

Grade 4 Mathematics Sample TE Item C1 TL

MAT.04.TE.1.0000G.L.094 C1 TL

Sample Item Id:	MAT.04.TE.1.0000G.L.094
Grade:	04
Claim(S):	Claim 1: Concepts and Procedures Students can explain and apply mathematical concepts and interpret and carry out mathematical procedures with precision and fluency.
Assessment Target(S):	1 L: Draw and identify lines and angles, and classify shapes by properties of their lines and angles.
Content Domain:	Geometry
Standard(S):	4.G.2
Mathematical Practice(S):	2, 3, 5
DOK:	2
Item Type:	TE
Score Points:	2
Difficulty:	M
Key:	See Sample Top-Score Response.
Stimulus/Source:	
Target-Specific Attributes (E.G., Accessibility Issues):	
Notes:	Classification TE Template

Sort these four shapes. Use the characteristics labeled in the boxes below. Some shapes may belong in more than one box.



Rectangle



Rhombus



Right Triangle



Square

Click on a shape and then click inside a box to place the shape in the box. Continue as many times as necessary.

Shapes with at Least One Right Angle	Shapes with at Least One Pair of Perpendicular Sides	Shapes with at Least One Pair of Parallel Sides

Sample Top-Score Response:

Shapes with at Least One Right Angle	Shapes with at Least One Pair of Perpendicular Sides	Shapes with at Least One Pair of Parallel Sides
 Right Triangle  Square  Rectangle	 Right Triangle  Square  Rectangle	 Square  Rectangle  Rhombus

Scoring Rubric:

Responses to this item will receive 0–2 points, based on the following:

2 points: The student demonstrates thorough understanding of the classification of two-dimensional shapes by the geometric characteristics of parallelism, perpendicularity, and right angles by correctly identifying each shape that demonstrates these characteristics. The student shows understanding that some shapes should be classified in more than one box as they have more than one of the characteristics. The student completes diagram with all correct classifications as shown in the Sample Top-Score Response.

1 point: The student demonstrates good understanding of the classification of two-dimensional shapes by the geometric characteristics of parallelism, perpendicularity, and right angles. However, the student makes one or two errors related to correctly placing a shape in the boxes that account for all of the characteristics. For example, the rectangle may be placed in the box for “Shapes with At Least One Right Angle” and “Shapes with At Least One Pair of Parallel Sides,” but not in the box for “Shapes with At Least One Pair of Perpendicular Sides.”

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0 points: The student demonstrates inconsistent or no understanding of the classification of two-dimensional shapes by the geometric characteristics of parallelism, perpendicularity, and right angles. If a shape is placed in a box that doesn't match any of its characteristics, then no points are earned.

TE Information:

Item Code: MAT.04.TE.1.0000G.L.094

Template: Classification

Interaction Space Parameters:

- A. Three images of the tables above (the three categories)
 - i. False (no limit on the number of content pieces that can be placed in each region)
- B. Four images of the shapes above (rectangle, rhombus, right triangle, square)
 - i. False (no limit on the number of content pieces that can be generated)

Scoring Data:

{Right Angle=Right Triangle, Square, Rectangle; Perpendicular = Right Triangle, Square, Rectangle; Parallel = Square, Rectangle, Rhombus}=2 points
{0 errors = 2 points} {1 error = 1 point} {2 errors = 1 point}
{Right Angle = Rhombus, *; Perpendicular = *; Parallel = *} = 0
{Right Angle = *; Perpendicular = Rhombus, *; Parallel = *} = 0
{Right Angle = *; Perpendicular = *; Parallel = Triangle, *} = 0