

## Writing

### Unit 1: Launching the Writing Workshop

Students will learn a number of strategies for generating personal narrative entries. They will learn that writers focus their stories and tell stories in scenes rather than summaries. Students will also learn that writers deliberately craft the leads and ending of their stories by studying published writing.

### Unit 2: Narrative Writing

Students will continue to be introduced to a number of strategies for generating personal narrative entries and will learn to write from the narrator's point of view. They will learn to incorporate external actions and internal responses while also incorporating scenes from the past or future. Students will learn that writers don't just end stories, they resolve problems, learn lessons, and make changes to end them effectively.

### Unit 3: Essays

Students will be introduced to the genre of essays by contrasting essay structures with the structure of narratives. Students will learn that writers need a sense of what they are aiming for in order to collect, elaborate on and structure their writing. In this unit, each student will write a personal essay in which he/she advances a theme of personal significance, arguing, for example, "It's hard being an only child," or claiming, "My dog is my best friend."

### Unit 4: Realistic Fiction

Students will learn that fiction writers need to choose a seed idea and begin to develop characters by creating their external and internal traits. They will also learn that writers develop characters not only by telling about their motivations and struggles, but also by creating scenes that show these things. Students will learn to listen to their writing carefully, and then choose words, structures and punctuation that help them to convey the content, mood, tone, and feelings of the piece.

### Unit 5: Poetry

Students will read and write poems in individual, critical and evaluative ways to explore the observations, feelings and ideas of other poets. Students will learn to express their own observations, feelings and ideas about their own lives and the world.

### Unit 5: Literary Essays

Students will begin to understand that literary essayists ask, "What's this story really about?" and then analyze the ways the author deliberately crafts the story to convey this meaning. Students will learn that literary essayists draw on their life experience to understand and develop ideas about texts. They will also learn ways to question and revise their theses as writers do, making sure each is supported by the whole text.

## **Reading Units**

### **Unit 1: Launching Reader's Workshop**

In this unit the reading workshop is launched. Teachers help students develop a love of reading, while introducing the routines, structures and habits of a rich reading workshop. Skills taught during this unit include, but aren't limited to, reading with fluency and stamina, monitoring for sense and retelling.

### **Unit 2: Character Study**

During this unit students will learn how to walk in the characters' shoes, see the story through the characters' eyes, and glean facts about the character. Students will use these skills to develop theories about the characters and then learn to talk about those theories with others. Skills taught during this unit include, but aren't limited to, empathizing, envisioning, predicting, inferring and synthesizing.

### **Unit 3: Nonfiction**

This unit teaches readers to focus on text structure. Students learn that most expository nonfiction has a central idea and supporting evidence. In addition, students learn that narrative nonfiction focuses on the goals and struggles of a central character. During the final stages of the unit, students will use what they have learned to research a topic of their choice. Skills taught during this unit include, but aren't limited to, predicting, determining importance, using context clues, finding the main idea, building fluency, research skills and synthesizing.

### **Unit 4: Humor**

The main goal of this unit is to help readers laugh at the funny parts in books. This means that students have to be able to "get the joke." In this unit students will learn to notice patterns in humorous texts, see the signals authors give when something is supposed to be funny, and overall, enjoy humorous texts. Skills taught in this unit include, but aren't limited to, critical reading, questioning, inferring and interpreting.

## **Unit 5: Critical Questions**

Throughout this unit students will question, question, question and question some more. The hope is that through the questioning, students will learn to dig deeper and understand more. Students will learn to ask deep questions about the text, the authors and finally themselves. Students will discuss these questions with their book club members and the write to grow ideas about their theories. Skills taught in this unit include, but aren't limited to, questioning, reading critically, interpreting and synthesizing.

## **Unit 6: Historical Fiction**

Throughout this unit students will read historical fiction texts, while learning to keep track of multiple plotlines, unfamiliar characters and shifts in time and place. Students will also learn to develop their own ideas about the characters and themes found within the stories. This work will be done within book clubs and the texts used will focus on a particular era in history. Skills taught during this unit include, but aren't limited to, perspective, interpreting, synthesizing, figurative language, symbolism and theme.

## **Unit 7: Traditional Literature**

In this unit, students will learn the characteristics of fairytales, folktales, fables, and myths. Students will then use what they have learned about these traditional stories to deepen their understanding of contemporary characters and stories. Skills taught in this unit include, but aren't limited to, understanding archetypes, recognizing story structure, antecedents and allegory.

# Math

## **Everyday Mathematics k-5**

Berkley's elementary math curriculum K through 5 uses the Everyday Mathematics program, a curriculum developed by the University of Chicago Mathematics Project to offer students a broad background in mathematics. Everyday Mathematics is a rigorous and balanced curriculum that emphasizes conceptual understanding and problem solving while building a mastery of basic procedural skills. The Everyday Math Program has recently been updated to include the Common Core State Standards. Both are founded on cross-disciplinary skills such as critical thinking and problem solving. All mathematical tasks are designed to be cognitively demanding requiring students examine a

mathematical situation, find a point of entry to begin their exploration of the problem, and apply their understanding of mathematical concepts to find and justify their solutions. (Smith and Stein)

In fifth grade many concepts that have been introduced in the earlier grades are consolidated and extended. In addition to mastering computational skills, students are encouraged to employ strategies to solve problems, link past experiences to new concepts, work cooperatively and apply mathematics to their everyday lives. Throughout the year, students cover six major mathematical content domains number sense, algebra, measurement, geometry, data analysis, and probability. Woven throughout all units is an emphasis on algorithms, estimation, mental arithmetic, developing (deepening) number sense, and complex problem solving. In fifth grade a large area of focus will be on fractions, equivalent fractions, and developing a fluency in converting between a fraction, decimal and percent. Students will spend three units deepening their understanding of what fractions are and the many ways they can be represented. Additionally, this is an important time for students to master the algorithms for addition, subtraction, multiplication and division using whole numbers and decimals.

### **Unit 1 – Number Theory**

In Unit 1, students study the properties of whole numbers by building on prior work with multiplication and division of whole numbers as well as reviewing place value.

Students will:

- build and draw arrays to model multiplication and division problem
- learn to apply the rules of divisibility
- explore finding factors and products
- be introduced to prime and composite numbers and exponents

### **Unit 2 – Estimation and Calculation**

In Unit 2, students extend their work with estimating answers to computation problems involving addition, subtraction, and multiplication.

Students will:

- devise an estimation strategy to solve a problem
- learn the usefulness of making a magnitude estimate for products of multi-digit numbers
- investigate several methods for adding, subtracting and multiplying whole numbers and decimals
- deepen their understanding of numbers through an exploration that addresses the differences between millions, billions, and trillions

### **Unit 3 – Geometry Explorations**

In Unit 3 students examine the properties of basic plane figures such as a square or triangle.

Students will:

- use a variety of geometry tools; compasses, rulers, protractors and the Everyday Math Geometry Template too aid them in their geometric explorations
- review types of angles, geometric figures and explore the many properties of polygons
- be introduced to and discover the side and angle relationships in regular tessellations
- continue their work in data collection, organization and interpretation

#### **Unit 4 – Division**

The main focus of Unit 4 is to develop division concepts.

Students will:

- begin by reviewing basic division facts and the partial-quotient method of division
- extend the algorithm to include division of a decimal by a whole number develop multiple representations for division problems; using words, pictures, diagrams and numbers
- practice division number stories and interpret the remainder; should an answer be rounded up to a whole number to include a remainder, should a remainder be ignored, or should a remainder be reported as a fraction or decimal.

Students may also:

- begin work on the traditional division algorithm

#### **Unit 5 – Estimation and Calculation**

Unit 5 is the first of three Units that focuses on fractions.

Students will:

- review fraction concepts, such as exploring mixed numbers, comparing and ordering fractions, and finding equivalent fractions
- review of the meanings of fraction, decimal and percent and reviews notation for rational numbers
- concentrate on the conversion among these notations, often stressing the fact that in every fraction is a division problem.
- Develop the ability to independently convert from a fraction, decimal or percent notation
- review the properties and construction of bar and circle graphs

#### **Unit 6 – Using Data; Addition and Subtraction of Fractions**

In Unit 6 students investigate data displays and sample size.

Students will:

- learn how to match “mystery” plots with data as well as use data from surveys

- investigate the effect of sample size and read and create stem-and leaf plots and other data displays
- work with data landmarks; range, maximum, minimum, median, mode and mean as a method to report and analyze data sets
- continue their study of fractions and revisit addition and subtraction of fractions with like and unlike denominators

### **Unit 7 – Exponents and Negative Numbers**

In Unit 7 students investigate pre-algebra concepts and skills.

Students will:

- be introduced to the notational conventions of exponents, scientific notation, and number-and-word notation
- develop rules for the addition and subtraction of positive and negative numbers
- recognize the need to use negative numbers in certain real world situations
- begin analyzing number sentences using the rules for order of operations paying special attention to how the rules help avoid ambiguity in interpretation
- finish the unit creating and interpreting line plots with fractional units

### **Unit 8 – Fractions and Ratios**

Unit 8 is the last formal unit on fractions.

Students will:

- review the concept of renaming fractions as equivalent fractions
- practice using equivalent names for fractions and mixed numbers to perform mixed number addition and subtraction with like and unlike denominators
- create area models as an introduction to the algorithm for multiplication of fractions and mixed numbers
- deepen their understanding of division of fractions by creating visual models for problems
- broaden their understanding of calculating percent to include a discount as well as finding the whole, given a fraction or percent of the whole

### **Unit 9 – Coordinates, Area, Volume, and Capacity**

Students will:

- reinforce their understanding of coordinate grid structures and practice plotting points on a coordinate grid while reviewing the relationship between ordered number pairs and transformations of figures in a plane
- review the area of rectangles then used as a starting point to find the area of triangles and parallelograms
- have a variety of experiences applying the formulas for the area of triangles and parallelograms
- move to a study of volume and capacity where students extend their knowledge of volume to find the volume of rectangular and right prisms

- consider capacity and the relationship between liter, milliliter, and cubic centimeters

### **Unit 10 – Using Data; Algebra Concepts and Skills**

In Unit 10, students are introduced to pre-algebra concepts and skills.

Students will:

- concentrate on solving problems using a pan-balance model, which means making sure that a change to one side is compensated by a change to the other side
- represent relationships as algebraic expressions that will help them generate input-output tables
- link the data in their tables to corresponding points on a coordinate grid helps students to better understand and interpret the data
- practice reading and interpreting line graphs
- finish the Unit working with the properties of circles
- complete a hands-on activity to compare the ratio of circumference and diameter to determine the irrational number (pi). Students find the circumference, diameter, and radius of a circle and are introduced to the formula for area of a circle.

### **Unit 11 – Volume**

Students will:

- review and compare the properties of 3-dimensional solids and develop formulas to find volume of a cylinder
- work with formulas for finding surface area of 3-dimensional figures
- be introduced to formulas for the volume of cones and pyramids through hands-on activities
- complete an exploration of volume of irregular shapes using water displacement as a method to determine volume
- practice converting measurements among units of weight, capacity, and volume

### **Unit 12 – Probability, Ratios, and Rates**

In Unit 12, students use factor trees to find the prime factorization, greatest common factors and least common multiples.

Students will

- work on probability and be introduced to tree diagrams to represent combinations of choices and to find probabilities in situations where the combinations are equally likely
- review and practice ratio and rates problems
- complete a heart rate and exercise task to experience calculating data and using graphs to represent, compare and interpret their data
- use their heart rate data to calculate rates and compare rates

## **Social Studies**

The central purpose of social studies education is the development of responsible citizenship which helps to foster relationships among people and between people and their institutions/governments. In fifth grade students continue to broaden their development by conducting a chronological study of early American history. Working as historians students read and analyze primary and secondary sources to gain perspective on the important events that shaped the founding of our nation, its history, its people, and its government.

### **Unit 1: Our Government**

In this unit students begin by studying the adoption of the United States' Bill of Rights and the United States Constitution which both serve to introduce the role and structure of our government. Students learn about the individual rights and responsibilities of citizens of the United States. This more in-depth look at core democratic values leads students to examine the principals upon which our federal government is based. Students learn concepts such as popular sovereignty, limited power, rule of law, and individual rights. All year students work keeping in mind the essential question: Why is the federal government organized to give and limit power? Students will study the three levels of government; local, state, and national and the three branches within each level. Finally, students will be asked to consider why people form governments, what happens in the absence of rules and laws, and the importance of the rule of law.

### **Unit 2: Three Worlds Meet**

In this unit students examine early American History with an emphasis on the history and events prior to 1585 the date of the first English settlement, Roanoke, in North America. Students will use their social studies textbooks as a secondary source to examine text structures and the function informational texts can play in learning about the past. Students will study the life and cultures of the inhabitants in America, Africa, and Europe prior to their coming together in the New World. Students will conduct a study of the major American Indian cultural groups looking specifically at how they existed and adapted in the different geographic regions of North America. Next students will study the culture and life on the continent of Africa prior to the 16<sup>th</sup> century. Students will then turn their attention to the developments in Europe that drove the age of global sea exploration. Students take an in-depth look at a variety of explorers, their voyages and the challenges they faced. Finally students consider the impact of the Colombian Exchange on these three societies and how the great movement of people, resources, ideas and human populations shaped their foundation.



### **Unit 3: Colonization and Settlement**

In this unit students will focus on the events of early European settlement in North America and colonization from 1585 – 1763 with an emphasis on the issues and events that drove the migration to the New World. Students will then take an in-depth look at the earliest settlements; Roanoke, New Amsterdam, Plymouth and Jamestown and how the difference in physical geography affected how these earliest settlements thrived. Next students look at the three distinct colonial regions that emerged in the New World; New England, Middle Colonies, and Southern Colonies. Students will analyze how the varied geography of North America impacted the colonies; natural resources, political leanings, and economic development. The specific economic development of the regions will be highlighted as New England becomes a manufacturing and small farm region and the Southern Colonies emerge as a staple-crop agriculture region. Students will consider how these economic differences influenced the use and dependence upon slave labor. Lastly, students will work to understand how cultural differences between the French and British defined their interactions with American Indians.

### **Unit 4: Life in Colonial America**

In this unit students take a closer look at life in the colonies and the settlement patterns. Students will create Venn diagrams to compare the different colonial regions and analyze their differences and similarities. Students will use informational texts to learn about the Southern Colonies, life there and in comparison to life in other colonial regions. Students will continue their work to gain a better understand of the influence and events that brought about slavery. Students will learn about the horrors of the Middle Passage, the slave trade and the impact of slavery on Africa and North America. Students will consider the evolution of the institution of slavery and the reasons for its growth in some colonial regions more than others. Students will work to understand the impact of slavery on enslaved Africans and how the slaves drew upon their African heritage to develop an African –American culture. Students then investigate how the economies of the regions depended on the resources available to them. The relationship between England and her colonies is examined as England strives to maintain economic and political control over the growing colonies.

### **Unit 5: Road to Revolution**

In this unit students take look at the myriad of events and causes that lead up to the American Revolution. Students study the time period from 1756 to 1775 covering the Seven Years' War to the battles at Lexington and Concord. They investigate how the British Parliament enacted a variety of

proclamations and acts as a means to tighten their control over the growing colonies. Students learn about and analyze; the Navigation Acts, Proclamation of 1763, Sugar Act, Stamp Act, Townsend Acts, the Tea Act, and the intolerable Acts. Students will consider the reasons behind the British Parliament's motivation to enact these new laws, the colonies response, and the complexities and political ideas of the time that spur colonies towards independence. Students will study varying accounts of the same historical events and read biographies of significant colonial leaders and their contributions during the Revolutionary War period. Students also explore colonial experiences with self-government and the loyalist and patriot perspectives as the colonies move towards independence. The unit ends with students creating a time-line of events leading up to the armed battle at Lexington and Concord.

### **Unit 6: The American Revolution**

In this unit students investigate the Revolutionary War. Students start their by creating a timeline of events leading up to the Declaration of Independence. In doing so, students investigate the colonies first attempts at self- government, the formation of the Continental Congress, political ideals of the time, and the role the press played in unifying political groups within the colonies and their objective to gain independence. Students study primary sources; Common Sense and the Declaration of Independence to gain insight into the mindset of the colonists' political ideals, their grievances in terms of unalienable rights, government by consent and limited government. Students then study the course of the Revolutionary War paying special attention to the winter at Valley Forge, the Battle of Saratoga and the Battle of Yorktown. Students evaluate the strengths and weaknesses of both sides, examine the influence of significant individuals on the War, and compare the perspectives of the Loyalists and Patriots. Students also look at the role women, African Americans, and American Indians played in the War and how it impacted their lives. The unit ends with students assessing the Treaty of Paris and the short term and long term consequences of the American Revolution.

### **Unit 7: A New Nation**

In this unit students probe the historical circumstances leading to the adoption of the United States Constitution and the Bill of Rights. Students review the final events of the Revolutionary War and look at the significant obstacles now facing the new nation. Students look at the structure of the government set up under the Articles of Confederation. Students will study both the struggles the young country faced and the success they achieved by examining historical events such as; Shay's Rebellion which lead numerous Americans to want a new form of government. Students also consider the adoption of the

Northwest Ordinance. Students learn about the Constitutional Convention and the key individuals that sought to construct a new constitution and just how the states dealt with the need to make compromises in the process. Students are introduced to the concept of federalism and how it serves to help build a powerful national government while also serving to limit its power. Students examine the history and reasons behind the inclusion of the Bill of Rights with special attention paid to the first four amendments. Students complete the unit by composing a persuasive essay on a public issue related to the Constitution.