, and translations.
- Recognize line and rotational symmetry.
- Calculate perimeter, area and volume of rectangles and triangles.
- Compute volume of rectangular prisms.
- Graph coordinate points in the first quadrant.

## **5th Grade Math**

### *Whole Numbers, Decimals, and Fractions*

- Read, write, and understand place value and powers of 10.
- Compare, order, round, and estimate numbers.
- Estimate sums, differences, products, and quotients.
- Add, subtract, multiply, and divide numbers.
- Identify terminating and repeating decimals.
- Use order of operations including parentheses and exponents.
- Recognize the addition and multiplication properties.
- Apply the divisibility rule.
- Distinguish between prime and composite numbers, and find prime factorization of composite numbers.
- Find greatest common factor and least common multiple.

### *Measurement and Data*

- Compute with customary and metric units.
- Collect, organize, and analyze data with surveys and sampling.
- Identify bias.
- Calculate and use measures of central tendency.
- Interpret and display data in graphs.
- Use theoretical and experimental probability.

### *Geometry*

- Measure, draw, classify, and explore properties of angles.
- Calculate area and perimeter of triangles and quadrilaterals.
- Calculate area and circumference of circles.
- Calculate volume and surface area of prisms.

### *Ratio, Proportion, and Percent Relationships*

- Solve problems using ratios, proportions, rates, and unit rates.
- Calculate distance, speed, and time.
- Draw and interpret scale drawings.
- Understand percent as a ratio.
- Compare and order fractions, decimals, and percents.
- Solve simple interest, sales tax, percent, and discount problems.

### *Integers and Algebra*

- Compare and order integers.
- Add, subtract, multiply, and divide integers.
- Use variables, expressions, and equations to solve problems.
- Solve one-step and two-step equations.
- Identify sequences and patterns.
- Investigate and represent functions.
- Graph points and lines on the coordinate plane.
- Graph and identify simple inequalities.

### *Problem solving*

- Solve real world problems with exact and estimated answers.
- Solve multi-step problems and interpreting remainders.

## **6th Grade Math**

### *Patterns and Relationships*

- Identify and extend patterns.
- Using exponents to represent numbers.
- Express numbers in scientific notation.
- Use order of operations to simplify expressions.
- Use prime factorization to find the least common multiple and greatest common factor.

### *Integers and Rational Numbers*

- Add, subtract, multiply, and divide integers and rational numbers.
- Comparing and ordering rational numbers.
- Find equivalent fractions, mixed numbers, and decimals.
- Estimating sums, differences, products and quotients.

### *Algebra*

- Evaluate and simplify algebraic expressions.
- Solving equations and inequalities by adding, subtracting, multiplying, and dividing integers and rational numbers.
- Use Distributive Property.
- Solving two-step, multi-step equations and inequalities with integers and rational numbers.
- Solving equations with variables on both sides.
- Evaluate and estimate using powers and roots.

### *Ratio, Proportion, and Percent Relationships*

- Solve problems using ratios, proportions, rates, and unit rates.
- Use dimensional analysis to make unit conversions.
- Use similar figures and proportions.
- Draw and interpret scale drawings and scale models.
- Understanding and estimating percent problems.
- Solving simple interest, percent problems, and percent of change.

### *Graphs and Functions*

- Understanding the coordinate plane.
- Using function tables to graph ordered pairs.
- Graphing linear and nonlinear functions.
- Using slopes and intercepts to graph linear equations.

*Measurement and Data*

- Compute with customary and metric units.
- Collect, organize, and analyze data with surveys and samplings.
- Interpret and display data.
- Use theoretical and experimental probability, combinations, and permutations.

*Geometry*

- Measure, draw, and classify properties of angles and triangles.
- Calculate area and perimeter of triangles and quadrilaterals.
- Use Pythagorean Theorem.

## **GRADES K–6**

### **Science Curriculum**

The science curriculum focuses on discovery and experimentation. There is very little “virtual” activities in the classroom. Everything is real. Students experience fascinating specimens and creative lessons that capture the imagination and instill a love of science. Through hands-on experimentation, demonstrations, lectures, discussion, and class field trips, students acquire the subject area knowledge essential for critical thinking in this field. Throughout the year, they engage in problem-solving strategies, scientific challenges, and learning proper laboratory techniques and procedures.

#### **Kindergarten Science**

- Explore animals and plants and learn important facts about their lives.
- Properly care for animals and plants in our indoor/outdoor classroom.
- Observe the effects of climate, weather, and seasons on plants and animals.
- Describe the life cycle of plants and animals and explore food chains and webs of life.
- Grow plants and animals.
- Explore practical applications of earth and physical science.
- Seek a sense of order in nature.

#### **1st Grade Science**

- Understand the placements and movements and structure of our solar system.
- Observe and examine: arachnids, land and sea mammals, and other creatures of the San Francisco and Monterey Bay areas.
- Discuss weather systems and events and forces of nature that shape our landscape.
- Take action for conservation—learn to reduce, reuse, recycle, and repurpose.
- Participate in a recycling program.
- Label rocks and minerals and their history in the earth’s structure.
- Explore practical applications of earth and physical science.
- Apply a sense of order (or not) to nature.

#### **2nd Grade Science**

- Examine, identify, discuss, and recall applicable facts about California flora and fauna.
- Describe an animal’s or plant’s purpose in its ecosystem and our impact on them.
- Define anthropods and compare and contrast them.
- Nurture the classroom creatures and the outdoor garden.
- Discuss facts and theories of evolution and extinction—a prehistoric timeline.
- Continue a recycling program.
- Explore practical applications of earth and physical science.
- Apply a sense of order (or not) to nature.

#### **3rd Grade Science**

- Conduct experiments using the scientific method, including stating a hypothesis, carrying out the investigation, recording data, and analyzing the results.
- Understand the concept of controls and variables in a scientific investigation.
- Develop more complex thinking and observation skills during scientific inquiries.

- Gain proficiency in using the glossary and index of the science textbook to reference information.
- Learn the properties of water and its cycles through the earth's ecosystems.
- Study the properties and effects of heat and light energy.
- Use a scale to determine mass, and a graduated cylinder to determine volume.
- Learn the physical features and movements of the earth, sun, moon, and constellations.
- Learn how ecosystems get energy and how they can change.
- Participate in an annual field trip and optional science fair.

#### **4th Grade Science**

- Conduct experiments using the scientific method, including stating a hypothesis, carrying out the investigation, recording data, and analyzing the results.
- Understand the concept of controls and variables in a scientific investigation.
- Develop more complex thinking and observation skills during scientific inquiries.
- Develop proficiency in note taking, study skills, and using the science textbook to reference information.
- Understand the properties of magnets and their force fields, electricity, properties of matter, and the physical and chemical changes of matter.
- Compare, classify, and identify matter according to its physical and chemical properties.
- Understand how to construct series and parallel circuits.
- Study volcanoes and the theory of continental drift and plate tectonics.
- Participate in an annual field trip and optional science fair.

#### **5th Grade Science**

- Conduct experiments using the scientific method, including stating a hypothesis, carrying out the investigation, recording data, and analyzing the results.
- Understand the concept of controls and variables in a scientific investigation.
- Improve proficiency in note taking, study skills, and using the science textbook to reference information.
- Study the human body's nervous system and cell structure and function.
- Learn the properties and characteristics of sound.
- Study the structure of plants, their needs, adaptations and responses.
- Construct a working model of a roller coaster while learning forms of energy and machines.
- Participate in an annual field trip and optional science fair.

#### **6th Grade Science**

- Conduct experiments using the scientific method, including stating a hypothesis, carrying out the investigation, recording data, and analyzing the results.
- Understand the concept of controls and variables in a scientific investigation.
- Become proficient in note taking, study skills and using the science text to reference information.
- Observe and describe the physical and chemical properties of and changes in matter.
- Understand the atomic structure and composition of matter.
- Develop an understanding of Newton's Laws of Motion.
- Participate in an annual field trip and science fair.

## **GRADES K–6**

### ***History & Geography Curriculum***

*The history curriculum follows the Core Knowledge sequence for history and geography as outlined by the Core Knowledge Foundation. This progression provides rich content as knowledge and skills build cumulatively from year to year. Students study American history, world history, and geography. The goals of the program are to have students internalize a passionate fascination with history and enter each new grade ready to learn the next layer of subject matter. The artfully planned sequence also prevents repetitions and gaps in the history curriculum.*

#### **Kindergarten History & Geography**

- Learn the concept of geography, the purpose of maps and the names and locations of the seven continents.
- Study the regions and lifestyles of four different Native American tribes and reenact a Hopi village.
- Understand early American history highlights including the voyage of Columbus, the Pilgrims, and the principles behind Independence Day, democracy, and slavery.
- Learn in detail about the four Mount Rushmore Presidents; Lincoln, Washington, Jefferson and Roosevelt.
- Identify the origins and/or locations of our national symbols; the American Flag, the Statue of Liberty, and the White House.

#### **1st Grade History & Geography**

- Understand how to read a map by using a key, legend and/or symbols.
- Review the seven continents and four major oceans and locate the Equator, poles, hemispheres, and Pinewood's continent, country, state, and community.
- Gain a basic understanding of the development and contributions of the early world civilizations of Mesopotamia and Egypt.
- Introduce and compare various traditions, beliefs, and customs associated with the three major world religions: Christianity, Judaism, and Islam.
- Celebrate the rich culture of modern day Mexico.
- Learn how the earliest American civilizations of the Maya, Aztecs, and Incas developed and fell.
- Learn about the first European explorers and settlers of America.
- Learn the key figures, significance, and events of the American Revolution and the evolution from colonies to independence.
- Gain an introductory knowledge of the early exploration of the American West.
- Recognize and become familiar with the Liberty Bell, the current US President, the American Flag, and the Bald Eagle.

#### **2nd Grade History & Geography**

- Introduce various geographical features and locations of Canada, the United States, Mexico, and Central America.
- Gain a basic understanding of the development and contributions of the early Asian civilizations of India and China.
- Celebrate and introduce the modern civilization and culture of Japan.
- Learn about the great contributions, traditions, cultures, wars, and influential leaders from ancient Greece.
- Introduce the Constitution and the organization of the American Government.

- Learn about the key participants, battles, events and effects of the War of 1812.
- Study westward expansion across the United States.
- Understand the controversy over slavery while learning about the key parties and events of the Civil War.
- Introduce the Civil Rights Movement.
- Recognize and become familiar with the significance of the American Flag, the Statue of Liberty, and the Lincoln Memorial.

### **3rd Grade History & Geography**

- Identify the seven major continents and rivers of the world and understand fundamental geographical terms.
- Understand geography and history of Canada.
- Describe key events and people during the rise and fall of the Roman Empire.
- Understand the contributions of the Vikings.
- Study the first American settlers, specifically the Inuit to the Anasazi and their contributions to the United States.
- Identify the major early Spanish explorers and the major events of the settlement of North America.
- Understand geography, key events, and people of the original US colonies.
- Write a research paper in conjunction with the language arts class.

### **4th Grade History and Geography**

- Learn and use mapping skills in order to locate landmarks on a map.
- Learn and identify the major mountain ranges by continent as well as the highest mountain peaks in the world.
- Learn the geography of Western Europe during the Middle Ages.
- Identify reasons leading up to the fall of the Roman Empire and how this affected the lives of the people living at the time.
- Learn about important figures, events, and institutions in Europe during the Middle Ages.
- Understand the significance of the Magna Carta and the development of Parliament and the beginnings of representative government.
- Learn about the origins and spread of Islam, identify the Five Pillars of Islam, and study Islamic civilization's contributions to science and mathematics.
- Identify the cause and effect of the Crusades.
- Learn about the rise and fall of Western African Kingdoms during the Middle Ages and the impact of Islam on this part of the world.
- Compare and contrast the ancient Chinese Dynasties.
- Learn about the early ongoing battles for control of the colonies between England and France and the involvement of the Native Americans.
- Identify causes, provocations, major battles, and key individuals of the American Revolution.
- Identify the main Ideas of the Declaration of Independence and what they mean today in US government.
- Identify the purpose of the US Constitution, the three branches of government, and the Bill of Rights.
- Identify the first seven presidents and how each contributed to the early development of the United States.
- Identify some of the early reformers of the United States and how their contributions shaped much of our society in modern times.
- Learn California history and geography and visit Old Mission San Juan Bautista and enjoy a 2-day trip to the Gold Country.

## **5th Grade History & Geography**

- Heighten awareness of world geography using characteristics of place (climate and temperature, land and soil, animal and plant life) to compare and contrast locations of settlement and civilization relevant to areas of study.
- Compare and contrast Mesoamerican civilizations (Maya, Aztec, and Inca) through the lens of Cultural Characteristics of Place (language, religion, technology and invention, economy, government, and food supply).
- Explore the Renaissance through the study of the forces that put it in motion, the locations that nurtured it, the economies that helped fund it, the technology that helped catalyze it, the personalities that symbolize it, and the ways that it has shaped the world we live in today.
- Study the Age of Exploration through the investigation of the sources of information that heightened awareness of foreign lands and their resources, the technology that enabled explorers to reach farther, the nations and their motivations for exploring, the personalities that were successful in reaching distant lands, and the cultures that were deeply effected by these exploring nations.
- Study the Gutenberg Printing Press, Galileo and Copernicus, Martin Luther and John Calvin to understand the causes of the Reformation.
- Gain an understanding of revolution and the path of government to represent larger groups of the population through the study of the Magna Carta, the British Bill of Rights and the Glorious Revolution.
- Gain a deeper understanding of westward expansion before the civil war through the study of the geography and technology that enabled it, the courageous men and women willing to reach into what was deemed wilderness, the rich native cultures already residents of the land and the devastating effects of this movement on them, Manifest Destiny, Texas and the Mexican American War.
- Deepen understanding of the Civil War through the study of the events that led to it (abolitionists, slave rebellions, Missouri Compromise, Dred Scott, John Brown and Harper's Ferry, and the industrial North vs. the agricultural South) and the study of the deep differences between the North and the South and the leaders that influenced the American people and the battles that raged leading to its end.

## **6th Grade History & Geography**

- Identify the common characteristics of deserts and be able to recognize and identify the world's largest deserts.
- Develop an understanding of the basic beliefs, symbols, and origins of the three main monotheistic religions: Islam, Judaism, and Christianity.
- Understand and explain the circumstances and innovations that enabled large groups of people to live together in communities and eventually in large civilizations.
- Gain an introductory knowledge of the geographic, political, economic, religious, and social structures during the development of the Ancient Greece and Rome.
- Explore Newton, Descartes, Hobbes, Locke and other key personalities of the Age of Enlightenment to understand the root of modern government and modern thought.
- Deepen the understanding of government and power struggle through exploration of the French Revolution and the influence the American Revolution had on it, the Old Regime and the Three Estates in French Society, King Louis the XIV, XV, and XVI, the Declaration of the Rights of Man, the Reign of Terror, and Napoleon Bonaparte.
- Explore the Industrial Revolution and its effect on society through the study of the

technology that drove it (cotton gin, steam engine, spinning mule, factory), the shift from the farm system to the factory system, poor working conditions and child labor, affordable products.

- Gain an introductory understanding of Capitalism and Socialism through the study of Adam Smith, the law of supply and demand, income inequality, income redistribution, Karl Marx and the Communist Manifesto.
- Deepen understanding of revolution through the exploration of the characteristics, key figures, and major events of Latin American independence
- Explore the push and pull factors of immigration to the United States through a family history project that entails research of family name, creation of a family tree, and the research and presentation of a family immigration story.

## **GRADES K–6**

### **Spanish Curriculum**

*In Spanish, students develop listening comprehension skills, a vocabulary base, reading skills, the importance of correct use of grammatical structures and correct pronunciation of the Spanish language. They learn about different cultures in a creative and participatory way that facilitates understanding, tolerance, and respect for different cultures and countries.*

#### **Kindergarten Spanish**

- Learn basic vocabulary and use vocabulary in oral and written exercises.
  - vocabulary themes: greetings, colors, numbers, the calendar, weather, school, the body, food, clothing, home, and animals.
- Practice correct pronunciation of vowel and consonant sounds.
- Understand and speak in the imperative form through commands and through TPR (Total Physical Response) activities.
- Play games, sing songs, play act, recite poems, and listen to short stories and dialogues.

#### **1st Grade Spanish**

- Review Kindergarten vocabulary with additional terms for each category.
- Study and use singular and plural nouns and masculine and feminine articles and nouns.
- Write words and short sentences in the simple present tense.
- Understand and speak in the imperative form through commands and through TPR (Total Physical Response) activities.
- Play games, sing songs, play act, recite poems and rhymes, and listen to short stories and dialogues.

#### **2nd Grade Spanish**

- Review first grade vocabulary with additional terms for each category.
- Practice using singular and plural nouns and masculine and feminine articles and nouns.
- Begin conjugating present tense verbs in the first and third person.
- Learn how to understand and speak questions and answers.
- Write words, short sentences, and short stories.
- Understand and speak in the imperative form through commands and through TPR (Total Physical Response) activities.
- Play games, sing songs, play act, recite poems and rhymes, and listen to short stories and dialogues.
- Perform a musical play in Spanish

#### **3rd Grade Spanish**

- Build upon second grade vocabulary.
- Use Spanish to communicate most needs in the classroom.
- Introduce basic grammar conventions like the use of articles, subject/adjective agreement.
- Teach first and third person usage of “ser,” “estar,” and “tener.”
- Write sentences and short paragraphs that encourage practice and creativity.
- Engage in paired/group conversations, play games, play act, and use tablets to

- enhance the learning process.
- Learn and recall information for eight Spanish-speaking countries (e.g. location, flag, capital).
- Learn to use a Spanish-English dictionary.
- Learn about the Aztec culture.

#### **4th Grade Spanish**

- Build upon third grade vocabulary and grammar.
- Use Spanish to communicate most needs in the classroom.
- Introduce note-taking as a means of creating a useful student-centered resource.
- Teach full conjugations for “ser” and “estar,” and use throughout the year.
- Teach first and third person uses of “tener” and use throughout the year.
- Write sentences, short paragraphs, songs, and performance scripts that encourage practice and creativity.
- Engage in paired/group conversations, play games, play act, and use tablets to enhance the learning process.
- Learn and recall information for eight Spanish-speaking countries (e.g. location, flag, currency, and capital).
- Learn to use a Spanish-English dictionary.
- Learn about the Maya culture.

#### **5th Grade Spanish**

- Build upon fourth grade vocabulary and grammar.
- Use Spanish to communicate most needs in the classroom.
- Teach students how to take useful notes in class.
- Teach present-tense conjugations for “-ar,” “-ir,” and “-er” verbs and use throughout the year.
- Write sentences, short paragraphs, stories, and scripts that encourage practice and creativity.
- Engage in paired/group conversations, play games, play act, and use tablets to enhance the learning process.
- Learn and recall information for eight Spanish-speaking countries (e.g. location, flag, currency, capital, major cities).
- Learn to use a Spanish-English dictionary.
- Learn about the Inca culture.

#### **6th Grade Spanish**

- Build upon fifth grade vocabulary and grammar.
- Use Spanish to communicate most needs in the classroom.
- Teach students how to take useful notes in class.
- Reinforce present-tense conjugations for “-ar,” “-ir,” and “-er” verbs and use throughout the year.
- Teach preterite-tense conjugations for “-ar” verbs.
- Write sentences, short paragraphs, stories, and scripts that encourage practice and creativity.
- Engage in paired/group conversations, play games, play act, and use tablets to enhance the learning process.
- Learn and recall information for eight Spanish-speaking countries (e.g. location, flag, currency, capital, major cities).
- Use a Spanish-English dictionary.
- Learn about key historical figures in Iberian/Latin American ancient and modern history.

## **GRADES K–6**

### ***Musical Theatre Curriculum***

*The tradition of theater at Pinewood School began with our founder, Gwendolyn Riches, and her commitment to a program that promotes confidence and develops dynamic communication—vital life skills. The theater experience trains students to express themselves through voice, body, and facial expressions. Every year, each class has the opportunity to practice and perfect a musical production performed for the school and families.*

#### **1st–6th Grade Musical Theater**

- Practice, perfect, and perform a musical theater production which includes:
  - memorization of script, dance routines, and accompanying songs
  - character expression through face, voice, and movement
  - two school assembly performances and one family performance
- Gain self-confidence in performing before a group.
- Experience an activity that provides balance to a rigorous academic program.
- Develop a sense of personal responsibility by contributing to an ensemble performance.
- Learn audience etiquette through attendance at other class performances.

## **GRADES K–6**

### ***Music Curriculum***

*In music, students experience a complete, active involvement in music-making that includes singing, movement, and basic instrument instruction. The curriculum encourages a creative and expressive response to music. Throughout the year, students learn and perform a variety of musical genres including traditional, folk, patriotic, holiday, and contemporary age-appropriate songs. They also become familiar with some of the world's greatest composers and musical works.*

#### **Kindergarten Music**

- Learn to sing a wide variety of songs from memory.
- Listen to different types of music.
- Learn and analyze parts of a song such as verse, chorus, bridge, and coda.
- Learn to sing with clarity, volume, and expression.
- Learn hand signs to match pitch.
- Play simple rhythmic and melodic accompaniments on classroom instruments.
- Match and express music through movement and dance.
- Develop performance skills such as stage presence, vocal projection, and articulation.

#### **1st and 2nd Grade Music**

- Learn basic musical elements—rhythm, melody, form, dynamics, and musical nuances.
- Identify and match pitch using the Kodaly and John Curwen techniques.
- Identify and classify various music instruments.
- Learn selected master composers and their works.
- Sing while moving and/or dancing to further express music.
- Play basic instruments in the Orff Instrumentarium in an ensemble setting.
- Introduce notation to represent various notes and rhythmic patterns.
- Develop performance skills such as stage presence, vocal projection, and articulation.
- Develop confidence in performing solos and singing with a group.

#### **3rd–6th Grade Music**

- Explore pitch, melody, and harmony through singing, ear training, and solfege.
- Play, create, and sing music as an ensemble.
- Perform and listen to different types of music from various cultures and time periods.
- Identify musical elements: rhythm, meter, melody, phrase, form, and dynamics.
- Work as individuals and in groups to compose and notate original music.
- Appreciation and mastery of folk music from around the world.
- Listen to great composers and their signature works.
- Continue to develop performance skills and audience etiquette through classroom recitals.
- Learn simple improvisation techniques using the pentatonic scale.
- Sight-read rhythmic notation using whole notes, half notes, quarter notes, eighth notes and sixteenth notes.
- Coordinate with the History Department to provide reinforcement through music of the time period being studied.

## **GRADES K–6**

### **Visual Arts Curriculum**

*The art curriculum includes studies in art history, art criticism, and studio art which allow students to express themselves artistically and to appreciate the creative connections between art and life that are essential to the community. Students develop a personal vocabulary of expression while building confidence in creativity and a wide range of artistic strategies. They learn to see detail, to envision, to persist and learn from mistakes, and to make and justify critical judgments.*

#### **Kindergarten Visual Arts**

- Communicate thoughts and feeling through artwork.
- Name the basic primary and secondary colors and how to use them in painting.
- Recognize basic shapes and learn to apply them in drawings.
- Distinguish symmetry and asymmetry in their artwork.
- Consider shape, substance, color, line, and texture in creating 3D models.
- Study great artists such as Matisse, Picasso, Monet, O'Keefe, and Eric Carle.

#### **1st Grade Visual Arts**

- Recognize the elements and principles of art.
- Study art history.
- Explore drawing and painting styles.
- Learn color theory using paint, markers, colored pencils and pastels on two and three dimensional surfaces.
- Paint watercolors using wet into wet and dry brush techniques.
- Sculpt using clay, paper mache, gauze, cardboard and paper.
- Create collages using their own art pieces and found pieces.
- Investigate bookmaking.
- Experiment with printing.
- Explore animation.
- Critique peer's artwork.

#### **2nd Grade Visual Arts**

- Recognize the elements and principles of art.
- Study art history.
- Learn about architecture and construct a model of a building using cardboard.
- Draw and paint realistically and abstractly.
- Blend and graduate colors using paint, pastels and colored pencils.
- Mix and apply tempera paint onto two and three-dimensional surfaces.
- Paint watercolors using wet into wet, dry brush, and wash techniques.
- Sculpt using clay, paper mache, gauze and cardboard.
- Investigate bookmaking.
- Experiment with printing.
- Explore animation.
- Critique peer's artwork.

#### **3rd Grade Visual Arts**

- Design and create original artwork using various techniques and mediums such as:
  - o collage
  - o watercolor and oil pastel

- o paper sculpture
  - o acrylic painting
  - o block prints
  - o ink and wash
- Study the life and works of Giotto, Da Vinci, Van Gogh, Michelangelo, Vermeer, and Bearden.
- Learn art vocabulary and concepts.
- Mentor peers and collaborate.
- Care for art materials and art room.
- Explore ways that other subject areas are intertwined with the visual arts including math, science, history, music, language arts, and everyday life.

#### **4th Grade Visual Arts**

- Design and create original artwork using various techniques and mediums such as:
  - o collage
  - o watercolor and ink
  - o oil pastels and wax
  - o ink and wash
- Study the life and works of Titian, Durer, Rembrandt, and Velasquez.
- Learn art vocabulary and concepts.
- Mentor peers and collaborate.
- Care for art materials and art room.
- Explore ways that other subject areas are intertwined with the visual arts including math, science, history, music, language arts, and everyday life.

#### **5th Grade Visual Arts**

- Design and create original artwork using various techniques and mediums such as:
  - o assemblage
  - o watercolor and pencil
  - o oil pastels
  - o ink and watercolor
  - o acrylic painting
- Study the life and works of Raphael, El Greco, and Turner.
- Learn art vocabulary and concepts.
- Mentor peers and collaborate.
- Care for art materials and art room.
- Explore ways that other subject areas are intertwined with the visual arts including math, science, history, music, language arts, and everyday life.

#### **6th Grade Visual Arts**

- Design and fabrication of original artwork using the following techniques and mediums such as:
  - o watercolor pencil and ink on illustration board
  - o cardboard and paper
  - o acrylic paint, cardboard, and mixed media
  - o plaster and hot glue
  - o styrofoam and wire
- Study the life and works of Bruegel, as well as the Lascaux Caves.
- Learn art vocabulary and concepts.
- Mentor peers and collaborate.

- Care for art materials and art room.
- Explore ways that other subject areas are intertwined with the visual arts including math, science, history, music, language arts, and everyday life.

## **GRADES K–6**

### ***Physical Education Curriculum***

*Physical activity not only improves fitness levels but also enhances academic stamina. The Pinewood physical education program includes daily classes for all grade levels. Students participate in an extensive array of activities that includes competitive and non-competitive team sports that strive to develop good social behavior with other students. The goal of the program is to develop the lifelong skills of sportsmanship and physical fitness, as well as foster an overall enjoyment of athletics.*

#### **Kindergarten Physical Education**

*Based on the San Diego State University SPARK (Sports, Play & Active Recreation for Kids) curriculum.*

- Develop basic locomotor and manipulative skills designed for athletic success.
- Develop good sportsmanship and leadership skills.
- Learn to enjoy and seek out physical activity.
- Focus on individual athletic skills such as endurance, agility, footwork, and ball-handling skills.

#### **1st and 2nd Grade Physical Education**

*Based on the San Diego State University SPARK (Sports, Play & Active Recreation for Kids) curriculum.*

- Develop basic locomotor and manipulative skills designed for athletic success.
- Develop good sportsmanship and leadership skills.
- Learn to enjoy and seek out physical activity.
- Focus on team athletic skills.

#### **3rd–6th Grade Physical Education**

- Develop a variety of basic movement and manipulative skills through learning and playing team sports.
- Acquire good sportsmanship and leadership skills.
- Improve responsibility through participating in Intramurals by managing and playing games with students of different ages and skill levels.
- Demonstrate respect, kindness, and compassion for individual differences in physical abilities.
- Analyze and identify possible strategies and ideas when participating in an individual or team challenge, and be able to problem solve to find the best solution.
- Understand, locate, and describe the functions of the human skeletal and muscular systems and the organs of the human body.
- Create an environment that is safe, nurturing, and fun.

## GRADE K

# *Kindergarten Afternoon Enrichment*

### **Reading Workshop**

- Supplement morning literature with activities and read alouds.
- Play phonic based games.
- Read aloud and discuss Core Knowledge listening and learning strand that corresponds with the history curriculum.
- Explore classroom libraries.
- Participate in Readers Theater.
- Play and explore various creative stations.

### **Writers Workshop**

- Strengthen fine motor skills through beading, stenciling, lacing, tracing, puzzles, and play-doh.
- Draw and write sentences with guidance from teacher using “Draw, Write, Now”.
- Write in journals.

### **Creative Expression**

- Act out stories or chapters from a read aloud.
- Write, draw, or storyboard own stories or ones that follow a teacher prompt.
- Choose between four different creative stations that enhance the curriculum.
- Research answers to questions and explore topics that interest the children.

### **Project Design**

- Work as groups on projects based on holidays, morning curriculum, or the children’s own interests.
- Create anything from random recycled materials.
- Design and create various 3D projects such as collages, jewelry, fairy houses, and murals.
- Design projects that expand upon concepts taught in history and art, such as companies, the White House, and Native American villages.

### **SEL (Social Emotional Learning)**

- Give students a common language to help express their feelings.
- Increase students emotional vocabulary, social skills, decision-making and self-awareness skills, self regulation skills, and emotional intelligence.
- Teach tolerance and non-violent communication.
- Understand and instruct the feeling-communication-behavior link.

## LOWER CAMPUS

# Kindergarten Curriculum

### Language Arts

#### Oral Communication

- Use full sentences when responding to open-ended questions.
- Expressively recite nursery rhymes and poems from memory.
- Verbalize the steps in the process of forming letters as the letters are written.
- Orally summarize material that has been read.
- Speak with appropriate volume and articulate phonemes clearly and accurately.

#### Penmanship

- For ease and neatness in printing, use the correct grip for crayons and pencils.
- Use penmanship as kinesthetic reinforcement of letters and sounds for spelling and reading.

#### Phonics for Spelling and Reading

- Know the names and order of the letters in the alphabet and be able to alphabetize word by first letter.
- Identify names and all sounds of 72 English phonograms.
- Perceive separate sounds in sequential order in syllables and words.
- Explain the differences between consonants and vowels.
- Identify and label the rules that determine vowel sounds in syllables.
- Consistently identify the specific rule(s) that govern the spelling of a word.
- Identify, label, and explain open and closed syllables.
- After hearing a word, identify the sequence of phonograms as s/he writes that word, sound by sound, using best penmanship.

#### Reading and Auditory Comprehension

- Create and verbalize vivid mental images when reading words, sentences, and paragraphs without the aid of pictures.
- Respond orally to comprehension questions after reading words or sentences.
- Develop a rich vocabulary including words needed for following directions.
- Use grammar as a tool of comprehension by identifying the action (verb) and words that tell “who,” “doing,” “what or whom,” “how,” “when,” or “where.”
- Identify “key words” in sentences, the words that are most pertinent to the meaning.
- From the selected key word(s), create a “title” for sentences that accurately identifies the main idea of the sentences.
- Recall and retell from memory sentences and poetry that have been read and studied.
- Identify reading materials as “narrative,” or “informative.”
- Identify and describe characters, settings, plot.
- Predict outcomes.
- Summarize reading material (by a word, by a sentence, by a paragraph).
- Build vocabulary and comprehension by listening to works read aloud by the teacher that are above reading level but appropriate for comprehension level.

#### Literature

- Enjoy and recite (from memory) classic nursery rhymes.
- Read appropriate level fiction and non-fiction out loud and independently.

- Understand and follow left-to-right direction for reading using index finger to keep place and retain focus when reading.
- Read sentences “rhythmically” and expressively thereby revealing comprehension of content.
- In all literature activities, discuss new vocabulary, recall content, and experience the lives of others vicariously.
- To build character, discuss the virtues and vices that each fine literature piece provides.
- Some samples of books and authors they read include: Flyleaf Reading Series, Dr. Seuss, *The Runaway Bunny*, and *The Little Rabbit Who Wanted Red Wings*.

### *Writing*

- Learn proper punctuation for sentences.
- Compose original sentences orally.
- Write original sentences.
- Read written compositions aloud to the class.
- Recognize and know the labels for comma and end punctuation: “period,” “question mark,” and “exclamation point.”

### **Math**

- Add/Subtract to 12.
- Place value—tens and ones.
- Order and compare 2-digit numbers.
- Identify basic patterns and improve spatial sense.
- Understand whole and parts.
- Identify plane shapes.
- Introduce skip counting by 2’s, 5’s, and 10’s.
- Introduce telling time on whole and half hours.
- Increase understanding and retention of basic skills and vocabulary through songs, games, movement, manipulatives, and simulated experiences.
- Apply math facts and skills to problem solving and critical thinking challenges.
- Use and read graphs.
- Introduce money.

### **Science**

- Explore animals and plants and learn important facts about their lives.
- Properly care for animals and plants in our indoor/outdoor classroom.
- Observe the effects of climate, weather, and seasons on plants and animals.
- Describe the life cycle of plants and animals and explore food chains and webs of life.
- Grow plants and animals.
- Explore practical applications of earth and physical science.
- Seek a sense of order in nature.

### **History & Geography**

- Learn the concept of geography, the purpose of maps and the names and locations of the seven continents.
- Study the regions and lifestyles of four different Native American tribes and reenact a Hopi village.
- Understand early American history highlights including the voyage of Columbus, the pilgrims, and the principles behind Independence Day, democracy, and slavery.

- Learn in detail about the four Mount Rushmore Presidents; Lincoln, Washington, Jefferson and Roosevelt.
- Identify the origins and/or locations of our national symbols; the American Flag, the Statue of Liberty, and the White House.

## Spanish

- Learn basic vocabulary and use vocabulary in oral and written exercises.
- Vocabulary themes: greetings, colors, numbers, the calendar, weather, school, the body, food, clothing, home, and animals.
- Practice correct pronunciation of vowel and consonant sounds.
- Understand and speak in the imperative form through commands and through TPR (Total Physical Response) activities.
- Play games, sing songs, play act, recite poems, and listen to short stories and dialogues.

## Music

- Learn to sing a wide variety of songs from memory.
- Listen to different types of music.
- Learn and analyze parts of a song such as verse, chorus, bridge and coda.
- Learn to sing with clarity, volume, and expression.
- Learn hand signs to match pitch.
- Play simple rhythmic and melodic accompaniments on classroom instruments.
- Match and express music through movement and dance.
- Develop performance skills such as stage presence, vocal projection, and articulation.

## Visual Arts

- Communicate thoughts and feeling through artwork.
- Name the basic primary and secondary colors and how to use them in painting.
- Recognize basic shapes and learn to apply them in drawings.
- Distinguish symmetry and asymmetry in their artwork.
- Consider shape, substance, color, line, and texture in creating 3D models.
- Study great artists such as Matisse, Picasso, Monet, O'Keefe, and Eric Carle.

## Physical Education

*Based on the San Diego State University SPARK (Sports, Play & Active Recreation for Kids) curriculum.*

- Develop basic locomotor and manipulative skills designed for athletic success.
- Develop good sportsmanship and leadership skills.
- Learn to enjoy and seek out physical activity.
- Focus on individual athletic skills such as endurance, agility, footwork, and ball-handling skills

## Reading Workshop

- Supplement morning literature with activities and read alouds.
- Play phonic based games.
- Read aloud and discuss Core Knowledge listening and learning strand that corresponds with the history curriculum.
- Explore classroom libraries.
- Participate in Readers Theater.
- Play and explore various creative stations.

## **Writers Workshop**

- Strengthen fine motor skills through beading, stenciling, lacing, tracing, puzzles, and play-doh.
- Draw and write sentences with guidance from teacher using “Draw, Write, Now”.
- Write in journals.

## **Creative Expression**

- Act out stories or chapters from a read aloud.
- Write, draw, or storyboard own stories or ones that follow a teacher prompt.
- Choose between four different creative stations that enhance the curriculum.
- Research answers to questions and explore topics that interest the children.

## **Project Design**

- Work as groups on projects based on holidays, morning curriculum, or the children’s own interests.
- Create anything from random recycled materials.
- Design and create various 3D projects such as collages, jewelry, fairy houses, and murals.
- Design projects that expand upon concepts taught in history and art, such as companies, the White House, and Native American villages.

## **SEL (Social Emotional Learning)**

- Give students a common language to help express their feelings.
- Increase students emotional vocabulary, social skills, decision-making and self-awareness skills, self regulation skills, and emotional intelligence.
- Teach tolerance and non-violent communication.
- Understand and instruct the feeling-communication-behavior link.

## **Language Arts**

### *Oral Communication*

- Read aloud expressively each day in oral reading groups.
- Answer questions and speak using full sentences.
- Learn and apply techniques for excellence in oral presentation.

### *Penmanship*

- Produce neat printing with correctly formed letters and appropriate spacing between words.

### *Phonics for Spelling and Reading*

- Recognize, recite, and produce examples of the patterns and rules that govern English and use these to encode (spell) and decode (read).
- Drill phonetic patterns daily with auditory, visual, kinesthetic, and verbal activities.
- Spell and read daily the most commonly used words for K-3rd grade to achieve accuracy in spelling and automatic recognition in reading.
- Exercise visual and short-term memory by recalling the words on spelling lists.

### *Grammar and Punctuation*

- Define, identify, and label in a sentence nouns (common/proper, singular/plural), verbs (action/linking, present/past tense), adjectives, and pronouns.
- Recognize, label, and diagram simple sentences.
- Identify, label, and produce examples of subject, verb, direct object, and predicate nominative.
- Use capitals and correct ending punctuation in daily writing.

### *Literature and Comprehension*

- Read aloud from challenging text each day and participate in a teacher-led discussion to enhance comprehension and appreciation of the classics.
- Strengthen comprehension skills with activities that enhance mental imagery, improve recall, build vocabulary, and increase ability to analyze and summarize.
- Read and enjoy poetry.
- Participate in an out-of-class reading program (AR) that provides choices (fiction/nonfiction) grouped by comprehension level and personal interest.
- Listen to works read aloud by the teacher that are above students' reading level but appropriate for auditory comprehension level.
- Read and discuss books and authors including: *The Story About Ping* by Marjorie Flack, *The Tale of Peter Rabbit* by Beatrix Potter, and *My Father's Dragon* by Ruth Stiles Gannett.

### *Writing*

- Create sentences and simple paragraphs and receive instruction to correct spelling and grammar.
- Organize sentences in logical sequence within the paragraph.
- Enjoy creating personal narratives, stories, poems and informative writing and receiving input from teacher and peers.
- Compose opinion paragraphs (topic and support) with teacher support.

## **Math**

- Place value—hundreds, tens, and ones.
- Add/Subtract to 20.
- Regroup with 2-digit numbers.
- Order and compare 3-digit numbers.
- Identify patterns and improve spatial sense.
- Tell time on whole, half, and quarter hours.
- Practice skip counting by 2 through 11.
- Learn to identify plane and solid shapes.
- Increase understanding and retention of basic skills and vocabulary through songs, games, movement, manipulatives, and simulated experiences.
- Apply math facts and skills to problem solving and critical thinking challenges.

## **Science**

- Understand the placements and movements and structure of our solar system.
- Observe and examine: arachnids, land and sea mammals, and other creatures of the San Francisco and Monterey Bay areas.
- Discuss weather systems and events and forces of nature that shape our landscape.
- Take action for conservation—learn to reduce, reuse, recycle, and repurpose.
- Participate in a recycling program.
- Label rocks and minerals and their history in the earth's structure.
- Explore practical applications of earth and physical science.
- Apply a sense of order (or not) to nature.

## **History & Geography**

- Understand how to read a map by using a key, legend and/or symbols.
- Review the seven continents and four major oceans and locate the Equator, poles, hemispheres, and Pinewood's continent, country, state, and community.
- Gain a basic understanding of the development and contributions of the early world civilizations of Mesopotamia and Egypt.
- Introduce and compare various traditions, beliefs, and customs associated with the three major world religions: Christianity, Judaism, and Islam.
- Celebrate the rich culture of modern day Mexico.
- Learn how the earliest American civilizations of the Maya, Aztecs, and Incas developed and fell.
- Learn about the first European explorers and settlers of America.
- Learn the key figures, significance, and events of the American Revolution and the evolution from colonies to independence.
- Gain an introductory knowledge of the early exploration of the American West.
- Recognize and become familiar with the Liberty Bell, the current US President, the American Flag, and the Bald Eagle.

## **Spanish**

- Review kindergarten vocabulary with additional terms for each category.
- Study and use singular and plural nouns and masculine and feminine articles and nouns.
- Write words and short sentences in the simple present tense.
- Understand and speak in the imperative form through commands and through TPR (Total Physical Response) activities.
- Play games, sing songs, play act, recite poems and rhymes, and listen to short stories and dialogues.

## **Musical Theater**

- Practice, perfect, and perform a musical theater production which includes:
  - memorization of script, dance routines, and accompanying songs
  - character expression through face, voice, and movement
  - two school assembly performances and one family performance
- Gain self-confidence in performing before a group.
- Experience an activity that provides balance to a rigorous academic program.
- Develop a sense of personal responsibility by contributing to an ensemble performance.
- Learn audience etiquette through attendance at other class performances.

## **Music**

- Learn basic musical elements—rhythm, melody, form, dynamics, and musical nuances.
- Identify and match pitch using the Kodaly and John Curwen techniques.
- Identify and classify various music instruments.
- Learn selected master composers and their works.
- Sing while moving and/or dancing to further express music.
- Play basic instruments in the Orff Instrumentarium in an ensemble setting.
- Introduce notation to represent various notes and rhythmic patterns.
- Develop performance skills such as stage presence, vocal projection, and articulation.
- Develop confidence in performing solos and singing with a group.

## **Visual Arts**

- Recognize the elements and principles of art.
- Study art history.
- Explore drawing and painting styles.
- Learn color theory using paint, markers, colored pencils and pastels on two and three dimensional surfaces.
- Paint watercolors using wet into wet and dry brush techniques.
- Sculpt using clay, papier-mâché, gauze, cardboard and paper.
- Create collages using their own art pieces and found pieces.
- Investigate bookmaking.
- Experiment with printing.
- Explore animation.
- Critique peer's artwork.

## **Physical Education**

*Based on the San Diego State University SPARK (Sports, Play & Active Recreation for Kids) curriculum.*

- Develop basic locomotor and manipulative skills designed for athletic success.
- Develop good sportsmanship and leadership skills.
- Learn to enjoy and seek out physical activity.
- Focus on team athletic skills.

**Language Arts**

*Oral Communication*

- Read aloud expressively each day in oral reading groups.
- Answer questions and speak using full sentences.
- Give oral presentations.

*Penmanship*

- Produce neat cursive with correctly formed letters at a fluent pace.

*Phonics for Spelling and Reading*

- Recognize, recite, and produce examples of the letter patterns and rules that govern English and use these to encode (spell) and decode (read).
- Drill phonetic patterns daily with auditory, visual, and kinesthetic activities.
- Spell and read the most commonly used words for K-4th grades.
- Exercise visual memory by recalling words in spelling lists.

*Grammar and Punctuation*

- Analyze and label the eight parts of speech.
- Experience, identify, and produce examples of regular and irregular verbs in present and past tenses.
- Practice subject/verb and pronoun/antecedent agreement.
- Distinguish between subjective and objective pronouns.
- Recognize, label, and diagram predicate adjectives and adverbial prepositional phrases.
- Use commas after each word in a series, in letter greetings and closings, and in dates.
- Correctly use apostrophes in possessive nouns, contractions, and quotation marks in basic sentences.
- Correctly use quotation marks.

*Literature and Comprehension*

- Read aloud from a challenging work of literature each day and participate in a teacher-led discussion to enhance comprehension and appreciation of the classics.
- Strengthen comprehension skills with activities that practice mental imagery, improve recall, build vocabulary, and increase ability to summarize and analyze.
- Read and enjoy poetry.
- Participate in an out-of-class reading program (AR) that provides choices (fiction/nonfiction) grouped by comprehension level and personal interest.
- Label genres and types of literature.
- Listen to works read aloud by teacher that are above reading level but appropriate for auditory comprehension level.
- Learn and discuss new vocabulary words from works of literature.
- Read and discuss books and authors including: *Mirette on the High Wire* by Emily Arnold McCully, *Old Mother West Wind* by Thornton W. Burgess, and *Mr. Popper's Penguins* by Richard and Florence Atwater.

## *Writing*

- Produce clear, interesting, creative sentences using correct spelling and grammar.
- Write simple paragraphs that stay on topic and support the main idea.
- Enjoy creating personal narratives, stories, poems, and informative writing and receiving input from teacher and peers.
- Experience expository, descriptive, narrative, and persuasive writing.
- Learn the correct format of a business letter.
- Write summaries and poetry.
- Create and animated book combining technology, art, and language arts skills.

## **Math**

- Place value up to ten thousands.
- Multiply 1, 2, and 3 digits by single digit numbers.
- Add and subtract with regrouping 3- and 4-digit numbers.
- Order and compare 4-digit numbers.
- Identify patterns and improve spatial sense.
- Practice identifying, sorting, classifying, and measuring plane and solid shapes.
- Learn about elapsed time.
- Begin learning the concept of division with related facts.
- Increase understanding and retention of basic skills and vocabulary through songs, games, movement, manipulatives, and simulated experiences.
- Apply math facts and skills to problem solving and critical thinking challenges.

## **Science**

- Examine, identify, discuss, and recall applicable facts about California flora and fauna.
- Describe an animal's or plant's purpose in its ecosystem and our impact on them.
- Define anthropods and compare and contrast them.
- Nurture the classroom creatures and the outdoor garden.
- Discuss facts and theories of evolution and extinction—a prehistoric timeline.
- Continue a recycling program.
- Explore practical applications of earth and physical science.
- Apply a sense of order (or not) to nature.

## **History & Geography**

- Introduce various geographical features and locations of Canada, the United States, Mexico, and Central America.
- Gain a basic understanding of the development and contributions of the early Asian civilizations of India and China.
- Celebrate and introduce the modern civilization and culture of Japan.
- Learn about the great contributions, traditions, cultures, wars, and influential leaders from ancient Greece.
- Introduce the Constitution and the organization of the American government.
- Learn about the key participants, battles, events and effects of the War of 1812.
- Study westward expansion across the United States.
- Understand the controversy over slavery while learning about the key parties and events of the Civil War.
- Introduce the Civil Rights Movement.
- Recognize and become familiar with the significance of the American Flag, the Statue of Liberty, and the Lincoln Memorial.

## **Spanish**

- Review first grade vocabulary with additional terms for each category.
- Practice using singular and plural nouns and masculine and feminine articles and nouns.
- Begin conjugating present tense verbs in the first and third person.
- Learn how to understand and speak questions and answers.
- Write words, short sentences, and short stories.
- Understand and speak in the imperative form through commands and through TPR (Total Physical Response) activities.
- Play games, sing songs, play act, recite poems and rhymes, and listen to short stories and dialogues.
- Perform a musical play in Spanish.

## **Musical Theater**

- Practice, perfect, and perform a musical theater production which includes:
  - memorization of script, dance routines, and accompanying songs
  - character expression through face, voice, and movement
  - two school assembly performances and one family performance
- Gain self-confidence in performing before a group.
- Experience an activity that provides balance to a rigorous academic program.
- Develop a sense of personal responsibility by contributing to an ensemble performance.

## **Music**

- Learn basic musical elements—rhythm, melody, form, dynamics, and musical nuances.
- Identify and match pitch using the Kodaly and John Curwen techniques.
- Identify and classify various music instruments.
- Learn selected master composers and their works.
- Sing while moving and/or dancing to further express music.
- Play basic instruments in the Orff Instrumentarium in an ensemble setting.
- Introduce notation to represent various notes and rhythmic patterns.
- Develop performance skills such as stage presence, vocal projection, and articulation.
- Develop confidence in performing solos and singing with a group.

## **Visual Arts**

- Recognize the elements and principles of art.
- Study art history.
- Learn about architecture and construct a model of a building using cardboard.
- Draw and paint realistically and abstractly.
- Blend and graduate colors using paint, pastels and colored pencils.
- Mix and apply tempera paint onto two and three dimensional surfaces.
- Paint watercolors using wet into wet, dry brush and wash techniques.
- Sculpt using clay, paper mache, gauze and cardboard.
- Investigate bookmaking.
- Experiment with printing.
- Explore animation.
- Critique peer's artwork.

## **Physical Education**

*Based on the San Diego State University SPARK (Sports, Play & Active Recreation for Kids) curriculum.*

- Develop basic locomotor and manipulative skills designed for athletic success.
- Develop good sportsmanship and leadership skills.
- Learn to enjoy and seek out physical activity.
- Focus on team athletic skills.

## **Language Arts**

### *Oral Communication*

- Read aloud expressively each day in oral reading groups.
- Give oral presentations in all subject areas.
- Learn and apply techniques for excellence in oral presentation.

### *Spelling, Grammar, and Conventions*

- Exercise visual memory by recalling the order of words in spelling lists and poems.
- Memorize and apply knowledge of all phonograms and their sounds.
- Identify patterns in morphology and synthesize and describe these in spelling rules and apply these rules to reading and writing.
- Understand types of nouns, adjectives, and verbs.
- Experience, identify, and produce examples of regular and irregular verbs in the progressive forms of the past, present, and future tenses.
- Recognize, label, and diagram simple sentence types including words that modify each part.
- Reinforce ability to label the parts of a sentence, adding adverbial prepositional phrases.
- Use commas in addresses and dates, and in a series.
- Identify the four purposes of a sentence: declarative, interrogative, exclamatory, and imperative.

### *Literature and Comprehension*

- Read aloud from a challenging work of literature each day and participate in teacher-led discussion to enhance comprehension and appreciation.
- Strengthen comprehension skills with activities that develop mental imagery, improve recall, build vocabulary, and increase ability to summarize and analyze.
- Read and enjoy poetry and memorize and recite two poems a month.
- Write and respond to questions that elicit comprehension, analysis, and creative thinking about literature.
- Produce answers and take quizzes on vocabulary words from a formal vocabulary program that encourages students to experience each word in various forms and to use contextual clues to apply the word accurately and effectively.
- Read and discuss books and authors including: *Charlotte's Web* by E.B. White, *The Adventures of a Brownie* by Dinah Mulach, and *Misty of Chincoteague* by Marguerite Henry.

### *Writing*

- Learn and practice the writing process.
- Write paragraphs and essays that have a main idea, supporting details, transitions, and a conclusion.
- Organize sentences in logical sequence within the paragraph and learn to vary sentence structure.
- Produce examples of informative, narrative, and informative-narrative genres.
- Enjoy creating personal narratives, stories, and poems and receiving input from teacher and peers.
- Write a research paper in conjunction with the history and geography class.

## **Math**

### *Whole number operations*

- Understand place value through one hundred million.
- Compare, order, round, add and subtract whole numbers and money.
- Know multiplication and division facts to 12 fluently.
- Identify factors and multiples, primes and composites.
- Divide with remainders and re-grouping.
- Follow order of operations in whole number calculations.
- Identify, generate, explain patterns in arithmetic and problem solve.

### *Fractions and Decimals*

- Work with equivalent and improper fractions and mixed numbers.
- Understand decimal notation and place value to thousandths.
- Compare, add, subtract and order fractions, decimals and mixed numbers.

### *Measurement and Data*

- Use customary and metric units of length, weight and capacity.
- Solve problems with time, calendar and elapsed time.
- Work with temperature using positive and negative numbers.
- Collect, organize and interpret data using line plots, stem-and-leaf plots, line, bar and circle graphs.
- Calculate the mean, median, mode and range of a set of numbers.

### *Geometry*

- Measure angles using a protractor.
- Recognize and classify triangles, quadrilaterals, polygons and circles.
- Identify congruence, rotations, reflections, translations and line symmetry.
- Compute simple perimeter and area.

## **Science**

- Conduct experiments using the scientific method, including stating a hypothesis, carrying out the investigation, recording data, and analyzing the results.
- Understand the concept of controls and variables in a scientific investigation.
- Develop more complex thinking and observation skills during scientific inquiries.
- Gain proficiency using the glossary and index of the science textbook to reference information.
- Learn the properties of water and its cycles through the earth's ecosystems.
- Study the properties and effects of heat and light energy.
- Use a scale to determine mass, and a graduated cylinder to determine volume.
- Learn the physical features and movements of the earth, sun, moon, and constellations.
- Learn how ecosystems get energy and how they can change.
- Participate in an annual field trip and optional science fair.

## **History & Geography**

- Identify the seven major continents and rivers of the world and understand fundamental geographical terms.
- Understand geography and history of Canada.
- Describe key events and people during the rise and fall of the Roman Empire.
- Understand the contributions of the Vikings.
- Study the first American settlers, specifically the Inuit to the Anasazi and their contributions to the United States.

- Identify the major early Spanish explorers and the major events of the settlement of North America.
- Understand geography, key events, and people of the original US colonies.
- Write a research paper in conjunction with the language arts class.

## Spanish

- Build upon second grade vocabulary.
- Use Spanish to communicate most needs in the classroom.
- Introduce basic grammar conventions like the use or articles, subject/adjective agreement.
- Teach first and third person usage of “ser,” “estar,” and “tener.”
- Write sentences and short paragraphs that encourage practice and creativity.
- Engage in paired/group conversations, play games, play act, and use tablets to enhance the learning process.
- Learn and recall information for eight Spanish-speaking countries (e.g. location, flag, capital).
- Learn to use a Spanish-English dictionary.
- Learn about the Aztec culture.

## Musical Theater

- Practice, perfect, and perform a musical theater production which includes:
  - o memorization of script, dance routines, and accompanying songs
  - o character expression through face, voice, and movement
  - o two school assembly performances and one family performance
- Gain self-confidence in performing before a group.
- Experience an activity that provides balance to a rigorous academic program.
- Develop a sense of personal responsibility by contributing to an ensemble performance.
- Learn audience etiquette through attendance at other class performances.

## Music

- Explore pitch, melody, and harmony through singing, ear training, and solfege.
- Play, create, and sing music as an ensemble.
- Perform and listen to different types of music from various cultures and time periods.
- Identify musical elements such as rhythm, meter, melody, phrase, form, and dynamics.
- Work as individuals and in groups to compose and notate original music.
- Appreciation and mastery of folk music from around the world.
- Listen to great composers and their signature works.
- Continue to develop performance skills and audience etiquette through classroom recitals.
- Learn simple improvisation techniques using the pentatonic scale.
- Sight-read rhythmic notation using whole notes, half notes, quarter notes, eighth notes and sixteenth notes.
- Coordinate with History Department to provide reinforcement through music of the time period being studied.

## Visual Arts

- Design and create original artwork using various techniques and mediums such as:
  - o collage

- o watercolor and oil pastel
  - o paper sculpture
  - o acrylic painting
  - o block prints
  - o ink and wash
- Study the life and works of Giotto, Da Vinci, Van Gogh, Michelangelo, Vermeer, and Bearden.
- Learn art vocabulary and concepts.
- Mentor peers and collaborate.
- Care for art materials and art room.
- Explore ways that other subject areas are intertwined with the visual arts including math, science, history, music, language arts, and everyday life.

## **Physical Education**

- Develop a variety of basic movement and manipulative skills through learning and playing team sports.
- Acquire good sportsmanship and leadership skills.
- Improve responsibility through participating in Intramurals by managing and playing games with students of different ages and skill levels.
- Demonstrate respect, kindness, and compassion for individual differences in physical abilities.
- Analyze and identify possible strategies and ideas when participating in an individual or team challenge, and be able to problem solve to find the best solution.
- Understand, locate, and describe the functions of the human skeletal and muscular systems and the organs of the human body.
- Create an environment that is safe, nurturing, and fun.

## Language Arts

### *Oral Communication*

- Read aloud expressively each day in oral reading groups.
- Give oral presentations in all subject areas.
- Learn to use expression, cadence, intonation, volume, and body language effectively in oral presentations and reading.

### *Spelling, Grammar, and Conventions*

- Exercise visual memory by recalling words in spelling lists and poems.
- Memorize and apply knowledge of all phonograms and their sounds.
- Identify patterns in morphology and synthesize and describe these in spelling rules and apply these rules to reading and writing.
- Understand types of nouns and pronouns and their function in a sentence.
- Experience, identify, and produce examples of linking, transitive, and intransitive verbs.
- Study adjectives and their degrees of comparison including irregular forms.
- Study modifiers, including adjectives, adverbs, and prepositional phrases. Identify their role within the sentence and label and diagram accordingly.
- Recognize, label, and diagram simple and compound sentences and words that modify each part.
- Categorize all sentences into one of four groups: declarative, interrogative, imperative, and exclamatory.
- Use commas after introductory words, phrases, and clauses and compound and complex sentences.

### *Literature and Comprehension*

- Read aloud from a challenging work of literature each day and participate in teacher-led discussion to enhance comprehension and appreciation.
- Strengthen comprehension skills with activities that develop mental imagery, improve recall, build vocabulary, and increase ability to summarize and analyze.
- Read and enjoy poetry and memorize and recite two poems a month.
- Write and respond to questions that elicit comprehension, analysis, and creative thinking about literature.
- Produce answers and take quizzes on vocabulary words from a formal vocabulary program that encourages students to experience each word in various forms and to use contextual clues to apply the word accurately and effectively.
- Learn different genres of literature through book reports, projects, and presentations.
- Read and discuss books and authors including: *Pinocchio* by Carlo Collodi, *Where the Red Fern Grows* by Wilson Rawls, *Black Beauty* by Anna Sewell, and interdisciplinary literary and nonfiction works that engage students with history.

### *Writing*

- Trains students to use strong and pertinent ideas organized with a clear beginning, middle, and end.
- Improve fluency and voice by writing sentences that flow smoothly, are easy to read, and have carefully chosen words.

- Use clear and grammatically correct writing conventions.
- Produce examples of expository, descriptive, narrative, and persuasive writing.
- Respond to literature through writing summaries and essays.
- Work collaboratively with the history and geography teacher to write a research paper that includes identifying and summarizing trustworthy nonfiction resources, fact-finding, organizing data, and presenting information in an effective and organized manner.

## Math

### *Whole Numbers Operations*

- Understand place value through one billion.
- Compare, order, and round whole numbers, integers and decimals.
- Add and subtract whole numbers to 5 digits.
- Multiply and divide by 1- and 2-digit numbers and powers of 10.
- Follow order of operations in whole number calculations.
- Identify primes, composite numbers and prime factorization.
- Find greatest common factors and least common multiples.
- Assess reasonableness of answers using estimation.
- Write and solve simple equations.

### *Fractions and Decimals*

- Recognize and simplify equivalent fractions.
- Work with fractions, decimals and repeating decimals.
- Use the four operations on fractions, mixed numbers and decimals.
- Compute ratios, rates, and proportions.
- Calculate percents of numbers.

### *Measurement and Data*

- Use and convert between units of length, weight and capacity within the same measurement system.
- Collect, organize and interpret data including mean, median and mode.
- Draw and interpret bar graphs, histograms, line graphs, stem-and-leaf plots.
- Calculate simple probabilities.

### *Geometry*

- Identify points, lines, and angles.
- Name plane shapes and solid figures.
- Identify rotations, reflections, and translations.
- Recognize line and rotational symmetry.
- Calculate perimeter, area and volume of rectangles and triangles.
- Compute volume of rectangular prisms.
- Graph coordinate points in the first quadrant.

## Science

- Conduct experiments using the scientific method, including stating a hypothesis, carrying out the investigation, recording data, and analyzing the results.
- Understand the concept of controls and variables in a scientific investigation.
- Develop more complex thinking and observation skills during scientific inquiries.
- Develop proficiency in note taking, study skills, and using the science textbook to reference information.
- Understand the properties of magnets and their force fields, electricity, properties of matter, and the physical and chemical changes of matter.

- Compare, classify, and identify matter according to its physical and chemical properties.
- Understand how to construct series and parallel circuits.
- Study volcanoes and the theory of continental drift and plate tectonics.
- Participate in an annual field trip and optional science fair.

## History and Geography

- Learn and use mapping skills in order to locate landmarks on a map.
- Learn and identify the major mountain ranges by continent as well as the highest mountain peaks in the world.
- Learn the geography of Western Europe during the Middle Ages.
- Identify reasons leading up to the fall of the Roman Empire and how this affected the lives of the people living at the time.
- Learn about important figures, events, and institutions in Europe during the Middle Ages.
- Understand the significance of the Magna Carta and the development of Parliament and the beginnings of representative government.
- Learn about the origins and spread of Islam, identify the Five Pillars of Islam, and study Islamic civilization's contributions to science and mathematics.
- Identify the cause and effect of the Crusades.
- Learn about the rise and fall of Western African Kingdoms during the Middle Ages and the impact of Islam on this part of the world.
- Compare and contrast the ancient Chinese Dynasties.
- Learn about the early ongoing battles for control of the colonies between England and France and the involvement of the Native Americans.
- Identify causes, provocations, major battle, and key individuals of the American Revolution.
- Identify the main ideas of the Declaration of Independence and what they mean today in US government.
- Identify the purpose of the US Constitution, the three branches of government, and the Bill of Rights.
- Identify the first seven presidents and how each contributed to the early development of the United States.
- Identify some of the early reformers of the United States and how their contributions shaped much of our society in modern times.
- Learn California history and geography and visit Old Mission San Juan Bautista and enjoy a 2-day trip to the Gold Country.

## Spanish

- Build upon third grade vocabulary and grammar.
- Use Spanish to communicate most needs in the classroom.
- Introduce note taking as a means of creating a useful student-centered resource.
- Teach full conjugations for “ser” and “estar,” and use throughout the year.
- Teach first and third person uses of “tener” and use throughout the year.
- Write sentences, short paragraphs, songs, and performance scripts that encourage practice and creativity.
- Engage in paired/group conversations, play games, play act, and use tablets to enhance the learning process.
- Learn and recall information for eight Spanish-speaking countries (e.g. location, flag, currency, and capital).
- Learn to use a Spanish-English dictionary.
- Learn about the Maya culture.

## **Musical Theater**

- Practice, perfect, and perform a musical theater production which includes:
  - memorization of script, dance routines, and accompanying songs
  - character expression through face, voice, and movement
  - two school assembly performances and one family performance
- Gain self-confidence in performing before a group.
- Experience an activity that provides balance to a rigorous academic program.
- Develop a sense of personal responsibility by contributing to an ensemble performance.
- Learn audience etiquette through attendance at other class performances.

## **Music**

- Explore pitch, melody, and harmony through singing, ear training, and solfege.
- Play, create, and sing music as an ensemble.
- Perform and listen to different types of music from various cultures and time periods.
- Identify musical elements such as rhythm, meter, melody, phrase, form, and dynamics.
- Work as individuals and in groups to compose and notate original music.
- Appreciation and mastery of folk music from around the world.
- Listen to great composers and their signature works.
- Continue to develop performance skills and audience etiquette through classroom recitals.
- Learn simple improvisation techniques using the pentatonic scale.
- Sight-read rhythmic notation using whole notes, half notes, quarter notes, eighth notes and sixteenth notes.
- Coordinate with History Department to provide reinforcement through music of the time period being studied.

## **Visual Arts**

- Design and create original artwork using various techniques and mediums such as:
  - collage
  - watercolor and ink
  - oil pastels and wax
  - ink and wash
- Study the life and works of Titian, Durer, Rembrandt, and Velasquez.
- Learn art vocabulary and concepts.
- Mentor peers and collaborate.
- Care for art materials and art room.
- Explore ways that other subject areas are intertwined with the visual arts including math, science, history, music, language arts, and everyday life.

## **Physical Education**

- Develop a variety of basic movement and manipulative skills through learning and playing team sports.
- Acquire good sportsmanship and leadership skills.
- Improve responsibility through participating in Intramurals by managing and playing games with students of different ages and skill levels.
- Demonstrate respect, kindness, and compassion for individual differences in physical abilities.

- Analyze and identify possible strategies and ideas when participating in an individual or team challenge, and be able to problem solve to find the best solution.
- Understand, locate, and describe the functions of the human skeletal and muscular systems and the organs of the human body.
- Create an environment that is safe, nurturing, and fun.

## Language Arts

### *Oral Communication*

- Read aloud expressively each day in oral reading groups.
- Give oral presentations in all subject areas.
- Learn to use expression, cadence, intonation, volume, and body language effectively in oral presentations and reading.

### *Spelling, Grammar, and Conventions*

- Exercise visual memory by recalling the order of words in spelling lists and poems.
- Understand correct use of indefinite and relative pronouns.
- Learn active and passive voice of verbs.
- Study adjectives and adverbs and their degrees of comparison.
- Recognize, label, and diagram simple, compound, and complex sentence types.
- Reinforce ability to label the parts of a sentence, adding indirect objects.
- Use commas for appositives, after introductory elements, and after noun of direct address.

### *Literature and Comprehension*

- Read aloud from a challenging work of literature each day and participate in teacher-led discussion to enhance comprehension and appreciation.
- Strengthen comprehension skills with activities that develop mental imagery, improve recall, build vocabulary, and increase ability to summarize and analyze.
- Read and enjoy poetry and memorize and recite two poems a month.
- Write and respond to questions that elicit comprehension, analysis, and creative thinking about literature and informational texts.
- Produce answers and take quizzes on vocabulary words from a formal vocabulary program that encourages students to experience each word in various forms and to use contextual clues to apply the word accurately and effectively.
- Read and discuss books and authors including: *Island of the Blue Dolphins* by Scott O'Dell, *Wind and the Willows* by Kenneth Grahame, and *The Adventures of Robin Hood* by Howard Pyle.

### *Writing*

- Experience expository writing in response to literary and informational texts.
- Continue to produce examples of expository, descriptive, narrative, and persuasive writing including creative writing and poetry writing.
- Respond to literature and informational texts through writing and be able to write summaries.
- Write two research reports on history related topics, which could include Meso-American cultures, shapers of history, or major explorers.

## Math

### *Whole Numbers, Decimals, and Fractions*

- Read, write, and understand place value and powers of 10.
- Compare, order, round, and estimate numbers.
- Estimate sums, differences, products, and quotients.
- Add, subtract, multiply, and divide numbers.

- Identify terminating and repeating decimals.
- Use order of operations including parentheses and exponents.
- Recognize the addition and multiplication properties.
- Apply the divisibility rule.
- Distinguish between prime and composite numbers, and find prime factorization of composite numbers.
- Find greatest common factor and least common multiple.

#### *Measurement and Data*

- Compute with customary and metric units.
- Collect, organize, and analyze data with surveys and sampling.
- Identify bias.
- Calculate and use measures of central tendency.
- Interpret and display data in graphs.
- Use theoretical and experimental probability.

#### *Geometry*

- Measure, draw, classify, and explore properties of angles.
- Calculate area and perimeter of triangles and quadrilaterals.
- Calculate area and circumference of circles.
- Calculate volume and surface area of prisms.

#### *Ratio, Proportion, and Percent Relationships*

- Solve problems using ratios, proportions, rates, and unit rates.
- Calculate distance, speed, and time.
- Draw and interpret scale drawings.
- Understand percent as a ratio.
- Compare and order fractions, decimals, and percents.
- Solve simple interest, sales tax, percent, and discount problems.

#### *Integers and Algebra*

- Compare and order integers.
- Add, subtract, multiply, and divide integers.
- Use variables, expressions, and equations to solve problems.
- Solve one-step and two step equations.
- Identify sequences and patterns.
- Investigate and represent functions.
- Graph points and lines on the coordinate plane.
- Graph and identify simple inequalities.

#### *Problem solving*

- Solve real world problems with exact and estimated answers.
- Solve multi-step problems and interpreting remainders.

#### *Science*

- Conduct experiments using the scientific method, including stating a hypothesis, carrying out the investigation, recording data, and analyzing the results.
- Understand the concept of controls and variables in a scientific investigation.
- Improve proficiency in note taking, study skills, and using the science textbook to reference information.
- Study the human body's nervous system and cell structure and function.
- Learn the properties and characteristics of sound.
- Study the structure of plants, their needs, adaptations and responses.

- Construct a working model of a roller coaster while learning forms of energy and machines.
- Participate in an annual field trip and optional science fair.

## **History & Geography**

- Heighten awareness of world geography using characteristics of place (climate and temperature, land and soil, animal and plant life) to compare and contrast locations of settlement and civilization relevant to areas of study.
- Compare and contrast Mesoamerican civilizations (Maya, Aztec, and Inca) through the lens of Cultural Characteristics of Place (language, religion, technology and invention, economy, government, and food supply).
- Explore the Renaissance through the study of the forces that put it in motion, the locations that nurtured it, the economies that helped fund it, the technology that helped catalyze it, the personalities that symbolize it, and the ways that it has shaped the world we live in today.
- Study the Age of Exploration through the investigation of the sources of information that heightened awareness of foreign lands and their resources, the technology that enabled explorers to reach farther, the nations and their motivations for exploring, the personalities that were successful in reaching distant lands, and the cultures that were deeply effected by these exploring nations.
- Study the Gutenberg Printing Press, Galileo and Copernicus, Martin Luther and John Calvin to understand the causes of the Reformation.
- Gain an understanding of revolution and the path of government to represent larger groups of the population through the study of the Magna Carta, the British Bill of Rights and the Glorious Revolution.
- Gain a deeper understanding of westward expansion before the civil war through the study of the geography and technology that enabled it, the courageous men and women willing to reach into what was deemed wilderness, the rich native cultures already residents of the land and the devastating effects of this movement on them, Manifest Destiny, Texas and the Mexican American War.
- Deepen understanding of the Civil War through the study of the events that led to it (abolitionists, slave rebellions, Missouri Compromise, Dred Scott, John Brown and Harper's Ferry, and the industrial North vs. the agricultural South) and the study of the deep differences between the North and the South and the leaders that influenced the American people and the battles that raged leading to its end.

## **Spanish**

- Build upon fourth grade vocabulary and grammar.
- Use Spanish to communicate most needs in the classroom.
- Teach students how to take useful notes in class.
- Teach present-tense conjugations for “-ar,” “-ir,” and “-er” verbs and use throughout the year.
- Write sentences, short paragraphs, stories, and scripts that encourage practice and creativity.
- Engage in paired/group conversations, play games, play act, and use tablets to enhance the learning process.
- Learn and recall information for eight Spanish-speaking countries (e.g. location, flag, currency, capital, major cities).
- Learn to use a Spanish-English dictionary.
- Learn about the Inca culture.

## Musical Theater

- Practice, perfect, and perform a musical theater production which includes:
  - memorization of script, dance routines, and accompanying songs
  - character expression through face, voice, and movement
  - two school assembly performances and one family performance
- Gain self-confidence in performing before a group.
- Experience an activity that provides balance to a rigorous academic program.
- Develop a sense of personal responsibility by contributing to an ensemble performance.
- Learn audience etiquette through attendance at other class performances.

## Music

- Explore pitch, melody, and harmony through singing, ear training, and solfege.
- Play, create, and sing music as an ensemble.
- Perform and listen to different types of music from various cultures and time periods.
- Identify musical elements such as rhythm, meter, melody, phrase, form, and dynamics.
- Work as individuals and in groups to compose and notate original music.
- Appreciation and mastery of folk music from around the world.
- Listen to great composers and their signature works.
- Continue to develop performance skills and audience etiquette through classroom recitals.
- Learn simple improvisation techniques using the pentatonic scale.
- Sight-read rhythmic notation using whole notes, half notes, quarter notes, eighth notes and sixteenth notes.
- Coordinate with History Department to provide reinforcement through music of the time period being studied.

## Visual Arts

- Design and create original artwork using various techniques and mediums such as:
  - assemblage
  - watercolor and pencil
  - oil pastels
  - ink and watercolor
  - acrylic painting
- Study the life and works of Raphael, El Greco, and Turner.
- Learn art vocabulary and concepts.
- Mentor peers and collaborate.
- Care for art materials and art room.
- Explore ways that other subject areas are intertwined with the visual arts including math, science, history, music, language arts, and everyday life.

## Physical Education

- Develop a variety of basic movement and manipulative skills through learning and playing team sports.
- Acquire good sportsmanship and leadership skills.
- Improve responsibility through participating in Intramurals by managing and playing games with students of different ages and skill levels.
- Demonstrate respect, kindness, and compassion for individual differences in physical abilities.

- Analyze and identify possible strategies and ideas when participating in an individual or team challenge, and be able to problem solve to find the best solution.
- Understand, locate, and describe the functions of the human skeletal and muscular systems and the organs of the human body.
- Create an environment that is safe, nurturing, and fun.

## Language Arts

### *Oral Communication*

- Read aloud expressively each day in oral reading groups.
- Give oral presentations in all subject areas in front of a variety of audiences.
- Learn to use expression, cadence, intonation, volume, and body language effectively in oral presentations and reading.

### *Spelling, Grammar, and Conventions*

- Combined vocabulary and spelling program that includes weekly quizzes and monthly tests.
- Define, label, and identify the parts of speech in all of their functions and parts of a sentence.
- Review dependent clauses and learn to identify noun clauses.
- Practice subject/verb agreement with sentences having indefinite pronouns, intervening phrases, and compound subjects.
- Recognize, label, and diagram simple, compound, complex, and compound-complex sentence types.
- Identify and label verbals.
- Review use of commas and practice using them with nonessential elements and sentence interrupters.
- Construct complete sentences in order to establish written and verbal skills that can effectively communicate information in all subjects.

### *Literature and Comprehension*

- Read aloud from a challenging work of literature each day and participate in teacher-led discussion to enhance comprehension and appreciation.
- Strengthen comprehension skills with activities that develop mental imagery, improve recall, build vocabulary, and increase ability to summarize and analyze.
- Read and enjoy poetry and memorize and recite two poems a month.
- Write and respond to questions that elicit comprehension, analysis, and creative thinking about literature and informational texts.
- Produce answers and take quizzes on vocabulary words from a formal vocabulary program that encourages students to experience each word in various forms and to use contextual clues to apply the word accurately and effectively.
- Read and discuss books and authors including: *Number the Stars* by Lois Lowry, *The Adventures of Tom Sawyer* by Mark Twain, *The Bronze Bow* by Elizabeth George Speare, *The Call of the Wild* by Jack London, and primary and secondary sources and essays deepening understanding of history and science.

### *Writing*

- Develop a clear topic and establish its validity by providing relevant details.
- Identify and use reference materials for research reports and data based questions.
- Develop an outline that shows the relationship of details to main ideas.
- Apply the conventions of the English language and organizational structure to writing.
- Collaborate with the history and geography teacher to respond to informational texts through expository writing.

- Become a competent, confident writer with a distinctive personal style.
- Practice and perfect different genres of writing including, expository, compare and contrast, research report, descriptions, narratives, persuasion, poetry, and literary analysis.

## **Math**

### *Patterns and Relationships*

- Identify and extend patterns.
- Using exponents to represent numbers.
- Express numbers in scientific notation.
- Use order of operations to simplify expressions.
- Use prime factorization to find the least common multiple and greatest common factor.

### *Integers and Rational Numbers*

- Add, subtract, multiply, and divide integers and rational numbers.
- Comparing and ordering rational numbers.
- Find equivalent fractions, mixed numbers, and decimals.
- Estimating sums, differences, products and quotients.

### *Algebra*

- Evaluate and simplify algebraic expressions.
- Solving equations and inequalities by adding, subtracting, multiplying, and dividing integers and rational numbers.
- Use Distributive Property.
- Solving two-step, multi-step equations and inequalities with integers and rational numbers.
- Solving equations with variables on both sides.
- Evaluate and estimate using powers and roots.

### *Ratio, Proportion, and Percent Relationships*

- Solve problems using ratios, proportions, rates, and unit rates.
- Use dimensional analysis to make unit conversions.
- Use similar figures and proportions.
- Draw and interpret scale drawings and scale models.
- Understanding and estimating percent problems.
- Solving simple interest, percent problems, and percent of change.

### *Graphs and Functions*

- Understanding the coordinate plane.
- Using function tables to graph ordered pairs.
- Graphing linear and nonlinear functions.
- Using slopes and intercepts to graph linear equations.

### *Measurement and Data*

- Compute with customary and metric units.
- Collect, organize, and analyze data with surveys and samplings.
- Interpret and display data.
- Use theoretical and experimental probability, combinations, and permutations.

### *Geometry*

- Measure, draw, and classify properties of angles and triangles.
- Calculate area and perimeter of triangles and quadrilaterals.

- Use Pythagorean Theorem.

## Science

- Conduct experiments using the scientific method, including stating a hypothesis, carrying out the investigation, recording data, and analyzing the results.
- Understand the concept of controls and variables in a scientific investigation.
- Become proficient in note taking, study skills and using the science text to reference information.
- Observe and describe the physical and chemical properties of and changes in matter.
- Understand the atomic structure and composition of matter.
- Develop an understanding of Newton's Laws of Motion.
- Participate in an annual field trip and science fair.

## History & Geography

- Identify the common characteristics of deserts and be able to recognize and identify the world's largest deserts.
- Develop an understanding of the basic beliefs, symbols, and origins of the three main monotheistic religions: Islam, Judaism, and Christianity.
- Understand and explain the circumstances and innovations that enabled large groups of people to live together in communities and eventually in large civilizations.
- Gain an introductory knowledge of the geographic, political, economic, religious, and social structures during the development of the Ancient Greece and Rome.
- Explore Newton, Descartes, Hobbes, Locke and other key personalities of the Age of Enlightenment to understand the root of modern government and modern thought.
- Deepen the understanding of government and power struggle through exploration of the French Revolution and the influence the American Revolution had on it, the Old Regime and the Three Estates in French Society, King Louis the XIV, XV, and XVI, the Declaration of the Rights of Man, the Reign of Terror, and Napoleon Bonaparte.
- Explore the Industrial Revolution and its effect on society through the study of the technology that drove it (cotton gin, steam engine, spinning mule, factory), the shift from the farm system to the factory system, poor working conditions and child labor, affordable products.
- Gain an introductory understanding of Capitalism and Socialism through the study of Adam Smith, the law of supply and demand, income inequality, income redistribution, Karl Marx and the Communist Manifesto.
- Deepen understanding of revolution through the exploration of the characteristics, key figures, and major events of Latin American independence
- Explore the push and pull factors of immigration to the United States through a family history project that entails research of family name, creation of a family tree, and the research and presentation of a family immigration story.

## Spanish

- Build upon fifth grade vocabulary and grammar.
- Use Spanish to communicate most needs in the classroom.
- Teach students how to take useful notes in class.
- Reinforce present-tense conjugations for “-ar,” “-ir,” and “-er” verbs and use throughout the year.
- Teach preterite-tense conjugations for “-ar” verbs.

- Write sentences, short paragraphs, stories, and scripts that encourage practice and creativity.
- Engage in paired/group conversations, play games, play act, and use tablets to enhance the learning process.
- Learn and recall information for eight Spanish-speaking countries (e.g. location, flag, currency, capital, major cities).
- Use a Spanish-English dictionary.
- Learn about key historical figures in Iberian/Latin American ancient and modern history.

### **Musical Theater**

- Practice, perfect, and perform a musical theater production which includes:
  - o memorization of script, dance routines, and accompanying songs
  - o character expression through face, voice, and movement
  - o two school assembly performances and one family performance
- Gain self-confidence in performing before a group.
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- Listen to great composers and their signature works.
- Continue to develop performance skills and audience etiquette through classroom recitals.
- Learn simple improvisation techniques using the pentatonic scale.
- Sight-read rhythmic notation using whole notes, half notes, quarter notes, eighth notes and sixteenth notes.
- Coordinate with History Department to provide reinforcement through music of the time period being studied.

### **Visual Arts**

- Design and fabrication of original artwork using the following techniques and mediums such as:
  - o watercolor pencil and ink on illustration board
  - o cardboard and paper
  - o acrylic paint, cardboard, and mixed media
  - o plaster and hot glue
  - o styrofoam and wire
- Study the life and works of Bruegel, as well as the Lascaux Caves.
- Learn art vocabulary and concepts.
- Mentor peers and collaborate.
- Care for art materials and art room.
- Explore ways that other subject areas are intertwined with the visual arts including math, science, history, music, language arts, and everyday life.

## **Physical Education**

- Develop a variety of basic movement and manipulative skills through learning and playing team sports.
- Acquire good sportsmanship and leadership skills.
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- Create an environment that is safe, nurturing, and fun.