

# Instructional Unit Title: Fraction Frenzy

The teacher may provide models for decomposing and composing a fraction so that students can relate the decomposition and composition of a fraction to their work with and knowledge of whole numbers.

The teacher may use skip counting games (e.g., Buzz or Zap) so that students can strengthen their composition skills by developing mental and verbal concepts of fractions.

The teacher may utilize number line activities (e.g., a life-size number line) so that students can begin comparing fractions to benchmark quantities (e.g., 0, 1/2, 1).

The teacher may provide pairs of fractions with different denominators and different numerators (e.g., 2/3 and 3/5) so students can investigate ways to create common denominators to compare equivalent fractions [e.g.,  $1/2 = (2 \times 1) / (2 \times 2)$ ].

The teacher may revisit skip counting games (e.g., Buzz or Zap) so that students can connect repeated addition with the concept of multiplication.

The teacher may model the collection of fraction data (e.g., how far each student in the class can jump) so that students can begin exploring ways to plot fractional data and use the data to solve addition and subtraction word problems (e.g., How much farther can Mary jump than Brian?).

The teacher may provide addition and subtraction fraction word problems so that students can use decomposing and composing fractions in real world contexts.

The teacher may provide fraction models larger than one so that students can begin decomposing and composing mixed numbers.

The teacher may provide word problems so that students can explore various models (e.g., number line, area model) to solve problems involving fractions multiplied by whole numbers.

**PERFORMANCE ASSESSMENT:** As an artist you have been hired to design a beaded safety pin to sell on the internet ([http://www.makingfriends.com/safety\\_pin\\_projects.htm](http://www.makingfriends.com/safety_pin_projects.htm)). Your safety pin design should include 36 beads and six colors and no two colors can have the same quantity. You will create an advertisement for your design to include on the website, that will include a description of the process you used to create the pin (i.e., color and pattern choices) as well as the fractional parts that each of the colors represent in the whole safety pin. Good luck!

*This unit was authored by a team of Colorado educators. The unit is intended to support teachers, schools, and districts as they make their own local decisions around the best instructional plans and practices for all students. To see the entire instructional unit sample with possible learning experiences, resources, differentiation, and assessments visit <http://www.cde.state.co.us/standardsandinstruction/instructionalunitsamples>.*