

List of Fraction Apps for Use with Students



This document provides links to free fraction apps that were designed by Education Development Center (EDC). These dynamic, easy-to-use apps offer opportunities for students to explore fraction concepts, use virtual manipulatives to represent and solve problems, and build estimation strategies. These apps can be used in online lessons in a variety of ways, such as, demonstrations for synchronous discussions and as activities for students to do on their own. If you have any questions, please feel free to contact us at smi@edc.org.

1 FOUNDATIONAL FRACTION CONCEPTS

Number Line Representation

Locating fractions on a number line (Set 1): Move fractions to their correct locations on number lines and get feedback.

Locating fractions on a number line (Set 2): More challenging version that uses different endpoints and fractions from Set 1.

Comparing Fractions and Benchmarking Strategies

<u>Compare Fractions to Benchmarks</u>: Move each fraction to the bin for the closest benchmark number: 0, ½, or 1, and get feedback.

2 FRACTION ADDITION

Representing and Solving Addition Problems

<u>Fraction Bar Addition with Moveable Parts</u>: use virtual manipulatives for fraction bars to model addition and get feedback.

Fraction Addition with Bars and Number

<u>Lines</u>: model addition by placing fraction bar pieces on a number line and get feedback.

Building Estimation Strategies

Fraction Addition Estimation Practice:

Estimate whether the **sums** of fraction addition problems are less than or more than a given number. Get feedback and see examples of estimation strategies.

3 FRACTION SUBTRACTION

Representing and Solving Subtraction Problems

<u>Fraction Subtraction with Bar Models</u> (<u>Set 1</u>): Use virtual fraction bar pieces to model subtraction and get feedback.

<u>Fraction Subtraction with Bar Models</u> (Set 2): Use virtual fraction bar pieces to model subtraction and get feedback.

<u>What's the Distance</u>: use a distance model of subtraction by moving virtual fraction bar pieces to a number line and get feedback.

Building Estimation Strategies

Fraction Subtraction Estimation Practice: Estimate whether the differences are less than or more than a given number. Get feedback and see examples of estimation strategies.

4 FRACTION MULTIPLICATION

Representing and Solving Multiplication Problems

<u>Field of Fractions</u>: Use an area model for fraction multiplication problems and get feedback. The context is planting fruits and vegetables in fractional parts of a field.

Building Estimation Strategies

Fraction Multiplication Estimation Practice:

Estimate whether the product will be less than or more than a given number. Get feedback and see examples of estimation strategies.

5 FRACTION DIVISION

Representing and Solving Division Problems

<u>Fraction Division with Bar Models</u>: Use visual representations to make sense of dividing fractions and what the remainders mean. The context is determining servings of giant submarine sandwiches.

Building Estimation Strategies

Fraction Division Estimation Practice:

Estimate whether the quotient will be less than or more than a given number. Get feedback and see examples of estimation strategies.

Education Development Center (EDC) is a global nonprofit that advances lasting solutions to improve education, promote health, and expand economic opportunity. Since 1958, we have been a leader in designing, implementing, and evaluating powerful and innovative programs in more than 80 countries around the world.



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