PRACTICE TASK: CAN YOU FIND IT?

Adapted from North Carolina Math Instructional Resources

STANDARDS FOR MATHEMATICAL CONTENT

MCC3.G.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.

STANDARDS FOR MATHEMATICAL PRACTICES

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

BACKGROUND KNOWLEDGE

Students often have trouble seeing shapes within other shapes. They also have a difficult time if the shape is a different orientation than is seen most often. Most students will be able to draw the shapes requested. For those that struggle, provide models of the shapes requested.

ESSENTIAL QUESTIONS

- What are some ways that a hexagon (or pentagon) can look?
- Do rectangles and squares always look the same?
- Does the direction that a shape is facing change the way it looks? Does it change the shape's name?

MATERIALS

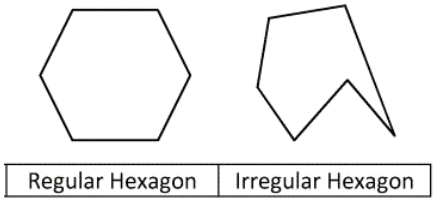
- Can You Find It? Student Resource Sheet or http://wps.ablongman.com/wps/media/objects/3464/3547873/blackline_masters/BLM_40.pdf
- Color pencils or crayons

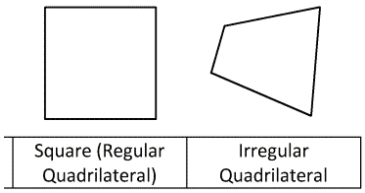
GROUPING

Individual or Partner

TASK DESCRIPTION, DEVELOPMENT, AND DISCUSSION

You may wish to open this lesson by reading a book such as *Shape Spotter* by Megan Bryant, *The Story of Goldie Locks and the Three Squares* by Grace Maccarone, or a similar book. Then, students will use the *Can You Find It?* student resource sheet to locate a rectangle, square, triangle, hexagon, pentagon, a quadrilateral that does not look like a rectangle or square, trapezoid, rhombus, a different looking hexagon, and a different looking trapezoid. They may color each shape a different color and then put some type of marking on all of the quadrilaterals, or you may want them to color all quadrilaterals the same color. Many students struggle to see irregular shaped polygons as fitting into the category with the regular shaped polygons. For instance, most students only know that a hexagon looks like  but a hexagon is **any** six sided closed figure. An important part of the task is to allow students to compare their drawings. This will help students who struggle with orientation of shapes.





FORMATIVE ASSESSMENT QUESTIONS

- Did all of your quadrilaterals have a square corner?
- Do all of your shapes look like a classmate's shapes? How were they different? How are they alike? What attributes help you know that the shapes are still the same?
- How do you know you drew a square and a rhombus?

DIFFERENTIATION

Extension

- Students who need an extension can draw different quadrilaterals and label them. They could also try drawing the shapes in a different orientation or direction. For example, if the trapezoid looks like  , have students draw the trapezoid like  .

Intervention

- Provide models of the shapes for students to be able to place on the grid to trace around. Remind students that shape names also tell the number of sides. For instance, a quadrilateral is any closed figure with 4 sides and a hexagon means any closed figure with 6 sides.

CAN YOU FIND IT?

Find the shapes listed below. Once you find it, use different colors to shade in or trace around the shape. Also color code the directions.

• Rectangle • Square	• Triangle • Hexagon • Pentagon	• Quadrilateral that does not look like a Rectangle or Square • Trapezoid • Rhombus	• A Different looking Trapezoid • A Different looking Hexagon