1(6) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties.	**1(6)(D)** The student is expected to identify two-dimensional shapes, including circles, triangles, rectangles, squares, as special rectangles, rhombuses, and hexagons and describe their attributes using formal geometric language.

Materials
- A variety of two-dimensional shapes (circles, triangles, rectangles, squares, rhombuses, and hexagons). Include different sizes of shapes and common and uncommon shapes (e.g. right triangle, equilateral triangle, etc.).

Procedure:
Show the student one two-dimensional shape at a time.

What shape is this? How can it be described?

Repeat for other shapes.

Check Student's Responses:

Shape: _____
- □ Correctly identifies all shapes   □ Incorrectly identifies all shapes
- □ Identifies attribute(s) using formal language: sides, vertices
- □ Identifies attribute(s) using informal language: _____

Shape: _____
- □ Correctly identifies all shapes   □ Incorrectly identifies all shapes
- □ Identifies attribute(s) using formal language: sides, vertices
- □ Identifies attribute(s) using informal language: _____

Shape: _____
- □ Correctly identifies all shapes   □ Incorrectly identifies all shapes
- □ Identifies attribute(s) using formal language: sides, vertices
- □ Identifies attribute(s) using informal language: _____

Notes:

1(6)(D) The student is expected to identify two-dimensional shapes, including circles, triangles, rectangles, squares, as special rectangles, rhombuses, and hexagons and describe their attributes using formal geometric language.	**Possible interpretations, issues to follow up on, and implications for teaching**

What did you observe?

- The student **correctly identified all the shapes.** The student may be ready to identify the shapes based on given attributes.

  A teaching strategy might include asking the student to identify a shape based on given attributes:
  - *What shapes have 4 sides and vertices? What is the name of the shapes?*
  - *What shapes have 4 equal sides? What is the name of the shapes?*

- The student **only identified geometric figures that are common or prototypical.** The student may need additional experience identifying uncommon or atypical shapes.

  A teaching strategy might include asking the student to show you a shape such as a triangle. Turn or flip the shape and ask the student, "Is this still a triangle?" Continue to turn and flip the shape until the student recognizes that it is still a triangle regardless of the orientation of the shape. Ask the student, "What makes this shape a triangle?" If the student correctly describes the triangle as having three sides and vertices, prompt the student to find all of the other shapes that have only three sides. If the student cannot describe an attribute of the triangle, explain that all triangles have three sides and three vertices as you point and count the sides and vertices.

- The student **used informal vocabulary.** The student may need additional time and practice relating informal vocabulary to formal vocabulary such as using the word vertices instead of corners.