More About Math

Appetite for Fractions

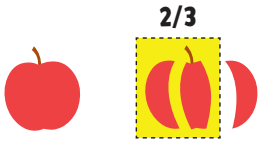
Background for Leaders

In this unit children will learn and apply fraction skills appropriate for 6-8-year-olds. They will use fractions to create representations of fractional amounts, divide up quantities to share fairly, and measure using fractions to feed some animals. Spatial sense is the understanding of position, direction, and location in space.

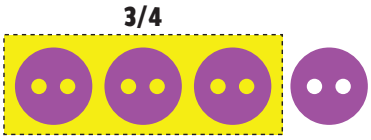
Fractions

Children in first and second grade should be learning the meaning of basic fractions. There are three basic representations of fractions: part of a whole (2/3 of an apple is 2 of the three equal pieces), part of set (3/4 of the buttons is 3 of the 4 buttons), or a location on a numberline (1/2 is 1 of the 2 sections between zero and one).

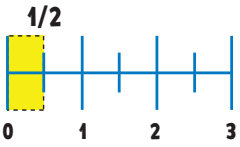
Part of a Whole



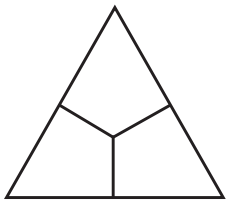
Part of a Set



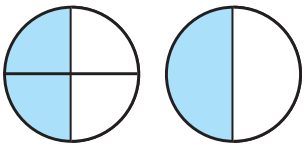
Numberline



At this age children's knowledge of fractions should include halves, thirds, and fourths. Children first learn to divide shapes into two, three, or four equal parts and then shading only one of those parts, name the fraction (for example, one-fourth). An essential part of children understanding fractions is the knowledge that each part of the shape must be equal in size. Shapes that are not equally divided are not "sharing fairly" and can be considered unequal or "unfair." Initially equal division of shapes means that all equal parts must look exactly alike, but as children learn more about shapes and fractions they will learn that the equal pieces of a shape do not always look the same (this is a very advanced concept for second graders).



To reinforce children's understanding of fractions ask them questions like the following; How many fourths make up a whole pizza? How many thirds make up a cup? How many halves make up an apple? As children become more comfortable with fractions they will begin to shade more than one part and name the fraction (for example, three-fourths). They will also learn that by combining fractional parts they can form a value equivalent to another fraction, such as one-fourth plus one-fourth equals two-fourths which is the same as one-half.



Several of these resources and activities ask children to identify or use eighths. Since eighths are generally above the standard mastery level for this age group remember to always have a visual model of eighths available to remind children what an eighth means. Vocabulary that should be used to reinforce these early fraction and division skills are: divide, evenly distribute, fair share, equal groups, one of the four equal pieces, etc.

This out-of-school resource was developed by Maryland Public Television.

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