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Exploring Fractions

Versatile Fraction Worksheet

Customize *Fraction Action* (page 27) before making a copy for each student. Write the directions for students on the lines at the top of the page.

Suggestions:

Write fractions on the lines and have students shade in the diagrams.

Shade in portions of the diagrams and have students write the appropriate fraction.

Cover problem numbers with strips of paper before reproducing if you wish to have students work with improper fractions.

Fraction Folding

Students will need unlined paper, markers, rulers, and scissors. Show students how to create a square from a rectangular sheet of paper.

Make a diagonal fold by bringing the short side of the page over to meet the long side. Crease along the fold and cut off the rectangular flap remaining at the bottom of the page.

Have students draw a line with a marker and ruler along the fold to divide the square in half diagonally. Ask students to color half of the sheet and label it $\frac{1}{2}$.

Next have students fold the paper again on the diagonal to create fourths, color one of the fourths, and label it $\frac{1}{4}$.

To divide the page into eighths, they should fold the top of the page down to meet the bottom, and then side to side. Color one of the eighths and label it $\frac{1}{8}$.

Write $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$ on the board. Ask students to name the pattern they see in the denominators and to continue the pattern by writing the next three fractions.

Sorting Fractions

Divide students into pairs. Give each pair a plastic bag containing 12, 24, or 36 similar items, such as paper clips, popcorn kernels, macaroni, beans, toothpicks, wooden cubes,

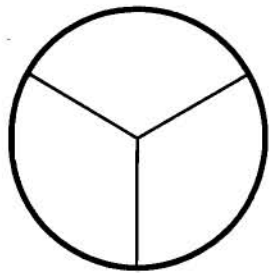
pencils, buttons, plastic lids, or large beads.

Invite students to count the items in each bag and divide them into equal groups. Have students record their groupings as fractions. For example, 24 items can be divided into two groups of 12. Each group would be $\frac{12}{24}$ or $\frac{1}{2}$ of the total. (24 items can also be divided evenly into twelve groups of 2, four groups of 6, six groups of 4, three groups of 8, or eight groups of 3.)

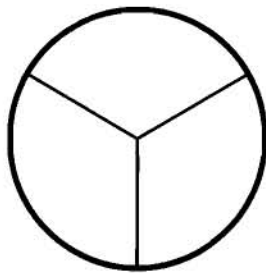
Encourage students to see how many different ways they can divide the items in the same bag.

Fraction Action.....

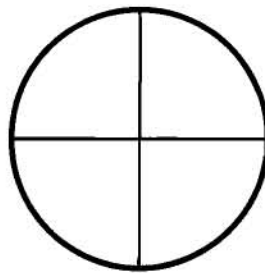
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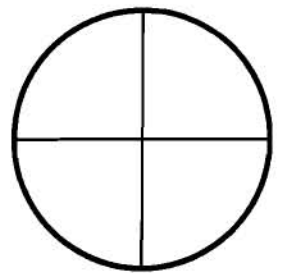
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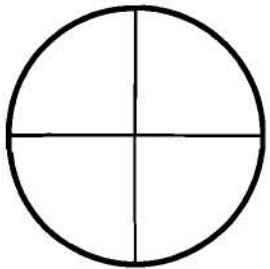
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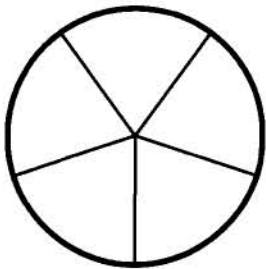
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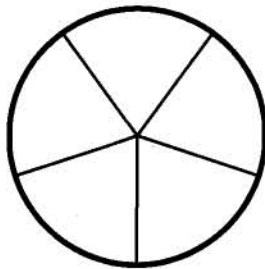
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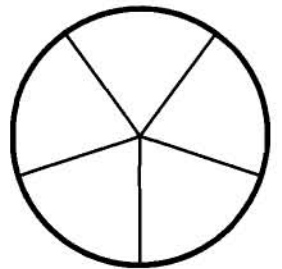
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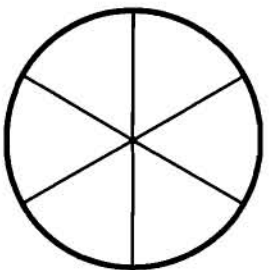
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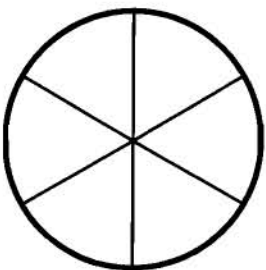
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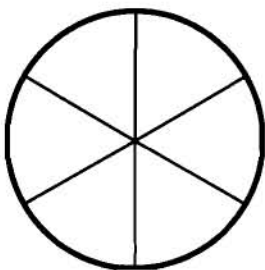
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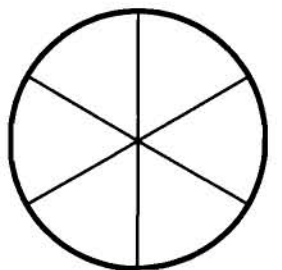
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10. _____



11. _____



12. _____