

Flat or Solid?

Sort flat figures from solid figures.

2.MG.4.d "Compare and contrast plane and solid figures (circles/spheres, squares/cubes, and rectangles/rectangular prisms) according to their characteristics (e.g., number and shapes of their faces, edges, vertices)."

NAME _____

DATE _____

FLAT FIGURES

A flat figure has length and width. It does not have depth, so you cannot hold it like an object.

A triangle is FLAT.

SOLID FIGURES

A solid figure has length, width, and depth. You can hold it, and it may have faces, edges, or vertices.

A cone is SOLID.

1 SORT _____ 8 items

Circle FLAT or SOLID for each figure, then for PROVE IT, choose two item numbers and explain how you knew.

1. A circle

FLAT

SOLID

2. A cube

FLAT

SOLID

3. A rectangular prism

FLAT

SOLID

4. A square

FLAT

SOLID

5. A rectangle

FLAT

SOLID

6. A flat shape with 4 equal sides

FLAT

SOLID

7. A sphere

FLAT

SOLID

8. A flat shape with 2 long sides and 2 short sides

FLAT

SOLID

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 FLAT example and one new SOLID example.

FLAT _____

SOLID _____

CHALLENGE

Compare a circle and a sphere. Tell one way they are alike and one way they are different.

PART 1 • SORT

#	ITEM	CATEGORY	WHY
1	A circle	FLAT	A circle is a flat plane figure.
2	A cube	SOLID	A cube is solid and has six square faces.
3	A rectangular prism	SOLID	A rectangular prism is a solid figure with depth.
4	A square	FLAT	A square is a flat plane figure.
5	A rectangle	FLAT	A rectangle is a flat plane figure.
6	A flat shape with 4 equal sides	FLAT	This describes a square, which is flat.
7	A sphere	SOLID	A sphere is solid and can be held.
8	A flat shape with 2 long sides and 2 short sides	FLAT	This describes a rectangle, which is flat.

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)

- **FLAT:** A pentagon is FLAT.
- **SOLID:** A cylinder is SOLID.

Challenge: Both are round. A circle is flat, but a sphere is solid.

For PROVE IT, accept explanations that name flat versus solid or describe depth and whether the figure can be held. Students may use other correct examples for Part 3.