K(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.	**K(6)(E)** The student is expected to classify and sort a variety of regular and irregular two- and three-dimensional figures regardless of orientation or size.

Materials
A variety of regular and irregular two-dimensional figures. Include different sizes of shapes and type of shapes (e.g. right triangle, equilateral triangle, etc.).

Procedure:
Provide the student with a set of two-dimensional figures to sort.

Sort these shapes into groups so that each group has shapes that are alike, have the same attribute. (Wait for response.)
Why did you put these shapes in this group?

Repeat the question for each group created.

Check Student's Responses:	**Check Student's Strategies:**
□ The student sorted the shapes by the type of shape. □ The student sorted the shapes by geometric attribute(s). Describe: □ The student sorted the shapes without using geometric attributes (randomly or by color).	The student: □ Identified the name of the shapes. □ Described attributes of shapes using formal language. □ Described attributes of shapes using informal language. □ Other:

Notes:

K(6)(E) The student is expected to classify and sort a variety of regular and irregular two- and three-dimensional figures regardless of orientation or size.	**Possible interpretations, issues to follow up on, and implications for teaching**

What did you observe?

- The student **sorted the shapes based on geometric attributes.** Consider how the student sorted the shapes:
  - The student grouped the shape according to the name of the shapes.
  - The student grouped the shapes according to an attribute such as the number of sides, number of vertices (or corners), etc.

- The student **sorted the shapes randomly or by color.** The student may need additional support.

  A teaching strategy may involve showing the student one shape (triangle) and asking them to find all of the shapes that are similar to it. Assist the student in finding all the shapes that have three sides and three corners or vertices.

- The student **described attributes of two-dimensional shapes using formal language.** Consider prior classroom instruction; if it is limited, it may be appropriate for students to use the word corners instead of vertices.

- The student **described attributes of two-dimensional shapes using informal language** (e.g. pointy thing or box).

  A teaching strategy might include introducing or reviewing geometric language for the shapes by showing the student a shape and identifying and describing the sides and corners.