

Scope and Sequence: Math Grades 3-5

Lower School

SINGAPORE MATH

[Click here to see the Math in Focus scope and sequence for grades 1st-5th.](#)

- Fewer topics covered each year
- More depth given to each topic, greater emphasis on mastery
- All students explore the same overarching concept, but at their own level (reteach, on-level, and enrichment)
- Accelerated program, typically one year ahead
- Higher-level thinking is emphasized. Math problems are multi-step, multi-concept, and multi-strand.

SUPPLEMENTAL MATH CURRICULA

3rd Grade: Math Notebooks

Third graders keep an independent Math Notebook to organize math examples and gain understanding of math vocabulary. Students take notes in their journals each chapter by recording the teacher-led examples of the concept. Each student writes definitions for math vocabulary with drawings, models, and example problems for each concept. Students use the notes throughout the unit for their reference, as well as on the exam for each chapter.

3rd Grade Xtramath.org

Online enrichment for automaticity of math facts is currently used in first through third grades. We use this online-based system to supplement addition, subtraction, multiplication, and division math facts. Students practice facts in rapid sequence in order to recall facts instead of taking time to calculate these facts. When students can

move from calculations to recalling these facts, mental resources are freed up for higher-level operations. Students and parents are asked to be accountable for a minimum of 3 practice sessions at home weekly. Teachers are able to track and monitor progression through the basic facts via weekly e-mailed reports. Students may also be asked to login at school for additional practice.

4th-5th Grades: Math Olympiad

In fall of 2016, Mrs. Eberle will lead Math Olympiad, a math team for students in grades 4th and up. Team members are math lovers that want a challenge. The students commit to weekly practice problems and meet once a week to develop new strategies and learn from each other. Math Olympiad includes 5 monthly contests from November to March. Students set personal goals over the school year and work hard to meet those challenges.

5th Grade: Khan Academy

In 5th Grade we supplement Singapore Math with Khan Academy. This online tool is an excellent support for strengthening the math skills that we are working on in class with our Singapore curriculum. We can use Khan Academy to approach a concept from a slightly different angle and to meet the needs of all our different learners. This visual method, plus another teacher's way of explaining, often provides extra clarification for our students. Khan Academy presents all areas of 5th Grade Math that we cover at Terra Verde. Each concept starts with basics and moves through progressively more challenging problems. Students can also sign up for an account and follow a series of

increasingly challenging lessons in all areas of study, go at their own pace, and keep a tally of how they are doing.

Khan Academy can be readily accessed at home or at school and as such is an excellent “go-to” tool.

All Grades: Math through Cooperative Play

Board game play is one of many tricks up our sleeves- children are learning mathematical concepts, teamwork, logic and critical thinking skills, and increasing their attention spans. Ask them, and they’ll just tell you they’re playing!

In first grade, the teacher converts popular board games into challenging math work by making small changes to the game play. Candyland becomes a fact fluency challenge. Guess Who? becomes a number sense partner game in which children ask various questions to determine the mystery number. Cootie gets an added challenge with doubles addition facts. Go Fish is used for combinations that add to 10 or 20.

In older grades, we use various math games such as 24, Carcassone, Forbidden Island, Rush Hour, Chocolate Fix, Tri-Dominoes, Math Sleuth and others. Students like strategizing games and engine building games and these all help create more robust math skills, pattern recognition, stamina and patience.