Four Side Detectives

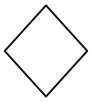
Sort shapes by counting their straight sides.

3.GSR.6.2 "Classify, compare, and contrast polygons, with a focus on quadrilaterals, based on properties. Analyze specific 3-dimensional figures to identify and describe quadrilaterals as faces of these figures."

NAME _____ DATE _____

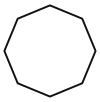
FOUR-SIDED

A quadrilateral is a closed shape with 4 straight sides. Count each side to check.

This rhombus has 4 straight sides. 

NOT FOUR-SIDED

Some shapes have more or fewer than 4 straight sides. They are not quadrilaterals.

This octagon has 8 straight sides. 

1 SORT

8 items

For each figure, circle FOUR SIDES or NOT FOUR, then in PROVE IT choose two figures and tell how you counted their sides.

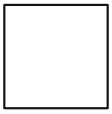
1. 

Figure 1

FOUR SIDES | NOT FOUR

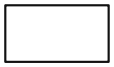
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Figure 2

FOUR SIDES | NOT FOUR

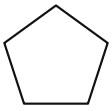
3. 

Figure 3

FOUR SIDES | NOT FOUR

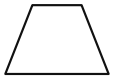
4. 

Figure 4

FOUR SIDES | NOT FOUR

5. 

Figure 5

FOUR SIDES | NOT FOUR

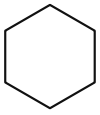
6. 

Figure 6

FOUR SIDES | NOT FOUR

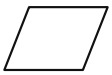
7. 

Figure 7

FOUR SIDES | NOT FOUR

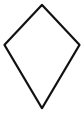
8. 

Figure 8

FOUR SIDES | NOT FOUR

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

Draw one new shape for FOUR SIDES and one new shape for NOT FOUR.

FOUR SIDES

NOT FOUR

CHALLENGE

Draw a rectangular prism. Circle two faces that are quadrilaterals, and explain why those faces belong in FOUR SIDES.

ANSWER KEY

Four Side Detectives

GRADE 3 · 3.GSR.6.2

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (square)	**FOUR SIDES**	A square is a closed shape with 4 straight sides.
2	Figure 2 (rectangle)	**FOUR SIDES**	A rectangle is a closed shape with 4 straight sides.
3	Figure 3 (pentagon)	**NOT FOUR**	A pentagon has 5 straight sides.
4	Figure 4 (trapezoid)	**FOUR SIDES**	A trapezoid is a closed shape with 4 straight sides.
5	Figure 5 (triangle)	**NOT FOUR**	A triangle has 3 straight sides.
6	Figure 6 (hexagon)	**NOT FOUR**	A hexagon has 6 straight sides.
7	Figure 7 (parallelogram)	**FOUR SIDES**	A parallelogram is a closed shape with 4 straight sides.
8	Figure 8 (kite)	**FOUR SIDES**	A kite is a closed shape with 4 straight sides.

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)

- **FOUR SIDES**: A right trapezoid.
- **NOT FOUR**: A circle.

Challenge: A rectangular prism has 6 rectangle faces. I circled two rectangle faces because each one has 4 straight sides.

Part 1 answers are FOUR SIDES for 1, 2, 4, 7, and 8, and NOT FOUR for 3, 5, and 6. In PROVE IT, accept explanations that correctly count the straight sides of the two chosen figures.