Botelle Elementary School Intermediate Curriculum Overview 2022-23 (YEAR A)

*refer to 3-5 Back to School <u>Readiness Unit</u> for BOY lessons

Fall		Wi	nter	Spring					
September – mid October mid October - November		December – mid January	mid January - February	March – April	May - June				
READING UNITS OF STUDY									
Building a Reading Life	Mystery Genre Study	Reading to Learn	Character Study	Biography Book Clubs	Research Clubs				
 -Develop goal setting, monitoring and self-assessment strategies for reading stamina, book choice, and comprehension. -Read closely to notice textual details. -Ask and answer questions, referring directly to the text. -Explain what the text says using its details and examples. -Determine the meaning of words and phrases, both literal and figurative. 	-Understand and explain the structure of mystery books and use it to make predictions. -Ask and answer questions, referring directly to the text. -Explain what the text says using its details and examples. -Recount/summarize important sections of the text. -Make inferences about the solution using text evidence. -Compare and contrast mystery texts and the author's craft.	-Determine the main idea of a text and explain how it's supported by key details. -Recount/summarize important information from the text. -Use text features to locate information efficiently. -Explain the visual information (photos, charts, diagrams, etc.) and how it supports the textual information. -Identify the structure of a text (chronological, cause/effect, problem/solution).	-Describe the characters' (traits, motivations, feelings) using specific evidence from the text. -Recount/summarize stories and how the character was developed throughout the text. -Identify the lesson or theme, explaining how the character's thoughts and actions connect. -Determine the point of view of characters and author.	-Understand and explain the structure of biographies and use it to recount/summarize the key details. -Describe the subject (traits, motivations, feelings) using specific evidence from the text. -Integrate information from two or more texts to demonstrate comprehension of the subject and the time period in which he/she lived. -Ask and answer questions about the subject and support ideas with key details from texts.	 -Choose an animal to research and identify main ideas and supporting details to learn all about it. -Ask and answer questions, referring directly to the texts. -Recount/summarize important information from the texts. -Compare and contrast information across texts. -Apply speaking and listening skills, in a book club, to teach others about what has been learned. 				
		WRITING UNI	TS OF STUDY						
Crafting True Stories	Writing About Reading	Information Writing	The Arc of Story	Changing the World: Persuasive Speeches, Petitions & Editorials	Writing About Research				
 -Generate ideas for personal narratives. -Collect stories in a writer's notebook and use the writing process to develop a personal narrative. -Use elaborative craft techniques to bring story scenes to life for the reader. -Write an ending that connects to the details in the story, using dialogue, thinking or feelings. - Apply editing skills to write clearly using appropriate conventions and spelling.→ 	-Collect important ideas and details from texts and organize them to develop a thesis. -Organize and develop ideas using text evidence and an explanation as to how it connects to the thesis. -Use exemplars and mentors to self evaluate and set goals for improvement. -Reflect upon and respond to various text dependent questions, writing a complete paragraph or two.	 -Choose a topic of interest and expertise and use the writing process to write an informational text. -Organize information by subtopic with main ideas and supporting details. -Elaborate using interesting facts, definitions, quotes and details with an engaging style. -Include relevant text features (diagrams, table, etc.) that support and extend the text. -Connect ideas with transition words and phrases. -Write a conclusion that connects information presented throughout the text. 	-Generate and plan fictional story ideas with a character/narrator and a sequence of story events. -Organize and write a narrative with a beginning that introduces a situation for the character/narrator, events that develop the situation and character and an ending that concludes the story and flows from the events. -Use transitional words and phrases and paragraphs to introduce and connect events. -Develop the character with dialogue, thoughts, feelings, actions and reactions to situations. -Describe events using concrete word choice, phrases and sensory details.	 -Choose a topic to persuade an audience to make a change. -Write a speech that clearly states an opinion with reasons. -Develop reasons with facts. examples, and details from research, surveys and interviews. -Use transition words and phrases to link opinions and reasons. -Revise introductions and conclusions to hook the audience and make a concluding statement related to the opinion. 	-Collect information about an animal from print and digital resources, take notes and organize the information into categories. -Integrate information from two or more resources to write a researched-based informational text. -Organize information by subtopic with main ideas and supporting details; include an introduction and conclusion. -Elaborate using interesting facts, definitions, quotes and details with an engaging style. -Include relevant text features (diagrams, table, etc.) that support and extend the text Provide a list of sources.				

CONTENT UNITS OF STUDY								
Science: <u>Bear Sense</u>	Social Studies: Intro to Geography, Map Skills & Overview of Regions	Science: <u>Forces that Move the Earth</u>	Science: <u>Changing Landforms</u>	Social Studies: Exploring and Researching the Five Regions of United States				
-Understand the problem of interactions between bears and humans. -Explore how the brain processes information through 5 sense receptors and use this information to design a bear-proof container. -Modify the design using what they've learned.	-Identify ways that a study of geography is important in the study of any country or region. -Analyze how the study of various regions of a country helps develop an overall understanding of that country. -Examine and describe the properties of a variety of maps and globes (e.g., title, legend, cardinal and intermediate directions, scale, symbols, grid, principal parallels, meridians) and purposes (road, reference, thematic). -Identify the maps or types of maps most appropriate for specific purposes.	-Understand plate tectonics and how those processes affect the Earth's crust. -Understand the energy that drives the processes and the impact those processes have on humans. -Investigate two mysterious sound clips and complete a series of activities that reveal that the Earth's crust is not stagnate but changing and moving all the time. -Recognize that the slow processes of plate tectonics can directly impact humans, often in very sudden ways.	-Analyze the differing landscapes throughout the US and its National ParksInvestigate various National Parks and monuments, in order to build understanding of energy, collisions, weathering and erosion. -Discover the answers to the questions, "Why does the topography change across the US? How do the National Parks provide evidence for the events that have led to the differences in topography across the US?"	 -Analyze how people from various American regions modify and adapt to their environments. -Analyze how people from various American regions use and allocate their available resources. -Explore the physical landforms and bodies of water in various American regions. -Explore the patterns of climate in various American regions. -Explore natural disasters that affect various American regions. -Analyze the relationship between climate and the people living in various American regions. -Explain reasons for migration of people within and beyond a region. -Evaluate the impact of immigration on a region. -Analyze unique cultural similarities to various American regions. -Discover various factors and themes that make a region unique. 				

MATHEMATICS UNITS OF STUDY: THIRD GRADE									
Introducing Multiplication	Area and Multiplication	Wrapping Up 1,000	Relating Multiplication to Division	Fractions as Numbers	Measuring Length, Time, Liquid Volume, and Mass	Polygons and Perimeter	Putting it All Together		
 Interpret scaled picture and bar graphs. Represent data using scaled picture and bar graphs. Solve one- and two- step story problems using addition and subtraction. Understand multiplication in terms of equal groups. Represent and solve multiplication problems involving equal groups. Represent and solve multiplication problems involving arrays. 	 Describe area as the number of unit squares that cover a plane figure without gaps and overlaps. Measure the area of rectangles by counting unit squares. Explain why the area of a rectangle can be determined by multiplying the side lengths. Solve problems involving the area of rectangles. Find the area of a figure composed of rectangles. 	-Use place value understanding to round whole numbers to the nearest multiple of 10 and 100. -Add within 1,000 using algorithms based on place value and properties of operations. -Subtract within 1,000 using algorithms based on place value and properties of operations. -Write and solve equations for two-step word problems using addition, subtraction, and multiplication and assess the reasonableness of answers.	 -Understand and represent "how many groups?" and "how many in each group?" problems and understand division as an unknown factor problem. -Connect and differentiate between "how many groups?" and "how many in each group?" problems. -Use properties of operations and place value to develop strategies for multiplying larger numbers. -Use properties of operations and the relationship between multiplication and division to develop strategies for devising larger numbers. -Wite and solve equations for two-step word problems using the four operations, and assess the reasonableness of answers. 	-Understand that unit fractions are formed by partitioning shapes into equal parts and how fractions are built from unit fractions. -Understand a fraction as a number and represent fractions on a number line. -Explain equivalence of fractions in special cases and express whole numbers as fractions and fractions as whole numbers. -Compare two fractions with the same numerator and denominator, record the results with the symbols > or <, and justify conclusions.	-Measure lengths using rulers marked with halves and fourths of an inch to generate data for making a line plot. -Measure time intervals and solve problems involving addition and subtraction of time intervals in minutes. -Measure and estimate liquid volumes and masses of objects. -Use the four operations to solve problems involving mass, volume, time, equal groups, area, and arrays.	-Understand the shapes in different categories can have shared attributes that define a larger category, with a focus on quadrilaterals. -Find the perimeter of polygons, including finding the perimeter given the side lengths and finding missing side lengths. -Solve problems that involve perimeter and area. -Solve problems in context that involve perimeters of polygons and examples and non-examples of quadrilaterals.	 -Identify and explain arithmetic patterns using properties of operations. -Fluently multiply and divide within 100. -Fluently add and subtract within 1,000 -Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays and measurement quantities. -Represent problems involving equal groups, arrays, and measurement quantities using drawings and equations with a symbol for an unknown number. -Solve two-step word problems using the four operations. -Represent two-step word problems using equations with a symbol for an unknown number. -Solve two-step word problems using the four operations. -Represent two-step word problems using equations with a letter standing for the unknown quantity. -Assess the reasonableness of answers using mental 		

			computation and estimation
			strategies including rounding.

MATHEMATICS UNITS OF STUDY: FOURTH GRADE									
Factors and Multiples	Fraction Equivalence and Comparison	Fraction Operations	Large Numbers and Decimal Fractions	Multiplicative Comparison and Measurement	Whole Number Multiplication and Division	Angles and Angle Measurement	Area, Perimeter and Classifying Shapes	Putting it All Together	
-Explain what it means to be a factor or a multiple of a whole number. -Determine if a number is prime or composite. -Apply multiplication fluency within 100 to find rectangles with given side lengths or a given area. -Apply multiplication fluency within 100 and the relationship between multiplication and division to find factor pairs and multiples.	-Make sense of fractions with denominators 2, 3, 4, 5, 6, 8, 10 and 12 through physical representations and diagrams. -Reason about the location of fractions on the number line. -Use visual representations to reason about fraction equivalence, including using benchmarks such as and ½ and 1. -Generate equivalent fractions with the following denominators: 2, 3, 4, 5, 6, 8, 10, 12, and 100. -Use visual representations or a numerical process to reason about fraction comparison.	-Represent and explain that a fraction <i>a/b</i> is a multiple of 1/ <i>b</i> . -Generalize that <i>n x a/b</i> = (<i>nxa</i>)/ <i>b</i> . -Use various strategies to add and subtract fractions and mixed numbers with like denominators. -Solve situations that involve adding and subtracting fractions and mixed numbers. -Use understanding of equivalence to add tenths and hundredths. -Create and analyze line plots to display measurement data in fractions of a unit (½, ¼, ½) -Solve problems involving addition and subtraction of fractions using measurement data presented in line plots.	-Represent, read, and write multi-digit whole numbers within 1 million. -Use multiplication and division equations to show that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. -Use place value understanding to round, compare and order multi-digit whole numbers within 1 million. -Use place value understanding and the standard algorithm to add and subtract multi-digit whole numbers. -Use decimal notation for fractions with denominators of 10 or 100 and represent decimals on grids and number lines. -Use understanding of fraction equivalence to compare, order decimals, and to combine tenths and hundredths.	-Represent multiplicative comparison situations with cubes, drawings, diagrams, and equations. -Multiply or divide to solve one and two-step problems involving multiplicative comparison. -Understand the relative sizes of kilometers, meters and centimeters, liters and milliliters, kilograms and grams, and pounds and ounces. -Convert units of measure from larger units to smaller units within a given system of measurement. -Solve multi-step problems involving multiplicative comparison and measurement. -Generate a number pattern that follows a given rule. -Identify apparent features of a number pattern that were not explicit in the rule itself.	-Multiply a whole number of up to four digits by a one-digit whole number, and two two-digit numbers using strategies based on place value and the properties of operations. -Use the four operations to solve problems. -Use a partial quotients algorithm to divide multi-digit numbers of up to four digits by one-digit divisors, resulting in numbers with or without a remainder. -Represent and solve division problems and interpret the result and remainder. -Use the four operations to solve problems that involve multi-digit whole numbers and assess the reasonableness of responses.	-Draw and identify points, lines, rays, segments, parallel and intersecting lines in geometric drawings. -Recognize that angles are formed wherever two rays share a common endpoint and identify angles in two-dimensional figures. -Recognize that angles can be measured in degrees, and can be found using addition and subtraction -Use a protractor to measure and draw angles, and recognize that perpendicular lines meet or cross at a right angle. -Draw and identify acute, obtuse, right, and straight angles in two-dimensional figures. -Write equations to represent angle relationships and reason about and find unknown measurements.	-Sort and classify triangles (including right triangles), parallelograms, rectangles, rhombuses, and squares based on the properties of their side lengths and angles. -Identify and draw lines of symmetry in two-dimensional figures. -Solve problems using the known properties and attributes of two-dimensional shapes including angle measurement, side lengths, symmetry, perimeter and area.	-Fluently add and subtract multi-digit whole numbers using the standard algorithm. -Multiply or divide to solve word problems involving multiplicative comparison. -Solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. -Assess the reasonableness of answers using mental computation and estimation strategies including rounding. -Solve word problems involving addition, subtraction, and multiplication of fractions and mixed numbers.	