

Side Count Sort

Find shapes with exactly four 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 POLYGONS

A four-sided polygon has exactly 4 straight sides. It is also called a quadrilateral.

A four-sided tile belongs in FOUR-SIDED.

OTHER SHAPES

These shapes do not have exactly 4 straight sides, or they are not polygons. They do not belong in the four-sided group.

A six-sided honeycomb cell belongs in OTHERS.

1 SORT

8 items

For each item, circle FOUR-SIDED or OTHERS, then choose two items, one from each group, and write how the number of straight sides proves each choice.

1. 1. A triangle

FOUR-SIDED

OTHERS

2. 2. A rectangle

FOUR-SIDED

OTHERS

3. 3. A circle

FOUR-SIDED

OTHERS

4. 4. A pentagon

FOUR-SIDED

OTHERS

5. 5. A rhombus

FOUR-SIDED

OTHERS

6. 6. A square

FOUR-SIDED

OTHERS

7. 7. A hexagon

FOUR-SIDED

OTHERS

8. 8. A trapezoid

FOUR-SIDED

OTHERS

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-SIDED and one new example for OTHERS.

FOUR-SIDED _____

OTHERS _____

CHALLENGE

A rectangular prism has rectangle faces. Does one rectangle face belong in FOUR-SIDED or OTHERS? Explain.

PART 1 • SORT

#	ITEM	CATEGORY	WHY
1	1. A triangle	OTHERS	A triangle has 3 straight sides.
2	2. A rectangle	FOUR-SIDED	A rectangle has 4 straight sides.
3	3. A circle	OTHERS	A circle has no straight sides.
4	4. A pentagon	OTHERS	A pentagon has 5 straight sides.
5	5. A rhombus	FOUR-SIDED	A rhombus has 4 straight sides.
6	6. A square	FOUR-SIDED	A square has 4 straight sides.
7	7. A hexagon	OTHERS	A hexagon has 6 straight sides.
8	8. A trapezoid	FOUR-SIDED	A trapezoid has 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-SIDED:** A parallelogram.
- **OTHERS:** An oval.

Challenge: A rectangle face belongs in FOUR-SIDED because it has 4 straight sides.

Items 1, 3, 4, and 7 are OTHERS. Items 2, 5, 6, and 8 are FOUR-SIDED. Accept any accurate new examples that match the number of straight sides.