

Share Shape Sort

Same amount, different shapes.

2.GSR.7.4 "Recognize that equal shares of identical wholes may be different shapes within the same whole."

NAME _____

DATE _____

EQUAL SHARES

Shares are equal when each part is the same amount of one whole. The parts can have different shapes.

A star-shaped card is split into 5 same-size parts. The parts look different, but each is one fifth.

NOT EQUAL SHARES

Shares are not equal when one part is more or less than another part of the same whole.

A loaf is cut so one piece is much wider than the other pieces. The pieces are not equal shares.

1 SORT _____ 8 items

Circle EQUAL or NOT EQUAL for each item, then choose two items and explain how you knew.

1. A circle is split into 4 equal wedges. EQUAL NOT EQUAL
2. A square is split by a diagonal into 2 equal triangles. EQUAL NOT EQUAL
3. A rectangle is split into 3 parts, one large part and two small parts. EQUAL NOT EQUAL
4. A hexagon is split into 3 equal-size pieces. The pieces have different shapes. EQUAL NOT EQUAL
5. A triangle is split into 2 parts. One part is larger than the other. EQUAL NOT EQUAL
6. A circle is split into 4 parts. One part is half the circle, and the other three parts share the rest. EQUAL NOT EQUAL
7. A rectangle is split into 4 equal-size parts. Two parts are triangles and two parts are rectangles. EQUAL NOT EQUAL
8. A square is split into 3 equal strips. EQUAL NOT EQUAL

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 EQUAL example and one new NOT EQUAL example. Tell what whole is split in each example.

EQUAL

NOT EQUAL

CHALLENGE

Draw a rectangle split into 3 equal shares. Make two shares triangles and one share a rectangle.

PART 1 • SORT

#	ITEM	CATEGORY	WHY
1	A circle is split into 4 equal wedges.	EQUAL	All four parts are the same amount.
2	A square is split by a diagonal into 2 equal triangles.	EQUAL	The diagonal makes two same-size halves.
3	A rectangle is split into 3 parts, one large part and two small parts.	NOT EQUAL	The parts are different amounts.
4	A hexagon is split into 3 equal-size pieces. The pieces have different shapes.	EQUAL	Each piece is the same amount, even though the shapes differ.
5	A triangle is split into 2 parts. One part is larger than the other.	NOT EQUAL	One part is more than the other part.
6	A circle is split into 4 parts. One part is half the circle, and the other three parts share the rest.	NOT EQUAL	The half-circle part is larger than each of the other parts.
7	A rectangle is split into 4 equal-size parts. Two parts are triangles and two parts are rectangles.	EQUAL	All four parts are equal amounts, even though they are different shapes.
8	A square is split into 3 equal strips.	EQUAL	The three strips are the same amount.

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)

- **EQUAL:** A paper heart is split into 4 equal-size pieces. The pieces do not all have the same shape.
- **NOT EQUAL:** An oval is split into one large piece and two small pieces.

Challenge: Draw a 3-by-2 rectangle. Split a 2-by-2 square on the left with a diagonal, and leave the 1-by-2 part on the right as a rectangle. Each share has 2 square units.

Items 1, 2, 4, 7, and 8 are EQUAL. Items 3, 5, and 6 are NOT EQUAL. For Part 2, accept explanations that compare the amount of each part, not the shape alone.