Name the Parts

Sort polygon parts by their number of sides.

3.MG.4.g "Subdivide a three-sided or four-sided polygon into no more than three parts and name the resulting polygons."

NAME _____ DATE _____

TRIANGLES

A triangle is a polygon with 3 straight sides. A part with 3 sides is a triangle.

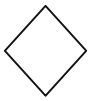
This equilateral triangle has 3 sides.



QUADRILATERALS

A quadrilateral is a polygon with 4 straight sides. A part with 4 sides is a quadrilateral.

This rhombus has 4 sides.



1 SORT

8 items

For Part 1, circle the category for each figure, then for Part 2, choose two figures and explain how you counted the sides.

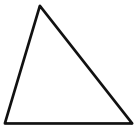
1. 

Figure 1

TRIANGLES FOUR SIDES

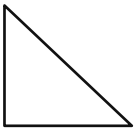
2. 

Figure 2

TRIANGLES FOUR SIDES

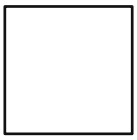
3. 

Figure 3

TRIANGLES FOUR SIDES

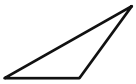
4. 

Figure 4

TRIANGLES FOUR SIDES

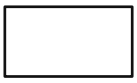
5. 

Figure 5

TRIANGLES FOUR SIDES

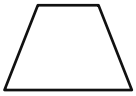
6. 

Figure 6

TRIANGLES FOUR SIDES

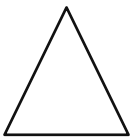
7. 

Figure 7

TRIANGLES FOUR SIDES

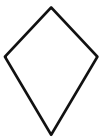
8. 

Figure 8

TRIANGLES FOUR SIDES

2 PROVE IT

Explain your thinking

Pick two items from Part 1. For each one, tell how you knew where it belonged.

ITEM # _____ **HOW I KNEW** _____

ITEM # _____ **HOW I KNEW** _____

3 MAKE YOUR OWN

One of each

Write one new example of a triangle and one new example of a quadrilateral. Tell how many sides each shape has.

TRIANGLES _____

FOUR SIDES _____

CHALLENGE

Draw a four-sided polygon. Draw two line segments inside it to make 3 polygon parts. Name each part.

ANSWER KEY

Name the Parts

GRADE 3 · 3.MG.4.g

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (triangle)	**TRIANGLES**	It has 3 sides, so it is a triangle.
2	Figure 2 (right_triangle)	**TRIANGLES**	It has 3 sides, so it is a triangle.
3	Figure 3 (square)	**FOUR SIDES**	It has 4 sides, so it is a quadrilateral.
4	Figure 4 (obtuse_triangle)	**TRIANGLES**	It has 3 sides, so it is a triangle.
5	Figure 5 (rectangle)	**FOUR SIDES**	It has 4 sides, so it is a quadrilateral.
6	Figure 6 (trapezoid)	**FOUR SIDES**	It has 4 sides, so it is a quadrilateral.
7	Figure 7 (isosceles)	**TRIANGLES**	It has 3 sides, so it is a triangle.
8	Figure 8 (kite)	**FOUR SIDES**	It has 4 sides, so it is a quadrilateral.

PART 2 · PROVE IT

Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 · MAKE YOUR OWN (SAMPLE ANSWERS)

- **TRIANGLES**: A scalene triangle has 3 sides.
- **FOUR SIDES**: A parallelogram has 4 sides.

Challenge: Draw a square with a diagonal from the bottom left corner to the top right corner and a segment from the top left corner to the middle of the diagonal. The 3 parts are triangles.

Items 1, 2, 4, and 7 are TRIANGLES. Items 3, 5, 6, and 8 are FOUR SIDES, or quadrilaterals; for Part 2, students should support each choice by counting 3 or 4 sides.