



# MATH EMPOWERERS<sup>5</sup>

## Optional Resources

Are you ready to teach division of fractions? Consider using Bits and Pieces II Investigation 4, Lessons 1 and 2. Students will spend time modeling problems involving dividing whole numbers by fractions and fractions by whole numbers. Working through this investigation allows students to gain a deep understanding of what it means to divide. As a result, students will often develop and share their own algorithms for dividing fractions and whole numbers!



Sometimes math centers that challenge many of our students are irrelevant for more accomplished fifth graders. And often activities students can handle independently, are not rigorous enough. Sometimes the BEST activities for fifth graders simply don't provide us with enough valid information if we are not right there at the time. Differentiation is not easy. Yet today, *Dreambox* provides us with targeted math concept development AND improves our focused time with small groups of students. So how do you *Dreambox*?

### Advanced Learners



Logical / Mathematical  
Individual / Partners

**Materials** index cards, centimeter cubes

- Have students write a volume problem such as the following on an index card and its solution on the back:

**Deirdre builds a rectangular prism with 75 centimeter cubes. The base of her prism has 15 centimeter cubes. What is the height of her prism?**

**5 centimeters**

- Have students exchange and solve each other's problems, checking their answers on the back of the index card.

## Go Math Resources

In each lesson Go Math! provides the "Advanced Learners" activities. These activities are great to help you to differentiate instruction in your classroom. The activity on the left allows students to use what they have learned about volume by writing their own volume problems and having a partner solve them. (Lesson 11.6)

## Becoming a Math Person!

### WHY STUDENTS DEVELOP AN AVERSION TO MATHEMATICS — AND HOW TEACHERS CAN HELP CHANGE THEIR MINDS

As teachers we can take steps to help students develop a growth mindset and encourage. Have you ever heard one of your students say, "I can't do this. I am not a math person!" According to HGSE Lecturer Noah Heller, the idea that there are "math people" and "not math people" is a social construct and not based on inherent characteristics the idea that it takes determination and persistence to achieve success. Here are some ideas to achieve this mindset:

- Create opportunities for cooperative learning.
- Give students the chance to productively struggle.
- Encourage participation, even if the student doesn't have the right answer yet.
- Re-envision math as a language.

To Read More:

<http://tinyurl.com/gumrht8>

