## Adding Fractions

The interactive white board tool for this lesson can be found on our website under Resources and Teacher Tools. (www.dreambox.com/teachertools)

In this DreamBox lesson, students use fraction tile manipulatives to find the sum of the fractions. Using the tiles, students demonstrate the answer visually and then numerically. The interactive whiteboard tool for this lesson can be found on our website under Resources and Teacher Tools: DreamBox.com/teachertools
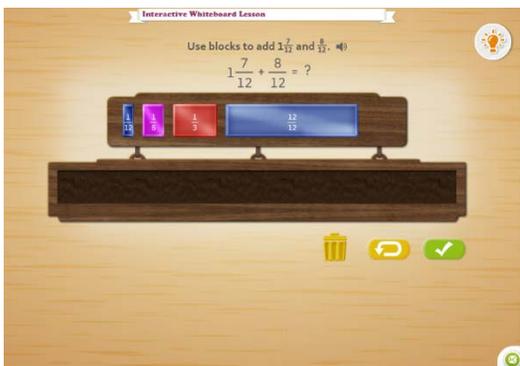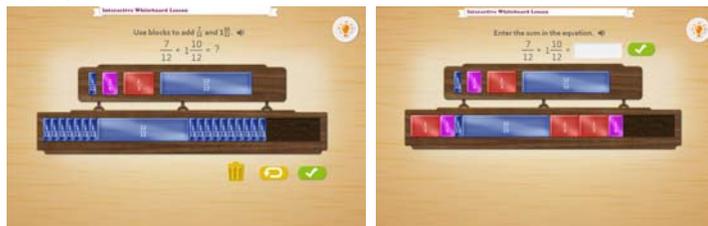
Sample Lesson

Objective
Using both a concrete bar model and equations, this tool enables students to represent fraction addition and think strategically about which fractional pieces are best to solve a given problem.

Background
Students should have background knowledge of equivalent fractions.

Instructions
1. Open the lesson on an interactive whiteboard or data projector and have students create the solution by drawing the fraction tiles on paper or individual white boards.
2. Invite students to form groups based upon common solutions, showing them a variety of solutions and strategies are possible. Then have one person from each group explain why their answer works as a solution.
    Possible strategies:
    a) Students use the unit fraction and count out each given fraction within the equation.
    b) Students use equivalent fraction combinations to create each individual fraction within the equation.
    c) Students use equivalent fraction combinations to create the sum of the fractions.
    d) Students may come up with alternative strategies as well.

3. Ask one student to solve the problem and determine the accuracy of their answer.

Adapted from: Fosnot & Dolk. (2001). "Addition and Subtraction Facts on the Horizon." Young Mathematicians at Work: Constructing Number Sense, Addition, and Subtraction (Portsmouth, NH: Heinemann), p. 106.

4. Students will then determine the sum. If students are struggling, click the hint button and the number line will appear. This will provide students another visual to assist in making the connection between the addends and the sums.

5. When students enter the sum, it does not have to be in simplest form.

6. Repeat the process above, skipping the step of getting in groups by common answers. Students can also partner up or work in small groups to determine the sums.

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