

FAMILY MATH

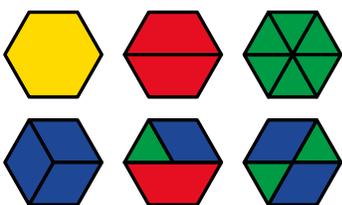
Composite Shapes and Fraction Concepts

Dear Family,

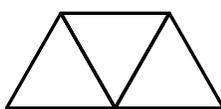
Your student is expanding their knowledge of fractions as they learn about relationships between the parts and wholes of shapes. They use pattern blocks to build shapes composed of smaller shapes, called composite shapes. They see that a whole shape can be decomposed, or broken apart, into smaller shapes. Composite shapes build your student's understanding of equal shares. Your student decomposes shapes into units of halves, thirds, and fourths and compares the size of the parts. They see that the more equal parts a shape has, the smaller the parts. This helps prepare them for work with area, fractions, and proportions in later grades.

Key Term

thirds



1 whole hexagon can be decomposed into smaller shapes.



3 triangles can be put together to compose a whole trapezoid.



1 half

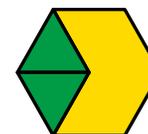
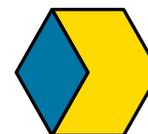


1 third



1 fourth

*Halves have 2 equal shares.
Thirds have 3 equal shares.
Fourths have 4 equal shares.*



It takes 3 thirds to cover 1 whole hexagon. 1 third of the hexagon can be composed with 1 rhombus or 2 triangles.

At-Home Activities

Make Equal Shares

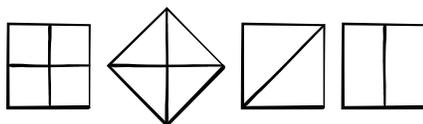
Help your student practice naming halves, thirds, and fourths by slicing food items such as sandwiches, pizza, or brownies. Slice the item into 2, 3, or 4 equal pieces. Discuss whether the pieces are equal and what to name each piece (1 half, 1 third, or 1 fourth), and ask how many pieces are in the whole. Encourage your student to use fraction language to describe the relationship between the parts and the whole (2 halves make 1 whole, 3 thirds make 1 whole, or 4 fourths make 1 whole). As an alternative to food items, modeling clay can be used for this activity.

Make Smaller Shapes

Experiment with different ways to decompose shapes with your student. Start with a piece of paper in the shape of a rectangle or square. Have your student draw lines to split the shape

into smaller shapes. Or using a larger surface, such as the top of a table or sidewalk, mark lines with tape or sidewalk chalk. Name the smaller shapes. Then start again and ask your student to decompose the shape a different way.

- “1 whole square can be decomposed into 4 smaller squares, 4 triangles, 2 triangles, or 2 rectangles.”



- “1 whole rectangle can be decomposed into 4 squares, 4 triangles, or 2 smaller rectangles.”

