

Just In Time Quick Check
Standard of Learning (SOL) 1.11a

Strand: Measurement and Geometry

Standard of Learning (SOL) 1.11a

The student will identify, trace, describe, and sort plane figures (triangles, squares, rectangles, and circles) according to number of sides, vertices, and angles.

Grade Level Skills:

- Identify the name of the plane figure when given information about the number of sides, vertices, and angles.
- Trace triangles, squares, rectangles, and circles.
- Describe a circle using terms such as *round* and *curved*.
- Describe triangles, squares, and rectangles by the number of sides, vertices, and angles.
- Recognize that rectangles and squares have special types of angles called right angles.
- Sort plane figures based on their characteristics (number of sides, vertices, angles, curved, etc.).

Just in Time Quick Check

Just in Time Quick Check Teacher Notes

Supporting Resources:

- VDOE Mathematics Instruction Plans (MIPS)
 - [1.11a - Shape Up!](#) (Word) / [PDF Version](#)
- VDOE Word Wall Cards: Grade 1 ([Word](#)) | ([PDF](#))
 - Plane Figures
 - Square: Right Angle
 - Triangle: Side and Vertex
 - Rectangle: Right Angle

Supporting and Prerequisite SOL: [1.11b](#), [K.10a](#), [K.10c](#), [K.12](#)

SOL 1.11a - Just in Time Quick Check: Student Interview

Provide student with a collection of shapes of different sizes that include a variety of triangles, circles, squares and rectangles (i.e., attribute blocks).

1. Ask student to Identify the plane figure(s) that have: (record student's response)

- a. three sides _____
- b. four sides _____
- c. three vertices _____
- d. four vertices _____
- e. right angles _____

2. Ask student to describe a circle.

Student Response: _____

3. Ask student to describe the following shapes telling how many sides, vertices and angles.

Triangle: Sides _____ Vertices _____ Angles _____

Rectangle: Sides _____ Vertices _____ Angles _____

Square: Sides _____ Vertices _____ Angles _____

What kind of angles are in squares and rectangles?

Student Response: _____

4. Provide student with a collection of attribute blocks. Blocks should include but are not limited to triangles, rectangles, squares and circles. Ask student to sort the figures based on their characteristics. Possible sorts include sorting by sides, vertices, angles and curves.

Student Response: _____

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Common Errors/Misconceptions and their Possible Indications

1. Ask student to identify the plane figure(s) that have: (record student's response)

Some students may have difficulty recalling the names of the shapes that meet the given characteristics or may not understand the terms that describe the shapes (i.e., sides, vertices, angles). These students will need additional opportunities to explore shapes, recognize and name their characteristics. Word banks or word wall cards may be helpful as students become more familiar with these terms. During classroom activities, it will be important to utilize these terms often so that students can also become comfortable and have many opportunities to use these terms when describing various plane figures. Activities that include finding shapes in the classroom or at home and describing the characteristics of those shapes are encouraged.

2. Ask student to describe a circle.

Students who are unable to describe a circle using the words curved and round need further opportunities to explore and describe the characteristics of a circle. Relating shapes to figures in the environment, while also providing more hands-on instruction using plane figures, is encouraged.

3. Ask student to describe the following shapes telling how many sides, vertices and angles.

Students who are unable to describe the shapes using the terms sides, vertices, and angles will need additional opportunities to explore and describe shapes. These terms need to be used frequently in the classroom. Playing games like I Spy during transition times throughout the day, allowing students to describe the shape and other students must name the shape will help to strengthen students' use of these terms. Word wall cards may be helpful until students are more comfortable using the terms sides, vertices, and angles.

What kind of angles are in squares and rectangles?

Students who are unable to identify that squares and rectangles have right angles need further experiences exploring the characteristics of squares and rectangles compared to other plane figures. In addition, students will need to hear and use the term 'right angle' often when describing the type of angle found in squares and rectangles. Utilizing word banks or word wall cards with graphics may be beneficial.

4. Provide student with a collection of attribute blocks. Blocks should include but are not limited to triangles, rectangles, squares and circles. Ask student to sort the figures based on their characteristics. Possible sorts include sorting by sides, vertices, angles and curves.

Students may be able to sort the blocks using these characteristics but may not be able to use the correct vocabulary to describe how figures are sorted. These students will benefit from additional experiences (i.e., class sorts, shape hunts) that focus on identifying and describing the characteristics of plane figures. Hands-on instruction using plane figures is encouraged to provide opportunities for students to become more fluent and confident with the vocabulary used to describe plane figures.