

Math Strategies for Grades K-3

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Instructional Strategies

Using Fact Families to Show Relationships

Fact families show young learners how numbers are related to each other. When learners understand the association between numbers and the facts that unite them, they can see how addition and subtraction are related, and even how they can use addition to subtract, and vice versa.

Working with Word Problems

Word problems go a long way in helping young learners build their number sense. Word problems provide a purpose to completing math and can show learners how math can be used in real life. Additionally, when working with word problems, they sharpen analytical problem-solving skills as they think through the problem to determine the way the problem must be solved.

Assessment Strategies

Personal Whiteboards

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

Emoji Scale Reflection

The emoji reflection exit ticket is very similar to the 1 to 5 scale except that students select an emoji that matches their understanding. They also must justify their choice by writing an *I can* statement of what they can do or what they need to work on. Doing this assessment with the emojis seems to take down some student anxiety about self-evaluation. Students are familiar with emojis and they don't have to show the whole class their response.



Standards of Mathematical Practices

Make sense of problems and persevere in solving them

- Realize 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.
- Be willing to try other approaches.
- Use concrete objects or pictures to help them conceptualize and solve problems.
- Check their thinking by asking themselves, "Does this make sense?"

Classroom / Time Management Strategies

Responsible Active Engagement: EMPATHY

- Use Positive Behavior Support to support students' understanding of healthy relationships.
- Encourage peers to help one another rather than offering adult assistance.
- Read and discuss books about empathy.
- Identify and describe others' feelings including use of nonverbal cues.
- Provide specific feedback and acknowledgement on students' efforts to help others.

The resources listed are provided as options and examples.

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