

Can Take You Places

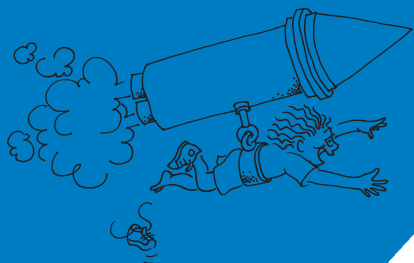
Professional Development Series

Using Manipulatives in the Mathematics Classroom

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Ice Breaker Activity



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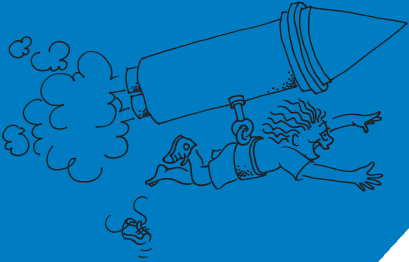
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**Using Manipulatives in the
Mathematics Classroom 2**

Effectively Using Manipulatives

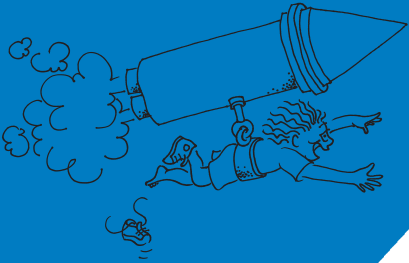
Session Goals

- ▶ Investigate the instructional benefits to students of using manipulatives to teach mathematics.
- ▶ Working collaboratively, design a lesson in which students will use manipulatives to clarify a mathematics concept.
- ▶ Explore implementation and facilitation strategies for incorporating manipulatives into mathematics lessons.
- ▶ Share professional expertise.



Reflect on a time you taught a lesson using manipulatives to clarify a mathematics concept.

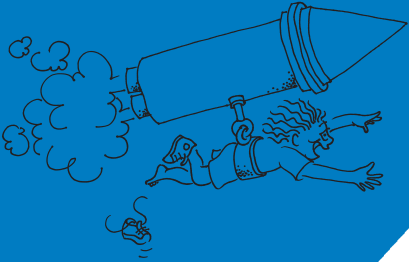
- ▶ What are two things that made the instruction successful?
- ▶ What are two things that made the instruction a challenge?



Video Presentation

As you watch the video, make note of the following ideas:

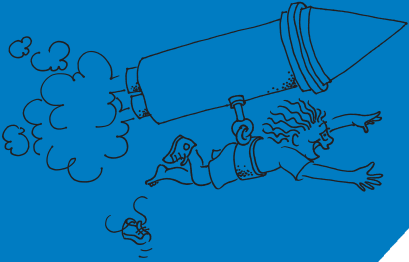
- ▶ How does the teacher prepare the students to work with manipulatives?
- ▶ How does the teacher check for effectiveness of using the manipulatives to teach the concept?
- ▶ What everyday objects can you use as manipulatives to teach mathematics?



Classroom Management Tips

Discuss how the following advice might affect classroom practice and students' learning.

- ▶ Students should work in small groups.
- ▶ Be patient. The room may not be quiet.
- ▶ Help students to realize that math is a process.
- ▶ Work from the concrete to give students a working mental picture of concepts.

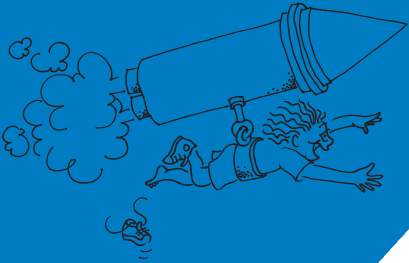


Implementation Strategies

Working with colleagues, investigate classroom implementation strategies for teaching with manipulatives.

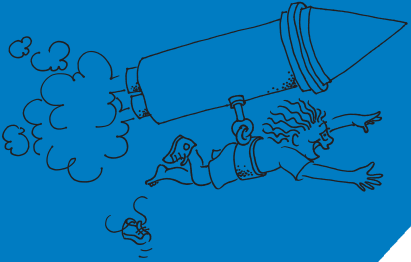
Examples:

- ▶ How do you monitor students' uses of manipulatives?
- ▶ How do you transition the learning from the concrete to abstract?



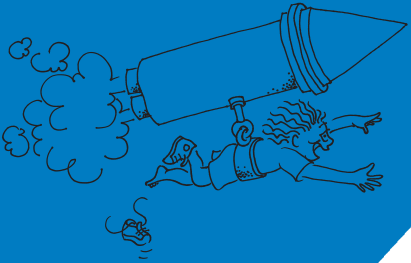
Creative Uses for Everyday Objects

- ▶ Work with your group to develop a list of creative ways to use everyday objects as manipulatives.
- ▶ Write your favorite suggestions on paper and be prepared to share.



Closing Activity

Using Manipulatives in the
Mathematics Classroom 9



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