Math Strategies for Grades 4-6

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Instructional Strategies

Open Questions

Too often, math is approached as a series of questions that have either right or wrong answers. This does not need to be how math is taught! Contrast the following two problems:

• Does the 5 make the inequality x + 2.5 < 20 true?

• When is the inequality x + 2.5 < 20 true? What do you notice, and what do you wonder?

Both problems practice similar concepts and open the door to similar discourse. However, the first problem leads to a "yes/no" answer that can be daunting if a student doesn't know how to solve it and ends the learning prematurely.

In general, ask questions that have a variety of responses or approaches. The goal is for every student to be able to participate in the learning conversation.

Assessment Strategies

Create Your Own Test Questions

Students get excited when they help create test questions because they feel like they have inside information! This fun assessment activity can be used to evaluate total student comprehension of the content and provide students with their own study guide.

Teachers ask students to prepare math problems to help create a variety of assessments on the content being taught. Students create any number of problems the teacher requires, modeled after their homework or classwork, thus creating their own study guide. Students solve the problems and return them to the teacher as an answer key. Based on the quality of responses, teachers may choose to use the problems for a quiz, in-class game or contest, or the summative assessment.

Standards of Mathematical Practices

Experiment with representing problem situations in multiple ways including numbers, words (mathematical language), drawing pictures, using objects, making a chart, list, or graph, creating equations, etc. Model with • Create opportunities to connect the different representations and explain the connections. **Mathematics** Evaluate the utility of models to determine which models are most useful and efficient to solve problems. • Standards for Mathematical Practice Grade Level Emphasis* Classroom / Time Management Strategies Setting priorities is another key to time management. Write down all tasks that are looming and assign each task an A, B, or C: A-B-C A – must be completed today Method B – would be nice to finish today C – can be pushed to tomorrow if necessary. When life determines that a C-level task becomes an A-level task, it's time to switch gears.

The resources listed are provided as options and examples.

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