Math Grade 2 Unit 8

Canterbury Public Schools

Subject	Math
Grade Level	2
Unit Title	Equal Groups
Unit Goals	Students work with equal groups of objects to gain foundation for multiplication Section B Find the total number of objects arranged in rectangular arrays with up to 5 columns and 5 rows using addition Partition the rectangles into rows and columns of equal size squares, count to find the total number of squares Represent the total number of objects in an array as a sum of equal addends
Pacing (# of weeks)	1- 2 weeks
Standards	2.NBT.A2, 2.NBT.B.7, 2.NBT.8, 2 OA.B.2, 2. OA.C.3
Content/Conceptual Knowledge (know)	Whether or not a group of objects(up to 20) has an odd or even number of members How to write an equation to express an even number as a sum of two equal addends
Skills (be able to do)	Skip count, find sums of equal addends, Analyze even and odd numbers of objects Build rectangular arrays Explain a group has an even number or an odd number of members.
Essential Questions	What is equal? How do you know if a number is odd or even?
Enduring Understandings	Even numbers can be split into 2 equal groups or units, or into groups of 2 with no objects left over Skip counting by 2's with no leftovers is an even number
Vocabulary	Rows , columns , odd, even, equation, leftover, array, equal , partition
Common Learning Experiences	Interactive Problem Solving: Students engage in rich, contextual math problems that connect to real-world experiences, encouraging critical thinking and perseverance. Hands-on Activities: Students work with manipulatives such as base-ten blocks, counters, or number lines to help visualize abstract concepts.

	Collaborative Learning: Opportunities for students to work together in pairs or small groups to discuss, explore, and solve problems. Conceptual Understanding: Focus is placed on deepening students' understanding of key concepts such as addition, subtraction, place value, and basic geometry through interactive lessons and visual aids. Mathematical Discourse: Students are encouraged to explain their thinking, ask questions, and justify their answers, which helps develop their mathematical vocabulary and reasoning skills. Story Problems: Word problems are used frequently, helping students apply their mathematical knowledge to solve real-world situations.
Assessments	End of unit assessment, daily checkpoints, hands on projects Formative Assessments: Ongoing informal assessments through observation, questioning, or brief check-ins during lessons to gauge understanding. Exit Tickets: Short, focused tasks at the end of lessons where students demonstrate their learning, allowing teachers to assess immediate understanding. Math Journals: Students maintain journals to track their learning progress, reflect on concepts, and record strategies used. End-of-Unit Assessments: Summative assessments at the conclusion of units to evaluate overall understanding of the topics covered. Performance Tasks: Tasks that require students to demonstrate their problem-solving skills in more complex, multi-step scenarios. Peer and Self-Assessment: Encourages students to reflect on their own work and provide feedback to others, fostering a growth mindset.
Resources	Shapes, base ten blocks, counters, Manipulatives: Tools like base-ten blocks, counters, number lines, and geometric shapes are often used to help students visualize and interact with math concepts. Math Tools Online: Digital platforms and interactive apps such as Illustrative Math's website, Khan Academy, or other math-specific resources may be used for practice and exploration. Anchor Charts: Visual aids created with students that outline strategies, formulas,

	or methods for solving problems. Workbooks and Practice Sheets: Printed or digital worksheets that allow students to practice specific math skills individually or in groups. Games and Puzzles: Math games, either digital or physical, that promote skill development in a fun, engaging way (e.g., dice games, card games, board games). Real-Life Resources: Students may use real-life objects like measuring cups or rulers to connect math to everyday life.
Strategies	Differentiation: Tailoring instruction to meet the varying needs of students by providing multiple entry points into the learning process, offering additional support for struggling students, and challenging advanced learners with extension tasks. Scaffolded Instruction: Breaking down complex problems into smaller, manageable steps to gradually build students' understanding. Visual Representation: Encouraging students to represent their thinking visually using drawings, models, or diagrams to make abstract concepts more concrete. Guided Practice: Teachers work with small groups or individuals to practice new skills, providing immediate feedback and guidance. Routine and Structure: Consistent routines help students feel comfortable and supported in their learning. For example, starting each lesson with a math talk or a review of prior learning. Math Talk: Students regularly engage in discussions about math strategies, problem-solving approaches, and reasoning, fostering a deeper understanding of the material. Growth Mindset: Promoting a positive attitude toward learning where mistakes are seen as opportunities for growth, encouraging persistence in problem-solving. Technology Integration: Using apps, websites, or interactive software that support math instruction and provide additional practice or enrichment activities. Cross-curricular Connections: Connecting math with other subjects (e.g., science, art, or social studies) to show its relevance and make learning more engaging.