

Geometry Concepts for Primary Grades (1 - 2)

Answer Key and Scoring Guide

<u>Item</u>	<u>Value</u>	<u>Answer</u>
1.	(1 point)	D
2.	(1 point)	C
3.	(1 point)	A
4.	(1 point)	C
5a.	(1 point)	square
5b.	(1 point)	6
6.	(1 point)	B
7.	(1-3 points)	<p>Give one point for each mathematical attribute of the shape, with a maximum of 3 points. Give points for:</p> <ul style="list-style-type: none"> 4 sides 4 vertices or corners 4 angles Trapezoid Parallel sides Right angle Finding it can be divided into a square and a triangle Size Flat shape 1 face <p>There are no points for:</p> <ul style="list-style-type: none"> Slanty line Telling what it looks like (car, paper airplane, etc.)
8.	(1 point)	D
9.	(1 point)	D
10.	(1 point)	A
11a.	(1 point)	<p>All three shapes must be used and the shapes must touch full side to full side. Possible shapes are: trapezoid, parallelogram, rectangle, triangle, hexagon (3 different ones).</p> <div style="text-align: center;"> </div>
11b.	(1-3 points)	<p>Give one point for each mathematical attribute of the shape, with a maximum of 3 points. Give points for:</p> <ul style="list-style-type: none"> Number of sides Number of vertices or corners Parallel sides

Any right angles
The name of the shape
Flat shape
1 face

There are no points for:

Slanty line
Telling what it looks like (car, paper airplane, etc.)
Telling that it is made up of 2 triangles and 1 square.

- 12a. (1 point) Shape must be one that is possible by flipping and/or turning the piece. No points are given if new shapes are added or if that configuration is not possible given the beginning shape.
- 12b. (1-3 points) 1 point is given if:
Transformational geometry vocabulary is used, but it does not match the picture of the transformation shown or there is some confusion in the use of terms.
Example: I flipped it and made it new. (Shape is actually rotated)
- 2 points are given if:
The description of the transformation matches the picture of the transformation, but is less clear. Type of transformation or direction is given, but not both. If multiple actions were taken, it was only partially reported.
Example: I turned it and the lines are on the top now. (Does not tell in which direction it was turned or how far it was turned)
- 3 points are given if:
There is a clear description of the transformation including **type(s)** (flip or reflection, turn or rotation, translation or slide) and the **direction** (horizontally, vertically, clockwise, counterclockwise, to the right, to the left, the number of times it was turned).
Example: I flipped it horizontally and then turned it to the right one turn.
13. (1-2 points) 1 point is given for each label.
The first label could be triangle, three sides, or three angles
The second label could be colored, black, or dark.
14. (1 point) The figure must have 5 sides that are easily identified. It need not be a regular pentagon.
15. (1-5 points) There are 10 shapes that should be glued onto the Venn diagram. Points are awarded using the following rubric:
5 points – All 10 shapes are in the correct place
4 points – There is one minor error (either one is missing or in the wrong place)
3 points – There are 2-3 errors in placement or there are 2-3 missing. 3 points are also given for students who have correctly sorted the pieces into 4 sides and small, but have not made an intersection.
2 points – there is some evidence of sorting (e.g. big and little)
1 point – Student glued the shapes onto the diagram.

