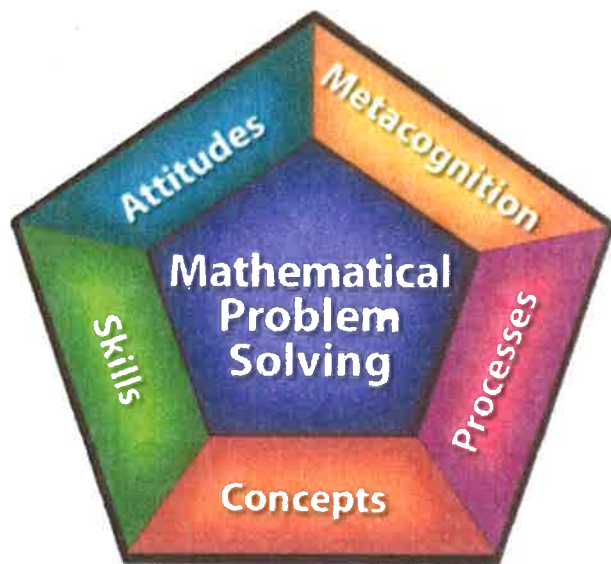


## What is Singapore Math

---



# What is Singapore Math?

“Singapore math” is the term used to refer to the mathematics curriculum used in Singapore. For over 15 years, Singapore has consistently scored at the top of international mathematics comparison studies. Its unique approach to teaching math — which focuses on problem solving, deep understanding, and model drawing — has helped Singapore students excel, and now U.S. students have the same opportunity to benefit from this proven curriculum!

**Math in Focus<sup>®</sup>** is the U.S. edition of Singapore’s most widely used program. It teaches the same content as traditional mathematics programs — just in a way that emphasizes understanding and flexible thinking. *Math in Focus* will teach your children both how and why math works. This deep understanding means that they will be better able to use math in real-life situations.

---



## Parents: What You Can Do to Help

---

- **Attend parent meetings.** Ask what they students are working on and how to help at home.
  - **Ask children to explain what they did in math today.** Can they show it to you with coins or blocks? Can they draw an example of what they did? Can they compute accurately and check their work?
  - **Ask your children to find math around them.** How can they use math everyday? Why is this important?
  - **Encourage your child to create math stories and have others solve them.** Make it fun!
  - **Play math games at home.**
  - **Stay involved.** Check your child's homework each night to make sure that they are always ready for the independent work that has been sent home.
  - **Use the websites that are available to you** to make sure that you are up to date with best practices for mathematics.
  - **If you need help understanding something, ask your child's teacher and make an appointment.** Parents and teachers must work together to build a strong foundation for mathematics.
-



## Frequently Asked Questions

---

### 1) How does instruction differ in classrooms using *Math in Focus*?

There are several key ways in which the instruction and learning in a *Math in Focus* classroom are unique. The underlying pedagogy, based on a concrete-pictorial-abstract approach to learning mathematics, advises that every concept be taught first at the concrete level with the use of manipulatives. The implications for instruction are that teachers model mathematical concepts using manipulatives and provide students with ongoing opportunities develop understanding through their own experience with concrete materials. Instruction in a *Math in Focus* classroom also leads students to make lasting connections between concrete materials, visual representation and abstract algorithms.

In addition to this, consistent and carefully structured lessons provide children with a systematic way to learn, and the time and opportunities do so. The *Math in Focus* curriculum is both logical and sequential; moving bit by bit to develop key understanding and intentionally lead students to mastery.

### 2) How will *Math in Focus* meet the needs of my individual child?

Most *Math in Focus* lessons contain opportunities for whole group, direct instruction/modeling, small group cooperative learning and practice, followed by time for independent work. The use of thoughtful questioning techniques during whole group instruction will allow every child to further their understanding of the concept presented. During the guided practice portion of a lesson teachers can take advantage of the first opportunities to differentiate by flexibly grouping students. Games and Hands-on Activities are another valuable time to meet the needs of individual students. Once a student has demonstrated their level of independent understanding on the "Let's Practice" textbook materials they are ready to move on to related workbooks activities, extra-practice and/or in some cases the provided Reteach or Enrichment materials.

### 3) How are teachers trained to adjust to the differences in program expectations?

*Math in Focus* professional development provides teachers with an in-depth understanding of the curriculum in addition to suggestions for smoothing the transition into the program. Specialized trainers lead teachers to think about their current classroom practices, recognize the importance of exceptional math instruction and explore what might shift for their students and themselves when *Math in Focus* is implemented in their school or district. For some teachers this is a larger shift than for others. Some of the most powerful moments of *Math in Focus* professional development occur when teachers have the opportunity to experience the mathematics of *Math in Focus* first hand.

---



## Frequently Asked Questions

---

### 4) How does *Math in Focus* help students prepare for state testing?

This is a question that *Math in Focus* specialists are asked frequently. *Math in Focus* develops students who are able to reason mathematically through consistent use of concrete-pictorial-abstract pedagogy. This approach develops a deep understanding of the content. In addition to this, at every grade level, and throughout every chapter, problem solving is at the heart of content and instruction. The embedded focus on problem solving encourages students to be flexible thinkers who can represent and apply their thinking. These factors, as well as the building of confidence in math, help children tackle the demands of state testing.

### 5) How is differentiation provided within lessons?

In a typical *Math in Focus* classroom, the “Teach/Learn” part of the lesson is done whole group with direct instruction/modeling. Thoughtful questioning techniques are placed into the “Teach/Learn” to allow children to have meaningful mathematical discussions while furthering their understanding of the concept being presented.

Following direct instruction during the “Teach/Learn”, teachers move on to “Guided Practice”. During “Guided Practice”, teachers have the opportunity to guide students in a whole group setting or in small groups with partner work. This will ensure that students are ready for practicing newly taught mathematics on their own.

When students are ready, they move on to the “Let’s Practice” pages, where teachers do an “on the spot assessment” to assess if students are ready for work that is completely independent. If they are not ready, students will be assigned reteach pages and will work with the teacher. If they are ready, students move to the workbook pages, which are done independently.

After completing the workbook pages, students who need more challenging problems can be pulled in small groups or partner groups to do enrichment work, while others who are ready to practice more math that was taught in the “Teach/Learn”, can be assigned extra practice worksheets.

### 6) What type of homework can I expect from *Math in Focus*?

*Math in Focus* has a somewhat predictable flow for teachers and students. direct instruction, guided practice, and independent practice. Students begin to consolidate and own newly presented mathematics when it is presented in a way that allows students to apply concepts independently.

---



## Frequently Asked Questions

---

Following daily direct instruction and guided practice, the “Let’s Practice” problems are designed to have the students attempt to answer questions independently of the teacher and their peers. These “Let’s Practice” questions done in-class in the textbook portion of the series are directly correlated to the concepts students learned about during direct instruction. Students who are able to complete these problems independently with 75-80% accuracy move on to workbook pages, which are done independently. Workbook pages are used during class time, and are also the most commonly used homework.

If students need extra help, a teacher may assign reteach pages. Reteach pages can be used for students who have not achieved 75-80% accuracy on the “Let’s Practice” portion of the textbook and need extra help with some of the concepts.

Extra Practice worksheets are also a source some teachers use for homework. Extra Practice worksheets reinforce new mathematics taught during the direct instruction portion of the lesson. These sheets are usually given out after students have completed their workbook pages in the classroom and are ready for more Independent work at home.

Enrichment pages can also be given out for homework. These pages are extension questions that relate to the big ideas in the chapter.

---