ASSISTments™
A Free Public Service of Worcester Polytechnic Institute

Graspable Math

We are performing a research study using Graspable Math, a learning tool that puts math in motion, and we would love your participation!

This assignment takes approximately 30 minutes to complete. It includes a 5 problem pretest, an 11 problem learning intervention in which students work on solving equations using either ASSISTments or Graspable Math, and a 5 problem posttest to assess learning gains. As necessary, students will receive Graspable Math tutorial problems.

Common Core	Content Topic	Problem Set ID
7.EE.B.4a	Solving Multi-Step Equations with Fractions	PSAYT8H

Click here to learn more!

Want to assign without a preview? Click here to see how!

If you have questions, please e-mail assistments-research@wpi.edu

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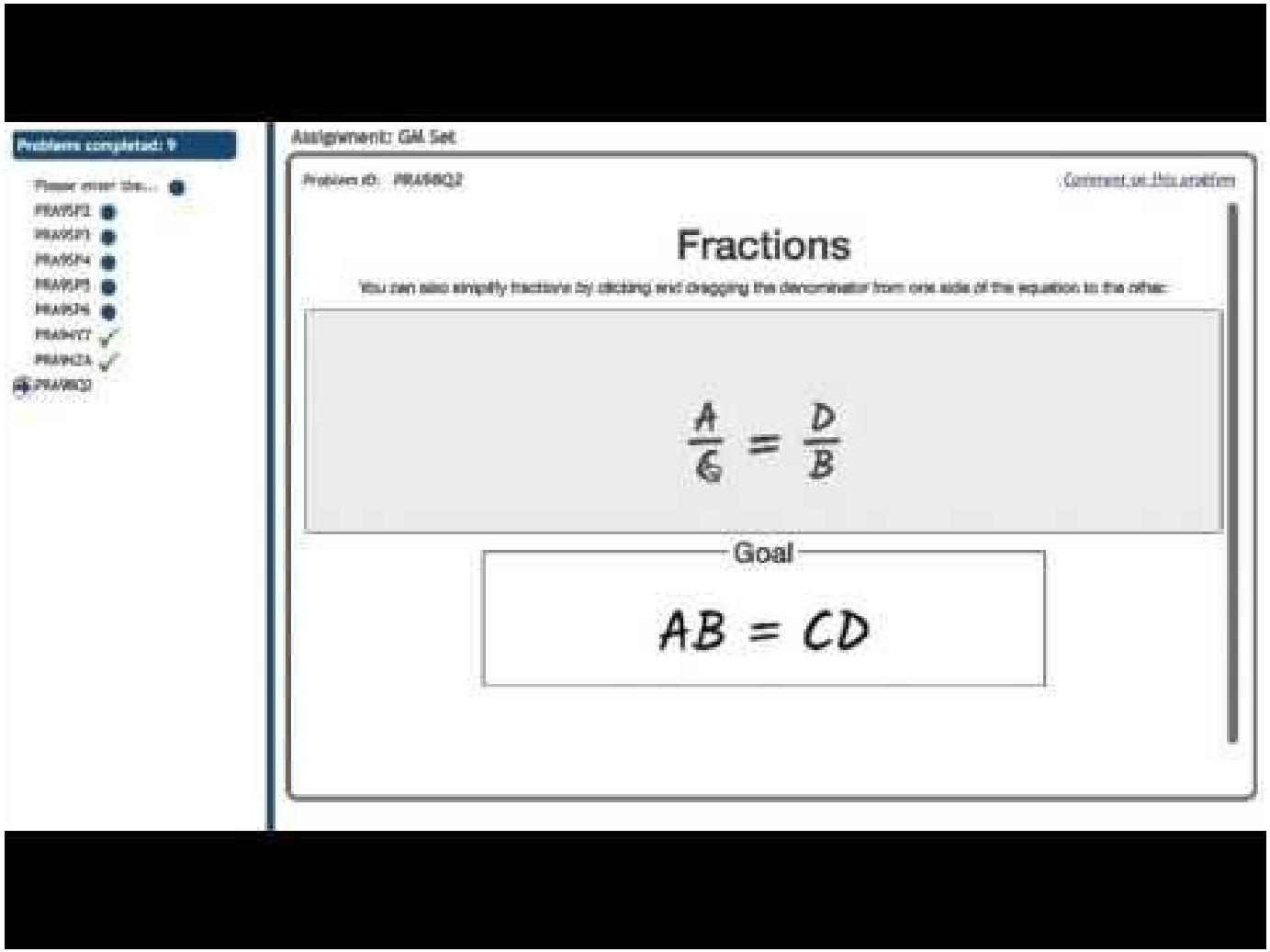
Graspable Math



For more information on Graspable Math
click here or visit www.graspablemath.com

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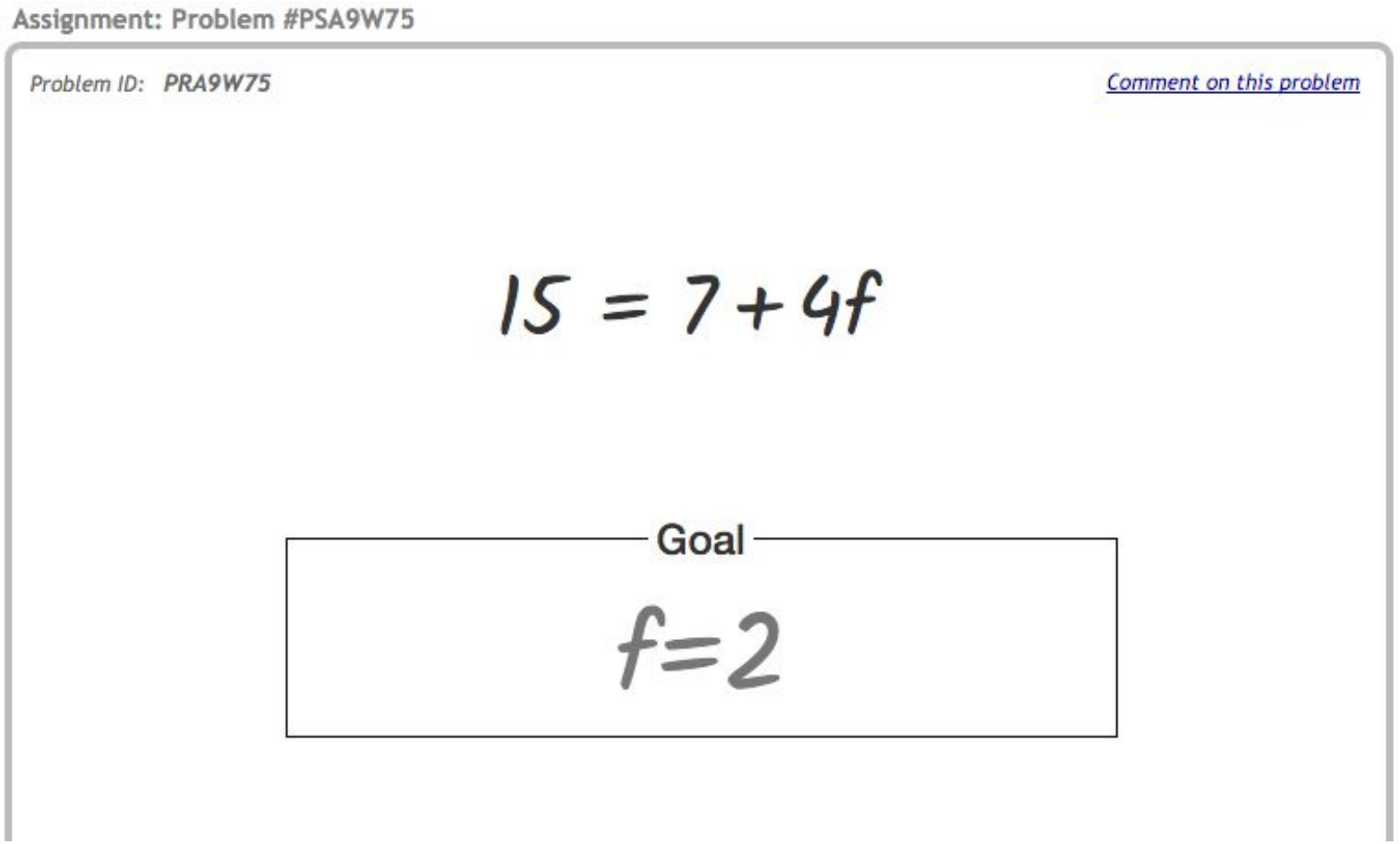
Graspable Math

One quarter of students will learn with Graspable Math (Goal State)...



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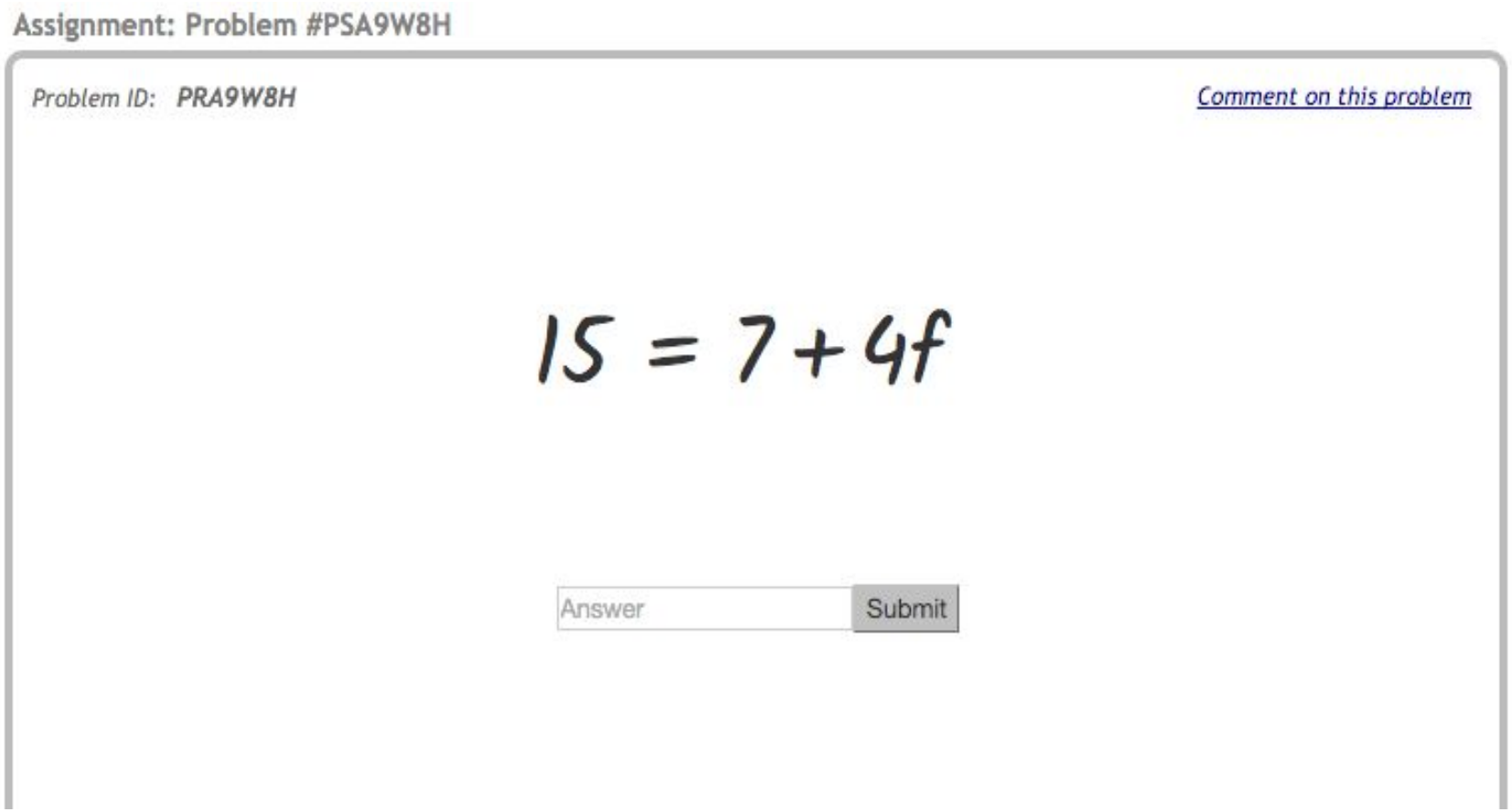
Graspable Math

One quarter of students will learn with Graspable Math (Free Work)...



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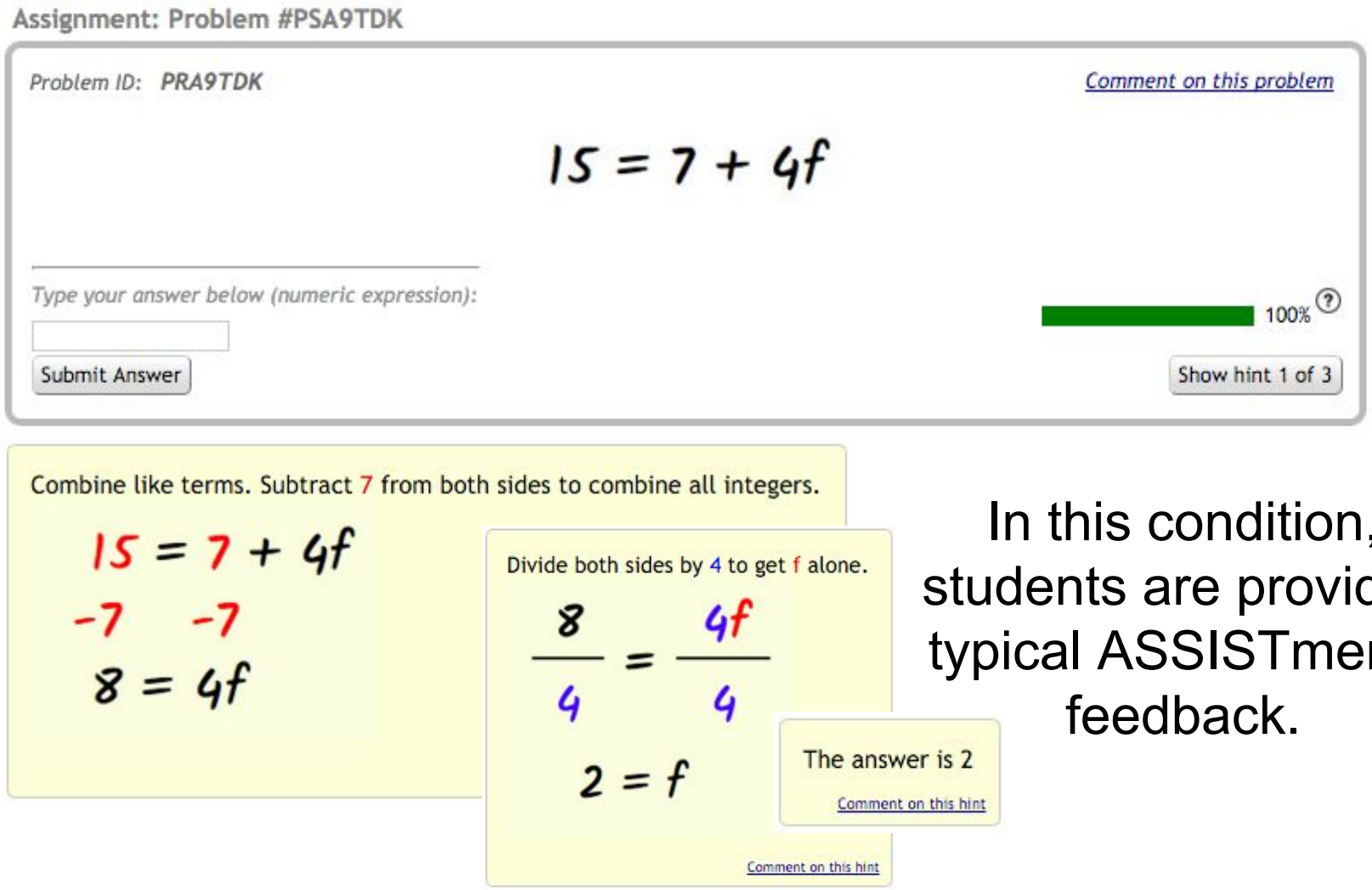
Graspable Math

One quarter of students will learn with ASSISTments (Feedback)...



In this condition, students are provided typical ASSISTments feedback.

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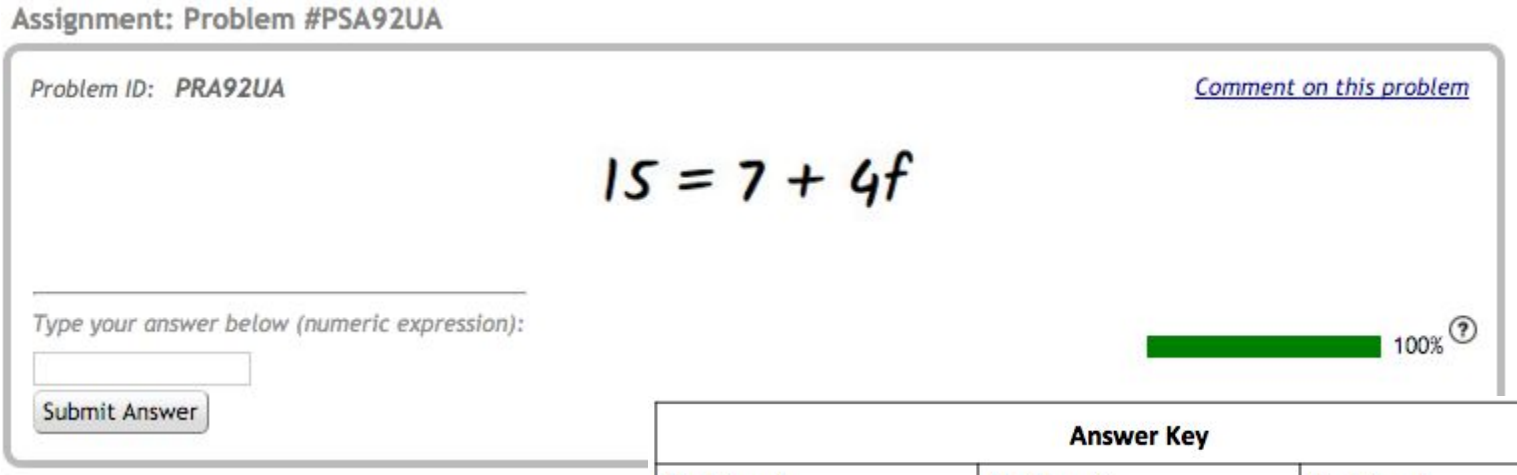
Graspable Math

And one quarter of students will learn with ASSISTments (Test Mode)



In this condition, students do not receive immediate feedback; all questions are in Test Mode. An answer key is provided following the 11th intervention question.

Answer Key		
Problem 1 $2 = f$	**Problem 2** $9 = b$	**Problem 3** $2 = q$
Problem 4 $b = -4$	**Problem 5** $d = 2$	**Problem 6** $6x + 12$
Problem 7 $\frac{-3}{2} = x$	**Problem 8** $5 = b$	**Problem 9** $a = -7$
Problem 10 $8x + 18$	**Problem 11** $v = 4$	

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Next Steps

1. Determine if this content matches your current curriculum, or if it can be used as review.

2. Assign the problem set for your students to complete.

3. The problem set can be assigned using ID PSAYT8H.

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Graspable Math

Want More Information?

For more information on this study and more like it, please visit graspableresearch.com

Step-by-step instructions on how to run this study in your class are available under the “Studies” tab

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Graspable Math

What is Graspable Math?

Graspable Math's Capabilities

- Draw or type mathematical expressions onto a canvas
- Use gesture-based actions to transform expressions
- Interact with tangible equations
- Engage in deep playful mathematical thinking and problem solving
- Discover patterns in mathematics
- Receive immediate feedback about whether a transformation is legal
- Work and explore mathematics safely

Benefits for Teachers

- Spend more time teaching and less time writing on the board
- Clearer and more fluid instructions and examples
- Easier assessments that focus on the problem solving strategy and process
- Visualize the history of *how* students' get their answers, rather than *just* the answer
- Less time grading, more time exploring
- Mathematics becomes an interactive and fun activity for students

For more information on Graspable Math, visit www.graspablemath.com