

Math Strategies for Grades 4-6

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Instructional Strategies

Use Strategic Questioning

Instead of congratulating a student when they get an answer correct and moving on, ask them to communicate their approach. *"Tell me how you solved that."*

Asking students to elaborate on different approaches to the same question highlights that there is no single, correct way of doing the math. Moreover, students may discover some new mental math tips or strategies from their peers that they can use in future activities. *"Is there any other way of solving this?"*

Before students start shrugging their shoulders in response to an unfamiliar problem, ask them if it reminds them of anything they've done before.

"Does this problem remind you of anything else we've done before?"

The students will start to recognize previously encountered concepts underneath the surface. This habit of checking for familiarity is what produces flexible and agile mathematical thinkers. The student is encouraged to reflect on their own thought process in detail.

Assessment Strategies

Journal Reflections

Students write their reflections on a lesson, such as what they learned, what caused them difficulty, strategies they found helpful, or other lesson-related topics. Students reflect on and process lessons. By reading student work - [20 Types of Learning Journals That Help Students Think](#) - teachers can identify class and individual misconceptions and successes.

3-2-1

Students consider what they have learned by responding to the following prompt at the end of the lesson:

3 things they learned from your lesson;

2 things they want to know more about; and

1 questions they have.

The prompt [stimulates student reflection](#) on the lesson and helps to process the learning..



Standards of Mathematical Practices

Reason Abstractly & Quantitatively

- Recognize that a number represents a specific quantity.
- Connect quantities to written symbols and create a logical representation of the problem at hand, considering both the appropriate units involved and the meaning of quantities.
- Extend this understanding from whole numbers to their work with fractions and decimals.
- Write simple expressions that record calculations with numbers and represent or round numbers using place value concepts..

Classroom / Time Management Strategies

Greet Students at the Door

We all know that transitions from one class to another in middle school can be chaotic. One way to help students regulate their behavior and get themselves into a learning mindset as they transition into your class is to greet them individually at the door. Positive greetings at the classroom door produced significant improvements in academic engagement and reductions in disruptive behavior.

When greeting students, be sure to:

- Make eye contact
- Say the student's name
- Use a nonverbal greeting (handshake, fist bump, or high-five)
- Say a few words of encouragement