Convent & Stuart Hall
Schools of the Sacred Heart San Francisco

Mathematics Summer Engagement K-4

The principal content goals of the first years in Mathematics are centered on counting and cardinality, along with elementary level geometry and an understanding of shapes and space.

Using IXL, with which students in (rising) grades 1-4 are already familiar having used throughout this school year, students may continue to practice and maintain confidence and fluency in any of the following mathematical skills. The goal is to review and maintain skills rather than jump ahead and preview future skills. Therefore, we recommend that students spend 15-30 minutes per day on any combination of the following topics -- topics should be student choice, and will and should vary from student to student.

Families can access IXL Math through the IXL App on a phone or tablet OR through the website on any device: https://www.ixl.com/ Student usernames and passwords are the same as they were during the school year. If you have lost or forgotten your log-in information, please email support@sacredsf.org and someone will get back to you with those credentials.

For incoming K students, we recommend that parents engage with their child in "number play" practicing counting, organizing by quantity and category. You may use anything to do this -- in the house, on a walk, when driving in the car. Just a few minutes per day can be valuable practice and a way to see that "numbers are everywhere."

Suggested IXL strands for student engagement:
1st Grade - Levels B and C
2nd Grade - Level D
3rd Grade - Level E

Content and Skills in K-4 Mathematics:

Grade Levels	Content and Skills
Rising K-2	• Number sense • Problem Solving and Number patterns • Counting, comparing and ordering numbers • Measurement and data • Write numbers to 20 • Addition and Subtraction (varies by grade level, multi-digit by 2nd grade)

	• Understand place value • Money (understand the names and values of coins and bills) • Time (read digital and analog clocks) • Create and solve single-step problems involving different operations • Identify, order, and compare fractions • Introduction to perimeter and area
Rising 3-4	• Number sense • Operations and algebraic thinking • Multiplication and division tables (up to 12) • Problem-solving • Addition and Subtraction (up to 4 digit numbers) • Read and write numbers, understand place value to 100,000 • Round numbers to tens, hundreds, thousands • Multiply multi-digit numbers • Fraction identification and comparison • Operations with fractions and mixed numbers (varies by grade level) • Add/subtract decimals • Solve and create single and multi-step problems • Read, create, and interpret graphs (bar graphs, line graphs) • Identify two-dimensional shapes • Calculate area and perimeter of rectangles (for rising 4th only)