

Math Strategies for Grades 4-6

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Instructional Strategies

Develops Mathematical-language Skills

Students internalize vocabulary words—both their definitions and correct usage—through repeated exposures to the words in meaningful contexts. Classroom discussion provides an opportunity for students to practice using new vocabulary terms. Since many math concepts build on prior knowledge, classroom discussions allow students to revisit vocabulary words; use them in multiple, varied contexts; and thus keep the terms current.

Working with Word Problems

With explicit instruction, a teacher models a skill and verbalizes the thinking process, using clear and concise language. Students are given opportunities for guided and independent practice — including practicing the new skill and reviewing skills that they've learned in the past.

Assessment Strategies

Personal Whiteboards

A teacher can provide a question or problem to the entire class and then they can see the whole class response instantly. With a quick check the teacher can see how students are doing and then let them know if they got it or if there is something that they need to fix. A teacher will be able to see students learning when they go through this process.

Observation and Interview

Teachers may observe student performance of mathematical operations during class. They can also ask the students to explain their thought process as they solve a problem. An interview assessment allows the teacher to engage the students and guide them through self-assessment. This produces immediate feedback that helps a teacher quickly modify the lesson.



Standards of Mathematical Practices

Make sense of problems and persevere in solving them

Know that doing mathematics involves solving problems and discussing how they solved them. Explain to themselves the meaning of a problem and look for ways to solve it. Use concrete objects or pictures to help them conceptualize and solve problems. Check their thinking by asking themselves, “Does this make sense?” Listen to the strategies of others and will try different approaches. Use another method to check their answers.

Classroom / Time Management Strategies

Have a “Do Now” Ready

This is a proactive classroom management strategy that sets the tone from the get-go. Students know from the start exactly what to do, eliminating confusion that can lead to distractions and misbehaviors. This can be avoided by having a “Do Now” that’s either written on the board or is already on your students’ desks before they enter the classroom.