

LINKS TO MANIPULATIVES: PATTERN BLOCKS

Have students use combinations of other pattern blocks to make composite shapes congruent to the yellow hexagon. In order to build language and the habit of comparing fractions one to another, prompt students to talk about the relationships they see, by asking questions like, "What do you notice?"

- *the yellow hexagon is 2 times bigger than the red trapezoid because it takes two red trapezoids to cover the same area as the yellow hexagon*
- *3 blue rhombuses or 6 green triangles cover the yellow hexagon*
- *1 red trapezoid is half as much as 1 yellow hexagon because 1 red trapezoid covers half of 1 yellow hexagon*
- *half of 1 yellow hexagon can be covered by 1 red trapezoid and the other half by 3 green triangles or $1/2 = 3/6$ (grade 4 and up)*
- *2 trapezoids cover 1 hexagon and 3 rhombuses, so 1 trapezoid is a larger fraction of the hexagon than 1 rhombus (record as $1/2 > 1/3$ (grade 4 and up)*

As students continue to explore, they will combine different pattern blocks. Pose questions like, "What is the same and different about these two hexagons?"

- *2/6 of both hexagons is green triangles*
- *2/6 of one of the hexagons is green triangles and 2/3 blue rhombus'; 4/6 of the other hexagon is green triangles and 1/3 blue rhombus*

Listen for students who call each part of these hexagons one fourth because they used four pattern blocks to cover the area. Try a similar problem with other fraction materials such as fraction circles.