Elementary School Math & Literacy Curriculum
At Concordia we use research-based teaching methods to ensure that your child learns to read, write and spell successfully. We use a balanced literacy program, which includes reading workshop, writing workshop and word study.

Workshop teaching is not new; it comes from the work of Lucy Calkins at Columbia University and has been used in classrooms around the world for more than twenty years. This is a literature-based teaching model, so you won’t see reading textbooks in any of our classrooms.

The instructional strategies which make up this approach are effective in addressing the literacy needs of young learners. All our teachers utilize these strategies in appropriate ways to ensure that all our students make progress toward the benchmarks for their grade level.

Reading

Reading Aloud
The teacher reads aloud to the whole class or small groups. A carefully selected body of children’s literature is used; the collection contains a variety of genres and represents our diverse society. Favorite texts, selected for special features, are reread many times.

Guided Reading or Strategy Lessons
The teacher works with small groups who have similar reading processes. In guided reading the teacher selects and introduces new books and supports children reading the text, making teaching points during and after the reading. In strategy lessons, the teacher pulls together flexible groups of students with similar reading processes and teaches targeted skills and strategies based on individual needs.

Independent Reading
Children read on their own or with partners from a wide range of materials, including a special collection at their independent reading level.

Shared Reading
Shared reading builds reading fluency. Using an enlarged text so that all children can see, the teacher involves children in reading together. The process often includes reading big books, poems, songs and student writing. In the upper elementary grades, shared reading can take the form of reader’s theater or poetry reading.

Writing

Guided and Independent Writing
Children engage in writing a variety of texts in a variety of genres. The teacher guides the process and provides instruction through mini lessons and individualized conferences. Writing units of study cover three main types of writing: narrative, opinion and informational.

Shared Writing
Teacher and students work together to compose messages and stories. The teacher supports the process as a scribe.

Interactive Writing
As in shared writing, the teacher and the children compose messages and stories that are written using a “shared pen” technique that involves children in the writing.

Working with Words
Woven through the activities in this framework, teachers have opportunities to help children notice and use letters and words; knowledge is further fostered through the use of alphabet centers and word walls. Time is dedicated to both spelling and developmentally appropriate grammar instruction. Research-based word study activities help children to internalize spelling patterns as opposed to rote memorization of words.
From Kindergarten to Grade 4 we utilize Bridges in Mathematics, 2nd Edition created by the Math Learning Center. The Math Learning Center is a research based cohort of university educators, administrators, and classroom teachers dedicated to curriculum that is at the cutting edge of mathematics pedagogy.

Our math curriculum focuses on developing in students a deep understanding of math concepts, proficiency with key skills, and the ability to solve new and complex problems. Students in a Bridges classroom talk about math, describe observations, explain methods, and ask questions. They are encouraged to find multiple ways to solve problems and show different ways of thinking. This is a vital way to help students build more flexible and efficient ways to solve increasingly complex problems.

**Key Facts about Bridges in Mathematics**

- Teach higher order thinking and problem solving.
- Integrate mathematics into other subject areas.
- Allow for student discussion and inquiry.
- Utilize effective questioning strategies.
- Encourage students to explain their thinking.
- Promote discourse while maintaining a safe environment.
- Makes and tests conjectures while recording their thinking.
- Believe that learning is a process of constructing meaning to understand concepts.

**Enhancing the Program**

To enhance the program, as well as to assist our children who may have challenges with certain math areas, we use additional materials that share the same philosophy as the Bridges in Mathematics Program.

Authentic literature from trade books is integrated into the units. Games and critical thinking exercises from research leaders in the field of early mathematics are used to extend the program and to provide additional practice.

**Number Corner**

To reinforce concepts and aid in mathematical fluency, Concordia has also adopted Number Corner. Number Corner is a skill-building program that revolves around the classroom calendar, providing daily practice as well as continual encounters with broader mathematical concepts in 15-20 minutes of engaging instruction. Number Corner features short daily workouts that introduce, reinforce, and extend skills and concepts related to the critical areas of study at each grade level. New pieces are added to the display each day, providing starting points for discussions, problem-solving, and short written exercises.

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<tr>
<th><strong>Bridges Components</strong></th>
<th><strong>Number Corner Components</strong></th>
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<tr>
<td>Inquiry based mathematical learning model where students are encouraged to talk, explain, and model their thinking.</td>
<td>Coherent progression of skills acquisition throughout the year</td>
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<td>Allows for monitoring of student growth and precise feedback throughout the course</td>
<td>Provides students an opportunity to apply broad mathematical skills in real life contexts.</td>
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<td>45-60 minutes of math instruction</td>
<td>15 minutes of math instruction</td>
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When you talk with your child about math at home, here are some great conversation starters:

- How did you solve that problem?
- What other problems have you seen like that in class?
- How did you use the picture to help solve the problem?
- Can you show me what you learned?

Resources Aligned with Bridges

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<tr>
<th>Resource</th>
<th>QR Code</th>
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<tr>
<td>Math Learning Center Apps</td>
<td><img src="image1.png" alt="QR Code" /></td>
<td>These apps are based on the visual models featured in Bridges in Mathematics. All apps are available in two or more versions: a web app for all modern browsers, and downloadable versions for specific operating systems and devices (such as Apple iOS for iPad).</td>
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<tr>
<td>Math Learning Center for Families</td>
<td><img src="image2.png" alt="QR Code" /></td>
<td>This page will provide you detailed information about the Bridges in Mathematics program being implemented in your child's math class. Course overviews, apps/games, and resources for parents can be found here.</td>
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How to Foster a Love of Math at Home

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<tr>
<td>Youcubed.org</td>
<td><img src="image3.png" alt="QR Code" /></td>
<td>This website provides valuable resources such as tasks, apps/games, and articles related to the type of math learners we strive to cultivate at Concordia.</td>
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