Fold and Match

Sort figures by their matching halves.

2.GSR.7.2 "Identify at least one line of symmetry in everyday objects to describe each object as a whole."

NAME _____ DATE _____

SAME HALVES

A figure is SAME when one straight fold line makes its two halves match.

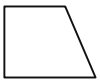
A semicircle is SAME because a fold from the middle of its flat side to the curved edge makes matching halves.



NOT SAME HALVES

A figure is NOT SAME when no straight fold line makes its halves match.

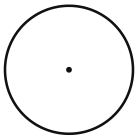
A right trapezoid is NOT SAME because no straight fold makes matching halves.

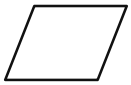


1 SORT

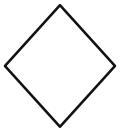
8 items

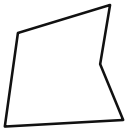
Look at each figure, then circle SAME if at least one straight fold line makes matching halves or NOT SAME if no fold line does.

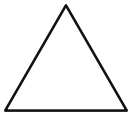
1.  Figure 1 **SAME** **NOT SAME**

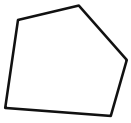
2.  Figure 2 **SAME** **NOT SAME**

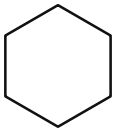
3.  Figure 3 **SAME** **NOT SAME**

4.  Figure 4 **SAME** **NOT SAME**

5.  Figure 5 **SAME** **NOT SAME**

6.  Figure 6 **SAME** **NOT SAME**

7.  Figure 7 **SAME** **NOT SAME**

8.  Figure 8 **SAME** **NOT SAME**

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

Part 2, PROVE IT: Pick two numbered figures, one SAME and one NOT SAME. Tell where you would draw a fold line for the SAME figure, and tell why no fold line works for the NOT SAME figure. Part 3, MAKE YOUR OWN: Write one new everyday object for each category.

SAME _____

NOT SAME _____

CHALLENGE

Draw an everyday object that has two or more fold lines that make matching halves. Draw two of the lines.

ANSWER KEY

Fold and Match

GRADE 2 · 2.GSR.7.2

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (circle)	**SAME**	A circle has many lines of symmetry through its center.
2	Figure 2 (parallelogram)	**NOT SAME**	A general parallelogram has no line of symmetry.
3	Figure 3 (isosceles)	**SAME**	An isosceles triangle has one line of symmetry from the top vertex to the middle of the base.
4	Figure 4 (rhombus)	**SAME**	A rhombus has lines of symmetry along its diagonals.
5	Figure 5 (polygon)	**NOT SAME**	This irregular polygon cannot be split into matching halves by a straight line.
6	Figure 6 (equilateral)	**SAME**	An equilateral triangle has three lines of symmetry.
7	Figure 7 (polygon)	**NOT SAME**	This irregular polygon has no line of symmetry.
8	Figure 8 (hexagon)	**SAME**	A regular hexagon has lines of symmetry through its center.

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)

- **SAME**: a round dinner plate
- **NOT SAME**: a mitten

Challenge: A square tile. Draw one line from top to bottom through the middle and one line from side to side through the middle.

Answers in Part 2 should name one SAME figure and one NOT SAME figure and use the idea of matching halves. Accept other everyday examples in Part 3 when the object clearly has, or does not have, at least one line of symmetry.