THE CO-OP SCHOOL

THIRD "GRADE EXPECTATIONS"

MATH

Integral to our math program is the development of deep conceptual understandings of the number system, place value, addition, subtraction and early algebra. We do this through a variety of ways, but what is critical is that our math work has real-life application and that it is constantly being integrated into all times of day (during morning meeting when they look at how many kids are present in school or when they are making their own graph of what is the most popular playground structure). They also read a variety of books that touch on various mathematical concepts and ideas.

Children learn best through real problem solving experiences and where problems can be solved using a variety of strategies and individual approaches while meeting national mathematics standards. Students at each grade level to explore theories and functions through investigation, to develop a variety of strategies to solve problems and share their solutions, and to see math in the world around them. Students work in depth on a small number of problems, actively using mathematical tools and consulting with peers as they find their own ways to solve the problems. Significant time is allowed for students to think about the problems and to model, draw, write, and talk about their work. Each investigation is divided into several class sessions, approximately one hour long, and grouped together to reflect the continuity and flow of the activities as they actually happen in the classroom. During each investigation students work a number of activities that include pair and small-group work, individual tasks, and whole-class discussions. Math discussions are encouraged, where students can share and explain their strategies and thinking. Children represent their perspectives and findings through numbers, words, and pictures. Assessments occur through observations, studying student work and end of unit assessments.

Focus: Understanding of multiplication and division and strategies for multiplication and division within 100 are a major focus of third grade.Third Grade is all about exploring mathematical concepts through open ended questions. Children work in various setups to do this: individually, small group or all class. Using a variety strategies and being able to explain these strategies helps to solidify their problem solving skills. As the third grade curriculum incorporates more challenging problem-solving activities, we help students to solidify their computational efficiency and fluency.

Math Units	Goals
Habits of Mind: Becoming a Mathematical Thinker	A unit that helps us develop routines and a mathematical community of discourse
TERC Trading Stickers, Combining Coins: Addition, Subtraction, and the Number System	In this first of three addition, subtraction, and number system units, students solve addition problems with two and small three-digit numbers, solve subtraction problem involving two-digit numbers, find combinations of numbers that add to 100, and work with coins/coin values. Their understanding of place value develops as they add/subtr 10s to and from three-digit numbers, break three-digit numbers into hundreds, tens, a ones in different ways, and solve story problems involving hundreds, tens, and ones.
TERC Equal Groups: Multiplication and Division	In this unit, students develop an understanding of multiplication as combining a num of equal groups and division as splitting a quantity into equal groups. This understand is developed as students explore multiples. Students represent multiplication and div situations with groups, rectangular arrays, and by writing multiplication and division problems. In this unit, students achieve fluency with multiplication combinations wit products to 50 and consider the relationship between multiplication and division (e.g. 4 = 24; 24 ÷ 6 = 4).
TERC Surveys and Line Plots: Data Analysis	In this unit, students collect, represent, describe, categorize, and interpret both categ and numerical data. They carry out their own data investigations, create representati of the data collected, and compare and discuss these representations. Students draw conclusions about the data by identifying characteristics in their representations. Students' collection of numerical data includes measuring length in inches and feet. Students review the basic units of inches, feet, and yards and their relationships (e.g., foot is equivalent to 12 inches, one yard is equivalent to 3 feet or 36 inches) by measu lengths longer than one foot.

CFL The Big Dinner	**The context of preparing a turkey dinner highlights students' early multiplication strategies, and supports automatizing the facts, using the ratio table, and developing distributive property with large numbers. Strings of related problems guide learners toward computational fluency with whole-number multiplication and build automatic with multiplication facts by focusing on relationships.**
CFL Muffles Truffles	**A chocolatier's efforts to cope with the operational challenges of running a truffle sho (counting, pricing, and labeling assorted boxes of chocolates) in Muffles' Truffles introduces students to the open array as a model for multiplication and division. A se of investigations explores and applies place value—the multiplicative structure of our base-ten system and quotative division—and big ideas in multiplication, including the distributive, associative, and commutative properties.**
TERC Finding Fair Shares: Fractions and Decimals	**Using a variety of contexts (rectangles representing "brownies," pattern block "cookie and groups of objects), students develop their understanding of fractions as represent equal parts of a whole. They work with commonly used fractions and their equivalenc (e.g., 3/6 and 2/4 both equal one-half of the same whole) and use fractions and mixed numbers as they solve sharing problems and build wholes from fractional parts. They introduced to decimal fractions in the context of money and gain familiarity with deci equivalents for one-fourth and one-half.**
TERC Perimeter, Angles, and Area: 2-D Geometry and Measurement	**This unit develops ideas about the attributes of 2-D objects and how they are classifie (the definition of a triangle, rectangle, and square), linear measurement (which includ perimeter), area (relate to multiplication) and the measurement of angles. Using the context of perimeter, students continue to develop their ability to use measurement t as they work on accurate linear measurement techniques. Students learn to identify angles by their relationship to a right angle. They develop an understanding of area as amount of flat space an object covers and determine the area of 2-D shapes in square units.**
TERC Solids and Boxes: 3-D Geometry and Measurement	**Students develop ideas about the attributes of 3-D shapes and how these attributes determine classification as they sort and build common geometric solids. Throughout unit, they move back and forth between 2-D and 3-D as they build and describe 2-D representations of 3D objects and create 3-D objects from their 2-D representations. T begin to develop important ideas about the measurement of volume as they examine structure of 2-D box patterns and the number of cubes the 3-D box will hold.**

**** The Co-op School uses TERC Investigations of Number, Data, and Space along with Math in the City's Contexts for Learning Mathematics (CFL), programs that embrace individual approaches to problem solving while meeting national mathematic standards, form the foundation of our math program.***

LITERACY

Workshop model:

Students learn to listen, speak, write and read for a variety of purposes. They receive directed instruction to the skills they need to be successful and have opportunities to practice and apply those skills. The reading and writing workshop model is used, supported by *Units of Study for Teaching Writing* and *Units of Study for Teaching Reading*, workshop-based literacy instructional programs that were developed at Teachers College at Columbia University. Teachers begin by modeling one reading or writing strategy in a mini lesson. Students practice the focal strategy independently, with partners, and in small groups while teachers circulate and provide guidance. Selected students share their work to build confidence with sharing ideas and public speaking.

Balanced Literacy:

Beginning in Kindergarten, we use a balanced literacy approach, a researched and proven method which recognizes the need for both the explicit teaching of skills such as sound-symbol correspondence, phonemic awareness, encoding and decoding as well as the opportunity for children to participate in activities that are designed to build comprehension and meaning. Balanced literacy instruction provides students with opportunities for differentiated instruction, including small group work targeting specific needs in comprehension, phonics, grammar, spelling, and vocabulary building. Groups are formed on the basis of common needs and are fluid, recognizing that children may need different tools and supports at different times.

Literacy Assessment:

The literacy development of our students is assessed in a variety of ways and is used to inform instructional decisions for both the class as a whole, and for individuals. Assessment takes many forms. Teachers gather information during daily lessons and through careful examination of student work. Each reading and writing unit includes assessments used to evaluate student understanding of content, and benchmark assessments are used to evaluate reading fluency and comprehension as well as writing skill and development. Assessments are designed to be age-appropriate and individualized.

Beginning in 3rd grade we administer the CTP Test, a standardized achievement and reasoning test from the Educational Records Bureau (ERB), to all of our students. This test is designed for each grade level and the results help us assess and make decisions about our curriculum and instruction. For the students, taking the CTP Test provides experience with standardized test taking.

Reading:

Third grade is a foundational year for literacy growth. Readers choose books more independently, read for longer periods of time and are often heard discussing their favorite book or series. Third grade readers begin the transition from "learning to read" to "reading to learn." Students engage in complex discussions about characters and story structure and are asked to think about authors' perspectives and points of view in greater depth. In order to understand more complex texts, third grade students work on strategies for learning new vocabulary, and word study allows students to practice a variety of strategies (such as analysing the root or base of an unfamiliar word) that help them decode, spell and understand longer or unfamiliar words. Most importantly, in Third Grade readers become highly reflective about the process through which they make meaning of a text, allowing them to become more active partners with the teacher in developing strategies and setting personal goals.

Writing:

In Third Grade, the writing process includes greater peer conferencing and editing. Students actively listen to their partner's thoughts and consider the ideas of others when revising for meaning and structure. Writers support each other by taking time to thoughtfully consider the pieces of classmates, giving considerate and constructive feedback. As proficiency increases, writing becomes an integral part of the curriculum. Integrated writing activities include explaining a math solution by creating a math poster, writing a letter to a local business owner, or recording detailed field notes. In Writer's Workshop, students learn new ways to effectively express their ideas in a variety of genres. Through close study of mentor texts, students consider an author's "voice." Third graders' spelling grows through the regular introduction of sight words and tailored word study work exploring spelling patterns.

Reading Units	Goals
Launching the Reading Workshop.and Building a Reading Life	Students practice the routines and procedures needed to be successful in the reading workshop. Readers learn how to participate fully and engage in thoughtful discussions wit class, in small groups, and with partners. Readers begin to record what they notice and wonder, and to identify connections and patterns in text.
Realistic Fiction: Character Studies	Readers explore a central element of fiction, characters, and begin to recognize patterns ir characters and plot. Students examine how authors show rather than tell to develop comp characters and resolve problems. Readers examine the connection between plot and chara traits and feelings.
Reading to Learn: Nonfiction reading	Readers learn how to use nonfiction structure and text features to create meaning and sea for information. Students continue to record what they notice and wonder about within a t and identify patterns relevant to nonfiction texts. Readers practice using skills to identify t meaning of unfamiliar words in context as the complexity of texts increases. Readers learn the main idea is not always explicit and make inferences.
Research Clubs	Readers draw on their growing understanding of how to read nonfiction to go deeper, explo a topic in depth. Readers begin by previewing a collection of books on the same topic and selecting specific subtopics to research. Readers generate questions, take notes, and learn synthesize information from different texts. As they develop expertise with their topic, stu engage in comparative analysis and eventually apply their knowledge to a real-world probl
Social Action Book club	Readers participate in book clubs and analyze how an author can show what happens in a s rather than tell the reader. Students analyze how authors use strategies like creating patt and foreshadowing to support readers predicting, analyzing, and synthesizing information. Readers discuss how to derive meaning and understand symbolism and theme.
Opinion Reading	Readers learn that some authors write to persuade, argue, or state an opinion. Students identify the difference between facts and opinions to determine how authors support their arguments. Readers explore language that expresses opinions or facts best and identify strategies for forming their own opinions based on facts and quality of arguments.
Poetry	Readers identify attributes of poems, recognize that poems can be written about different topics, and identify figurative language like similes and metaphors. Readers connect the structure and title of poems to meaning and analyze how the senses connect everyday life poetic expression.

Writing Units	Goals
Launching the Writing Workshop: Focus on Personal Narrative Writing	Students practice the routines and procedures for writing workshop and examine a varie purposes for writing. Working within the personal narrative genre, students come to see their own lives as a source of meaningful stories, and their familiarity with these stories supports them as teachers challenge them to lengthen and deepen their narrative style. Writers use the writing process, rehearsing, planning, drafting, revising and editing work. Students practice the skill of sharing and receiving constructive feedback with partners.
Fiction: Focus on Fairy Tales	Writers adapt and write fairy tales, using familiar fairy tales to explore techniques of fict writing such as writing in scenes, employing an omniscient narrator to orient readers, us story structure to create tension, and crafting figurative language to convey mood.
Information Writing	Writers write books that synthesize a wide variety of information and learn to section th topics into subtopics. They are supported in this challenging work because they are writi about topics on which they have personal knowledge. Later in the unit, writers select a t related to their inquiry study and write an information book about the topic.
Persuasive Writing: Exploring a Social Issue	Writers study how authors intentionally write to persuade, argue or express opinions. Students choose an issue or concern related to their inquiry study and craft persuasive writing intended to convince the reader that their point of view is correct. Writers identif strategies for gathering and organizing factual information to support arguments. Write share writing with partners for feedback and to help make each other's arguments stron
Poetry	Writers learn to recognize special moments in their lives and record small sensory details Students learn to think about strong feelings and ways to describe them, painting a pictu with their writing. Writers learn how to use similes and metaphors in their writing to cre visuals in their poetry. Student poets use repetition and structure to create rhythm and meaning.

SOCIAL STUDIES

We are creating curriculum with and for children in order to help them think and communicate as readers, writers, scientists, mathematicians, artists and social scientists. Our social studies projects are the core of what is happening in our classrooms. This constructivist way of teaching is absorbed into our classrooms through a Reggio Emilia inquiry-based Open Work/Project Work periods. Projects are planned with attention to state standards, teacher goals and individual classroom interests and curiosities. The term "Project" refers to an in-depth look into a particular topic, usually undertaken by a class working on subtopics in small or whole group, occasionally even individually. The key feature is that it is an investigation, research that involves children seeking answers to their questions. This approach to learning emphasizes children's active participation in the planning, development, and assessment of their own learning. Long-term projects provide contexts where innate curiosity can be expressed purposefully. This enables children to experience the joy of self-motivated learning. They read, construct, research, interview and recreate in various mediums. They go on trips, interview experts and have lively debates and conversations. Our teachers are observers and facilitators to the children's interests. They step back and listen. They allow the children to have changes to problem solve. They document their ideas, questions, struggles, connections and insights. Teachers ask provoking questions to gather prior knowledge and learn about curiosities. They present materials that they suspect will engage and elicit even further interest of the study. We are creating curriculum with and for children to help them develop lifelong thinking and communication skills.

Third Graders begin to have a deeper understanding of how communities relate to who we are. Stronger reading and writing skills support more comprehensive research and information-sharing as students delve more deeply into the past. Curious Third Graders look into historical migration patterns in New York and delve deep into exploring a country of their choice. This in-depth historical investigation provides a context in which to learn about the ways that environment and human needs can affect the identity of a community. Literature, maps, field trips, and interviews with experts help answer questions and promote further study.

Third Grade's "World Communities" Focus

- **Year long World Community Study (ex China, Africa, Mexico)**

Essential Questions Anchoring Studies:

- **Why does geography matter?**
- **How do culture, geography and history shape a community?**
- **How are world communities the same? How are they different?**
- **How does the past influence the present?**

The children will work on some of the following skills and abilities:

- **Developing questions about a world community.**
- **Recognizing and using different forms of evidence to make meaning.**
- **Identifying and explaining the purpose of evidence.**
- **Identifying arguments of others and comparing/ contrasting points of view in differing world communities.**
- **Creating an understanding of the past by using and analyzing primary/secondary sources.**
- **Explaining how multiple events are related.**
- **Measuring time in years, decades and centuries.**
- **Identifying causes and effects, changes/continuity over time.**
- **Identifying world regions and characteristics and world communities.**
- **Describing where places are in relation to each other.**
- **Distinguishing human and man made environments, how humans can alter environments.**
- **Examining the idea of scarcity.**
- **Identifying products and resources in communities and goods/services.**
- **Demonstrating respect for the rights of others.**
- **Participating in activities that focus on a classroom, school or world community issue/problem.**
- **Identifying political systems found in world communities.**
- **Identifying situations where social action is needed and brainstorming possibilities.**
- **Identifying rights and responsibilities of citizens in the local community and comparing them to those in world communities.**

MULTICULTURALISM/ANTI BIAS WORK

The Co-op School is committed to creating a community of diverse learners, families, and staff members. We believe strongly in embracing and respecting our differences. For us, diversity is about how we connect to each other. As a school we have committed ourselves to further strengthening our anti-bias curriculum through a series of trainings for our families and staff members. To create a foundation for our work, Co-op teachers will share personal histories and investigate their own biases and stereotypes. Our teachers then will thoughtfully create classroom environments and curricula that intentionally reflect the diversity of our school community and beyond. Throughout the school year, teachers and students together will collaborate in creating an inclusive classroom environment which explores differences, identities, and societal stereotypes. At The Co-op School, our aim is to create a welcoming community that is respectful of differences and to teach our students how to successfully navigate our increasingly global society.

Will achieve this by:

- **Ensuring that The Co-op School's Core Values of compassion, uniqueness, innovation, community action and joy, guide our school community on what is important to us.**
- **Teaching Spanish daily to all our elementary school students.**
- **Speaking to children in an open way, not shutting down questions.**
- **Through read alouds about past experiences and events where people have faced adversity and created change.**
- **Addressing issues of gender conformity, stereotypes, body safety, personal space and boundaries through our new Third Grade Health & Feelings class.**
- **Reading books that include multiple and diverse individual, cultural, and family identities**
- **Selecting teaching materials and literature that reflect affirming depictions of a wide range of identities**