Vertical Progression:

Kindergarten	**K.G.A Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).** ○ **K.G.A.2** Correctly name shapes regardless of their orientations or overall size.
1st Grade	**1.G.A Reason with shapes and their attributes.** ○ **1.G.A.1** Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes. ○ **1.G.A.3** Partition circles and rectangles into two and four equal shares, describe the shares using the words *halves, fourths*, and *quarters*, and use the phrases *half of, fourth of*, and *quarter of*. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.
2nd Grade	**2.G.A Reason with shapes and their attributes.** ○ **2.G.A.1** Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. ○ **2.G.A.2** Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. ○ 2.G.A.3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words *halves, thirds, half of, a third of,* etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.
3rd Grade	**3.NF.A Develop understanding of fractions as numbers.** ○ **3.NF.A.1** Understand a fraction 1/*b* as the quantity formed by 1 part when a whole is partitioned into *b* equal parts; understand a fraction *a/b* as the quantity formed by *a* parts of size 1/*b*. **3.MD.C Geometric measurement: understand concepts of area and relate area to multiplication and to addition.** ○ **3.MD.C.5** Recognize area as an attribute of plane figures and understand concepts of area measurement. **3.G.A Reason with shapes and their attributes.** ○ **3.G.A.1** Understand that shapes in different categories (e.g., rhombus, 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.

Students will demonstrate command of the ELG by:

- Using specific attributes to identify, classify and draw shapes (e.g., number of sides, faces, angles/vertices/corners).
- Partitioning (dividing) a circle and rectangle into two, three, or four equal parts.
- Describing equal shares using grade level academic and content language (e.g., halves, thirds, fourths).
- Describing a whole by the number of equal parts (e.g., two halves make a whole).
- Explaining and creating multiple models to show that halves, thirds, and fourths of an identical whole need not be the same shape (e.g., half of a rectangle can be shown horizontally or vertically).
- Drawing rows and columns of equal size in a rectangle.

Vocabulary:

- edge
- face
- hexagon
- pentagon
- polygon
- quadrilateral
- vertex

Sample Instructional/Assessment Tasks:

1) **Standard(s): 2.G.A.1**

Source: Read Tennessee
http://www.readtennessee.org/sites/www/Uploads/Examples/2.G.A.1final.pdf

Item Prompt:
Draw a shape that has six sides. Make two sides longer than the rest. Compare your shape with a shape drawn by one of your classmates. Describe how they are the same and how they are different.

Correct Answer/Student Sample:

This is my shape.

My friend drew this one.

They are the same because they have 6 sides and they have two sides that are longer than all the other sides.

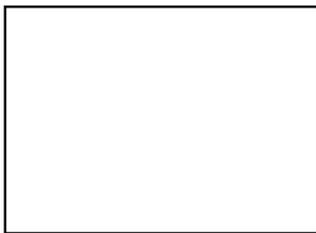They are different because my long sides are touching each other and my friends long sides do not touch

2) **Standard(s): 2.G.A.2**

Source: Read Tennessee
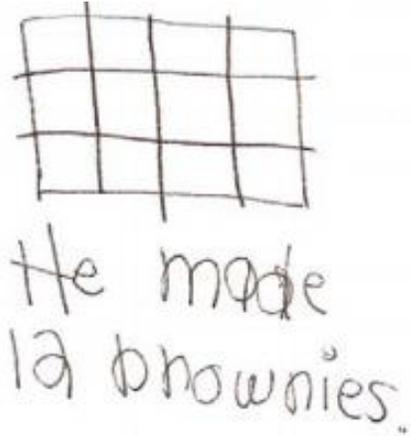http://www.readtennessee.org/sites/www/Uploads/Examples/2.G.A.2final.pdf

Item Prompt:

Stan made brownies in a pan shaped like a rectangle. When he cut them, he made 3 rows and 4 columns. Each piece was shaped like a square. Show how Stan cut the brownies.

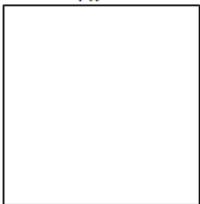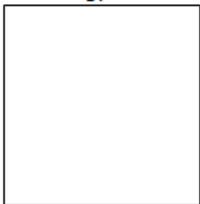How many brownies did Stan cut?

Sample Student Work:

3) **Standard(s): 2.G.A.3**

Source: https://grade2commoncoremath.wikispaces.hcpss.org/Assessing+2.G.3
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Item Prompt:

Name:_____   Date: _____ (2.G.3)

Draw a line or lines to show the following:

A. 1 square = 2 rectangles
B. 1 square = 4 squares
C. 1 square = 2 triangles
D. 1 square = 3 rectangles

A.	B.	C.	D.

Correct Answer(s):

Students who demonstrate full accomplishment correctly divided all 4 squares according to the given criteria (2 rectangles, 4 squares, 2 triangles, 3 rectangles).