Half Match Hunt

Find shapes that can make two matching halves.

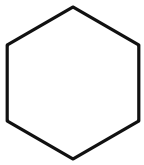
2.MG.3.c "Describe the two resulting figures formed by a line of symmetry as being congruent (having the same shape and size)."

NAME _____ DATE _____

MAKES MATCHING HALVES

A line of symmetry makes two halves that match exactly when folded across that line. The halves have the same shape and size: they are congruent.

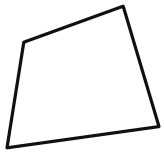
A regular hexagon is MATCHING.



DOES NOT MAKE MATCHING HALVES

No fold line makes both halves of this figure match exactly by reflection. Two pieces can sometimes be congruent after a turn without matching by a fold; that does not make a line of symmetry.

This lopsided four-sided figure is DIFFERENT.



1 SORT

8 items

For each figure, circle MATCHING or DIFFERENT, then choose two figures and explain how you knew.

1.

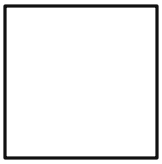


Figure 1

MATCHING **DIFFERENT**

2.

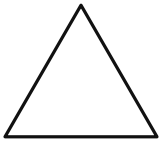


Figure 2

MATCHING **DIFFERENT**

3.

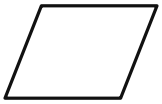


Figure 3

MATCHING **DIFFERENT**

4.

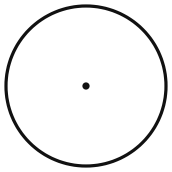


Figure 4

MATCHING **DIFFERENT**

5.

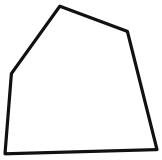


Figure 5

MATCHING **DIFFERENT**

6.

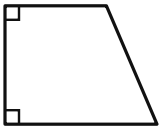


Figure 6

MATCHING **DIFFERENT**

7.



Figure 7

MATCHING **DIFFERENT**

8.

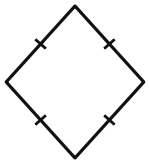


Figure 8

MATCHING **DIFFERENT**

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 MATCHING example and one new DIFFERENT example.

MATCHING _____

DIFFERENT _____

CHALLENGE

Draw a shape with two different lines of symmetry. Draw both lines, then explain why each line makes matching halves.

ANSWER KEY

Half Match Hunt

GRADE 2 · 2.MG.3.c

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (square)	**MATCHING**	A square can be split by a line of symmetry into two congruent parts.
2	Figure 2 (equilateral)	**MATCHING**	An equilateral triangle has lines of symmetry that make two congruent parts.
3	Figure 3 (parallelogram)	**DIFFERENT**	THIS pictured parallelogram is neither a rectangle nor a rhombus, so it has no reflection line. Its diagonal makes congruent triangles, but they do not match by folding across that diagonal.
4	Figure 4 (circle)	**MATCHING**	Any line through the center of a circle makes two congruent halves.
5	Figure 5 (polygon)	**DIFFERENT**	This irregular five-sided figure has no line of symmetry.
6	Figure 6 (right_trapezoid)	**DIFFERENT**	This pictured right trapezoid has no fold line that makes both halves match exactly.
7	Figure 7 (rectangle)	**MATCHING**	A rectangle has vertical and horizontal lines of symmetry, each making congruent halves.
8	Figure 8 (rhombus)	**MATCHING**	Each diagonal of this rhombus is a fold line: the halves reflect onto each other and are congruent.

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)

- **MATCHING**: A regular pentagon is MATCHING.
- **DIFFERENT**: A scalene triangle is DIFFERENT.

Challenge: A square. Draw one line from top left to bottom right and one line from top right to bottom left. Each line splits the square into two congruent triangles.

For Part 2, students should name a possible line of symmetry for a MATCHING figure or explain why the parts would not match for a DIFFERENT figure. Accept other correctly drawn shapes and valid explanations in Parts 3 and the challenge. Judge matching halves by reflection across a fold line, not by congruence alone. Rhombi and rectangles are also parallelograms and have reflection lines; the DIFFERENT classification applies only to the pictured nonrectangular, nonrhombus parallelogram.