

About Open Up Resources

Open Up Resources is a nonprofit developing the highest quality core curricula available to districts, provided for free to promote instructional equity. Open Up Resources K-5 Math is an Open Educational Resource (OER) free to download and use with a CC-BY license.

Open Up Resources is fiercely focused on equity for all students. All children deserve schools that foster their unique abilities, give them the real opportunity to achieve high academic standards, and help them take their full place in a society for which they are well prepared when they leave school. Equity is the foundation on which our curricula rests; all students must be held to the same high expectations and given the supports they need to meet them. Our curriculum is inherently supportive of students' varied learning needs.

Mathematical Foundations of the Curriculum

The *Open Up Resources K--5 Math* curriculum was designed around the principle that students should spend time in mathematics class *doing* math. As a problem-based curriculum, these materials give students opportunities every day to make sense of problems and persevere in solving them. At the appropriate time in the development of the mathematical ideas, students are expected to make mathematical arguments, critique the reasoning of others, and attend to precision in their use of language. Throughout the materials, students encounter tasks that require them to reason abstractly and quantitatively, look for and make use of structure, and express regularity in repeated reasoning.

These materials carefully and deliberately engage students in all three aspects of rigor: conceptual understanding, procedural fluency, and application of mathematics. A focus on conceptual understanding helps students grasp the 'why' behind the 'how'. Students have the opportunity to use different strategies and representations to consolidate their conceptual understanding by using more efficient methods, supporting the shift towards procedural fluency. Procedural fluency is developed over time, and distributed practice supports this development. As the materials progress, students have increasingly sophisticated opportunities to model with mathematics, which supports their ability to apply mathematical or statistical concepts and skills to a novel situation.

The materials present students with examples of mathematical or statistical ideas set in various real-world and mathematical contexts before the ideas are named and studied as objects in their own right. For example, in the beginning of interacting with a new idea, students have the space and time to play with the idea in intuitive ways and to talk about it in terms that make sense to them, rather than in formal terms. Later, formal language is introduced and connected to these informal experiences.

It is common to see mathematical representations used as tools for problem-solving. This is valuable when the representations are linked to developing understanding, but representations can also be productive tools for understanding. This curriculum makes heavy and thoughtful use of representations to support both objectives. When appropriate, representations are introduced from more concrete to more abstract. Any representation introduced is connected to symbolic methods. Students are encouraged to both use representations that make sense to them and connect their existing understanding to more efficient methods.

Open Up Resources K–5 Math curriculum is accessible for every child because of the intentional inclusion of strategies for all learners as they work to meet grade-level standards. Specifically, effective ELL and Students with Disabilities supports are strategically included in the teacher resources in an effort to guide instruction that includes all learners.

Open Up Resources K–5 Math is more than a textbook. It is a curriculum, with daily lessons and problems that have been written to ensure that students obtain procedural fluency built from conceptual understanding. The daily lessons are naturally differentiated based upon the nature of student thinking in the classroom so that all students can access the mathematics with the opportunity for challenge and extension for those that need it.

We know that learning extends beyond the walls of your school building. For each section, parents/guardians receive information as to what their student is working on, along with extension activities for home.

Open Up Resources understands that curriculum alone cannot make the changes that schools desire in their student learning. We know a comprehensive implementation plan with professional learning is necessary to implement with fidelity.

Professional Learning Support

The *Open Up Resources K--5 Math* program is designed to elevate math practice, and success starts with supporting teachers with necessary practice shifts. Teachers concur; in surveys of the early adopters of the curriculum, 95% of teachers said that in-person professional development was key to their success with the materials.

Our team of former educators helps districts to tailor professional development plans around district needs and capacity. We offer both in-person and virtual professional learning delivery as well as support for train-the-trainer implementations.



Implementation Support

We provide the following implementation services and support:

Flexible Classroom Deployment

We offer the curriculum in identical digital and print versions, which allows districts flexibility in implementation: fully digital, fully print, or a mix of print and digital.

Affordable Print Materials

We offer full-color print materials that are delivered to schools in convenient class sets. Because we negotiate deeply discounted print rates, districts find our print materials offer significant savings versus self-printing options, though we also provide free print-ready files via our website.

Multiple Digital Access Options

For 1:1 classrooms, we provide many ways to access the curriculum:

- Online, via our website
- Within a Learning Management System; our Common Cartridge files support LMS integration
- Via the free, classroom-friendly Microsoft OneNote app

Classroom Kits

We offer grade-level-specific kits comprising all required curriculum manipulatives. Blackline master and center kits are currently in development.