

Side Sleuth Sort

Sort shapes by their sides.

CCSS.Math.Content.3.G.A.1 "Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals)."

NAME _____

DATE _____

HAS FOUR SIDES

This is a closed shape with exactly four straight sides.

It is called a quadrilateral.

A kite is a closed shape with four straight sides.

DOES NOT HAVE FOUR SIDES

This shape does not have exactly four straight sides. It

is not a quadrilateral.

A hexagon has six straight sides.

1 SORT _____ 8 items

For each item, circle FOUR SIDES or NOT FOUR, then choose two items and explain how you knew where each one belongs.

1. a square

FOUR SIDES

NOT FOUR

2. a triangle

FOUR SIDES

NOT FOUR

3. a trapezoid

FOUR SIDES

NOT FOUR

4. a rhombus

FOUR SIDES

NOT FOUR

5. a circle

FOUR SIDES

NOT FOUR

6. a rectangle

FOUR SIDES

NOT FOUR

7. a pentagon

FOUR SIDES

NOT FOUR

8. an oval

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

Write one new example for FOUR SIDES and one new example for NOT FOUR.

FOUR SIDES _____

NOT FOUR _____

CHALLENGE

Draw a closed shape with four straight sides that is not a square, rectangle, or rhombus. Label its four sides.

PART 1 • SORT

#	ITEM	CATEGORY	WHY
1	a square	FOUR SIDES	A square has four straight sides.
2	a triangle	NOT FOUR	A triangle has three straight sides.
3	a trapezoid	FOUR SIDES	A trapezoid has four straight sides.
4	a rhombus	FOUR SIDES	A rhombus has four straight sides.
5	a circle	NOT FOUR	A circle has no straight sides.
6	a rectangle	FOUR SIDES	A rectangle has four straight sides.
7	a pentagon	NOT FOUR	A pentagon has five straight sides.
8	an oval	NOT FOUR	An oval has no 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 parallelogram
- **NOT FOUR:** a heptagon

Challenge: A kite with side lengths 3 cm, 3 cm, 5 cm, and 5 cm, with its four sides labeled A, B, C, and D.

For Part 2, accept explanations that correctly count the shape's straight sides. For Part 3 and the challenge, accept any accurate examples or drawings that meet the stated conditions.