

## Reading

Our goal is for students to read a variety of genres purposefully and critically, and to understand complex material deeply. This includes the ability to fluently read, analyze, and synthesize increasingly complex fiction and nonfiction text. Furthermore, students should know how to use evidence from text to support opinions and conclusions. And finally, our goal is for students to develop a life-long love of reading. Students in kindergarten through fifth grade learn these reading comprehension strategies: questioning; activating prior knowledge; evoking emotional and sensory images; synthesizing; self-monitoring; determining what's important; making inferences. (Adapted from *Mosaic of Thought* by Keene & Zimmermann, 2007.)

### KINDERGARTENERS

- Print and its functions
- Letter-sound correspondence
- Basic phonemic awareness, including beginning and ending sounds, and vowels
- Basic sight words
- Basic reading comprehension strategies: predicting, identifying text details, active reading
- Basic fiction elements: plot, characters, setting
- Difference between fiction and nonfiction

### 1ST GRADERS

- Increased phonemic awareness
- Understanding of phonics: onset and rime, consonant digraphs, beginning and ending sounds, word families, short and long vowels, basic vowel combinations
- Sight and high frequency words
- Text features
- Reading comprehension strategies: comparing and contrasting, questioning, retelling, self-to-text connections
- Read and synthesize nonfiction text for reporting purposes

### 2ND GRADERS

- Increased fluency and independence for decoding unknown words
- Support with more complex reading comprehension strategies: drawing conclusions, activating prior knowledge, making inferences
- Personal connections between text and self
- Using text to support ideas and opinions
- Read and synthesize one nonfiction source for reports in science and/or social studies
- Increased independence for decoding unknown words

### 3RD GRADERS

- Proficient fluency and decoding skills
- Independence with more complex reading comprehension strategies: drawing conclusions, activating prior knowledge, making inferences
- Personal connections between text and self, and text to text
- Increasingly use text to support ideas and opinions
- Read and synthesize one or more nonfiction sources for reports in science and/or social studies

### 4TH GRADERS

- Apply all metacognitive reading comprehension strategies with support
- Comprehend and synthesize two texts and other sources for reports and presentations
- Word attack skills and using context to decode content specific words
- Finding and citing evidence to support opinions regarding text, with support
- Determine key words and take notes with support
- Manage nonfiction sources, including primary and secondary materials, with support
- Exploration of a variety of genres
- Fluency and expression in oral reading

### 5TH GRADERS

- Independence with all metacognitive reading comprehension strategies
- Comprehend and synthesize multiple texts and other sources for reports and presentations
- Independently manage nonfiction sources, including primary and secondary materials
- Word attack skills and using context to decode difficult content-specific words
- Independence in finding and citing evidence to support opinions regarding text
- Independently determine key words and take notes
- Exploration of a variety of genres

## Mathematics

Our goal is for students to feel comfortable using a variety of math skills and strategies to solve real-world problems. Students will learn to persevere and present evidence when problem solving. This includes the ability to analyze data in order to understand increasingly complex information. Our focus on hands-on and project-based learning facilitates deep understanding and meets the needs of a variety of learning styles.

### NUMBER SENSE

- Reading and writing numbers to 20
- Introduction to place value to 100
- Introduction to greater than, less than, equal to
- OPERATIONS
- Counting to 50
- Introduction to counting by 2s, 5s, 10s
- Introduction to estimation
- Addition and subtraction with numbers up to 10

### DATA, MEASUREMENT, GEOMETRY

- Simple patterns
- Sorting and classifying
- Time: days, weeks, months
- 2-D shapes, and introduction to 3-D shapes
- Basic standard and non-standard measurements
- Basic graphs

### NUMBER SENSE

- Reading and writing numbers to 120
- Place value to 100
- Greater than, less than, equal to
- OPERATIONS
- Counting to 120
- Counting by 2s, 5s, 10s
- Addition and subtraction up to 20, including word problems
- Relationship between addition and subtraction
- Introduction to equivalent expressions

### DATA, MEASUREMENT, GEOMETRY

- Coin names, values, and calculating money to \$2.00
- Length with standard and nonstandard units
- Time: seconds, minutes, hours, half-hours
- Attributes of, and relationship between, 2-D and 3-D shapes
- Basic bar graphs and T-charts

### NUMBER SENSE

- Reading and writing numbers to 1,000
- Place value to 1,000
- Greater than, less than, equal to with three-digit numbers
- Beginning number theory: even and odd numbers
- OPERATIONS
- Counting up & down by 2s, 5s, 10s, from any number
- Add and subtract up to 100, including one- and two-step word problems
- Add up to four two-digit numbers
- Problem solving: when to use addition or subtraction for word and real life problems

### DATA, MEASUREMENT, GEOMETRY

- Estimate and calculate money up to \$10.00
- Length and weight with standard units
- Complex bar graphs
- Review time

### NUMBER SENSE

- Place value to 100,000
- Basic decimals to hundredths place
- Introduction to comparing and ordering basic fractions
- Expanded form
- Rounding to nearest 10 and 100
- Arrays

### OPERATIONS, ALGEBRAIC THINKING

- Relationship between addition and multiplication, between multiplication and division
- Introduction to relationship between decimals and fractions
- Multi-step word problems using all four operations
- Practice with multiplication facts 0-11
- DATA, MEASUREMENT, GEOMETRY
- Area and perimeter
- 3-D shapes
- Complex bar and line graphs
- Introduction to angles and triangles

### NUMBER SENSE AND OPERATIONS

- Place value to 100,000
- Multi-step problem solving
- Addition and subtraction with regrouping
- Rounding to nearest 10 and 100
- Multiplication and division of larger numbers
- Fluency with multiplication facts 0-11
- Factors and multiples
- Equivalencies; comparing, and ordering fractions and decimals

### ALGEBRAIC THINKING

- Sequences and patterns
- Coordinate graphing
- Expanded form

### DATA, MEASUREMENT, GEOMETRY

- Angles, symmetry, 3-D shapes
- Represent and interpret data
- Calculate range and median
- Probability
- Area, perimeter, volume, mass

### NUMBER SENSE AND OPERATIONS

- Place value with decimals and whole numbers
- Scale and proportion
- Roots, exponents, and factors
- Number theory: prime and square numbers
- Equivalences between fractions and decimals
- All four operations with fractions, decimals, and four-digit numbers
- Multi-step problem solving with whole and mixed numbers

### ALGEBRAIC THINKING

- Sequences and patterns
- T-tables, extending and predicting patterns, variables, and equations

### DATA, MEASUREMENT, GEOMETRY

- Volume
- Coordinate plane for solving real-world and mathematical problems
- Angles, symmetry, shapes, and congruency
- Represent and interpret data
- Perimeter and area of regular and irregular polygons

# Our Curriculum



**Crestmont School**

2015-2016

## Science

Our goal is for students to understand the core ideas in three domains: life science, physical science, and earth and space science. We also want students to understand major crosscutting concepts—such as structure and function and cause and effect—since such concepts are fundamental to having a scientifically coherent view of the world. And finally, we want students to be engaged in the kinds of practices that actual scientists use. Students collaboratively plan and conduct investigations; make observations and comparisons; produce and analyze data; represent the data in various graphical displays; construct arguments; and build models to describe phenomena. For each grade the three or four topics to be studied are listed, with sample projects for each. The actual projects may change from year to year.

## Social Studies

Our goal is for students to understand the people and events that have shaped our region, state, nation, and the world. We guide our students to engage in historical thinking – to raise questions, think critically, consider multiple perspectives, and gather evidence to support their positions. We want our students to have a solid foundation in both the human and the physical geography of California and the United States. We explore the benefits and problems that stem from the use of natural resources, building a sense of stewardship of our planet. We guide students to have a deep understanding of culture, and to challenge assumptions and stereotypes of various people and groups. Ultimately we support our students to make sense of the world in which they live, to make connections between major ideas and their own lives, and to develop into active members of our local and global communities.

## Writing and Literacy Skills

Our goal is for students to communicate effectively in all writing styles, including opinion, informative, and narrative. As students move from kindergarten to fifth grade, we expect their use of language to become more sophisticated. This requires consideration of audience, style, details, mechanics, and organization. Effective writing includes the ability to synthesize information from multiple sources and to cite evidence to support a position or claim. We aim for students to be comfortable with the writing process, including prewriting (planning), creating multiple drafts, editing, and publishing.

KINDERGARTENERS	1ST GRADERS	2ND GRADERS	3RD GRADERS	4TH GRADERS	5TH GRADERS
<ul style="list-style-type: none"> <li>Forces and interactions: Investigations of ramps and balls</li> <li>Interdependent relationships in ecosystems—animals, plants, and their environment: Building models of insect ecosystems</li> <li>Weather and climate: Monitoring weather and reporting to the community</li> </ul>	<ul style="list-style-type: none"> <li>Waves: Building string instruments</li> <li>Structure and function: Nighttime animal study</li> <li>Space systems—patterns and cycles: Tracing shadows</li> </ul>	<ul style="list-style-type: none"> <li>Structure and properties of matter: Investigations with heating and cooling</li> <li>Interdependent relationships in ecosystems: Amazon rainforest animal study</li> <li>Earth’s systems—processes that shape the earth: Field trip to Bay Model</li> </ul>	<ul style="list-style-type: none"> <li>Forces and interactions: Magnet investigations</li> <li>Inheritance and variation of traits: Dinosaur and fossil study</li> <li>Weather and climate: Graphing project</li> </ul>	<ul style="list-style-type: none"> <li>Energy: Building solar cars</li> <li>Waves and information: Exploratorium workshop on waves</li> <li>Structure and function: Building models of super animals</li> <li>Earth’s systems—processes that shape the earth: River-cutter project on erosion</li> </ul>	<ul style="list-style-type: none"> <li>Structure and properties of matter: Evaporation experiments</li> <li>Matter and energy in organisms and ecosystems: Building models of food webs</li> <li>Earth’s systems—geosphere, hydrosphere, atmosphere, and biosphere: Service project to protect our local watershed</li> <li>Space systems—stars and the solar system: Field trip to Chabot Space Museum</li> </ul>
<ul style="list-style-type: none"> <li>Community building</li> <li>Different kinds of families</li> <li>Cooperative group skills</li> <li>Mapping the classroom</li> </ul>	<ul style="list-style-type: none"> <li>The people, roles, places, and functions of our school</li> <li>Farm to table: Where does the food we eat come from?</li> <li>Growing our own food</li> <li>Mapping the school</li> </ul>	<ul style="list-style-type: none"> <li>The history of Richmond</li> <li>Children from different cultures, places, and time periods</li> <li>Mapping the East Bay</li> </ul>	<ul style="list-style-type: none"> <li>Native American peoples from today and long ago: dispelling myths and challenging stereotypes</li> <li>Historical use of natural resources and how environment shapes culture</li> <li>Changing map of the U.S. throughout the nation’s history</li> <li>Study of artifacts</li> </ul>	<ul style="list-style-type: none"> <li>California history: Gold Rush, missions, ranchos, and Japanese internment</li> <li>Key historical forces: Immigration, racism, conflict, and cooperation</li> <li>Statehood and state government</li> <li>California’s regions and their environmental challenges</li> <li>Difference between city, state, country, and continent</li> </ul>	<ul style="list-style-type: none"> <li>Pre-Columbian people: how the environment shapes how we live</li> <li>U.S. history: American Revolution, westward expansion, Civil War, slavery</li> <li>Conflict and cooperation between diverse people</li> <li>Causes and consequences of war</li> <li>Understanding the Bay’s watershed and our need to protect it</li> <li>Understanding multiple perspectives by analyzing primary and secondary sources</li> </ul>
<p><b>WRITING</b></p> <ul style="list-style-type: none"> <li>Basic understanding of writing as a process to capture ideas in text, including dictating, labeling, drawing, and writing</li> <li>Use of invented spelling</li> <li>Letter-sound correspondence</li> </ul> <p><b>HANDWRITING &amp; LITERACY SKILLS</b></p> <ul style="list-style-type: none"> <li>All uppercase, lowercase, and digits</li> <li>Introduction to writing including pencil grip, posture, and paper position</li> <li>Response to literature with sentence starter</li> <li>Thank you notes to teachers and staff</li> </ul>	<p><b>WRITING</b></p> <ul style="list-style-type: none"> <li>Introduction to writing process: prewriting with pictures, labels, oral storytelling</li> <li>Formulating sentences</li> <li>Writing for a variety of purposes</li> </ul> <p><b>HANDWRITING &amp; LITERACY SKILLS</b></p> <ul style="list-style-type: none"> <li>Appropriate use of uppercase and lowercase letters</li> <li>Basic spelling rules and word families</li> <li>Basic punctuation</li> </ul> <p><b>SAMPLE PROJECTS</b></p> <ul style="list-style-type: none"> <li>Feelings poetry</li> <li>“All About Books” for nocturnal animal study</li> <li>Moon myths</li> </ul>	<p><b>WRITING</b></p> <ul style="list-style-type: none"> <li>Focus on self-editing</li> <li>Paragraphs with multiple sentences</li> <li>Correct end-punctuation</li> <li>How to correct incomplete and run-on sentences</li> </ul> <p><b>HANDWRITING &amp; LITERACY SKILLS</b></p> <ul style="list-style-type: none"> <li>Review appropriate use of uppercase and lowercase letters</li> <li>More spelling patterns</li> </ul> <p><b>SAMPLE PROJECTS</b></p> <ul style="list-style-type: none"> <li>Constellation myths and script</li> <li>“How-to” posters and presentations</li> </ul>	<p><b>WRITING</b></p> <ul style="list-style-type: none"> <li>Increasing independence in writing</li> <li>More complex sentence construction</li> <li>More complex punctuation (e.g., commas in addresses and dates)</li> </ul> <p><b>HANDWRITING &amp; LITERACY SKILLS</b></p> <ul style="list-style-type: none"> <li>Complex spelling patterns</li> <li>Cursive</li> </ul> <p><b>SAMPLE PROJECTS</b></p> <ul style="list-style-type: none"> <li>“What Dino am I?” pop-up books</li> <li>Narrative writing from character’s perspective in historical fiction: <i>The Birchbark House</i></li> </ul>	<p><b>WRITING</b></p> <ul style="list-style-type: none"> <li>Support with essays with multiple paragraphs</li> <li>Increased independence with all steps of the writing process</li> </ul> <p><b>HANDWRITING &amp; LITERACY SKILLS</b></p> <ul style="list-style-type: none"> <li>Homophones</li> <li>Punctuation (e.g., quotations in dialogue)</li> <li>Cursive review</li> <li>Introduction to keyboarding</li> </ul> <p><b>SAMPLE PROJECTS</b></p> <ul style="list-style-type: none"> <li>Publish personal poetry journal</li> <li>“Do Pigs Make Good Pets?” opinion piece</li> </ul>	<p><b>WRITING</b></p> <ul style="list-style-type: none"> <li>Independence with expanded essays with multiple paragraphs</li> <li>Independence with writing process for nonfiction essays</li> </ul> <p><b>HANDWRITING &amp; LITERACY SKILLS</b></p> <ul style="list-style-type: none"> <li>Cursive review</li> <li>Punctuation (e.g., commas in sentences)</li> <li>Continued keyboarding</li> </ul> <p><b>SAMPLE PROJECTS</b></p> <ul style="list-style-type: none"> <li>Graduation speech based on important “small moment”</li> <li>Journal writing from perspective of historical figure</li> </ul>



## Our Educational Program

Crestmont School inspires children to be changemakers. We cultivate a learning environment where students become critical and creative thinkers, skillful collaborators, and courageous, compassionate citizens.

This curriculum matrix lays out the carefully planned progression of concepts and skills taught to Crestmont students across grades and subject areas.

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