Surface Sort

Sort solids by what you can feel.

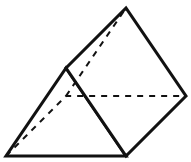
2.GM.1.4 "Sort three-dimensional shapes based on attributes such as number of faces, vertices, and edges."

NAME _____ DATE _____

ONLY FLAT FACES

Every outside part is flat. There are no rounded surfaces.

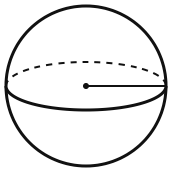
A tent-shaped block



HAS A CURVED SURFACE

At least one outside part is rounded. The solid may have flat faces, too.

A ball



1 SORT

8 items

Look at each figure and circle FLAT or CURVED.

1.

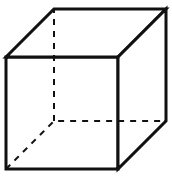


Figure 1

FLAT **CURVED**

2.

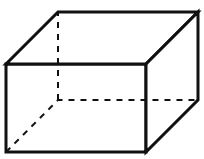


Figure 2

FLAT **CURVED**

3.

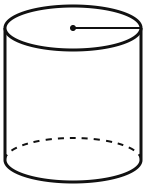


Figure 3

FLAT **CURVED**

4.

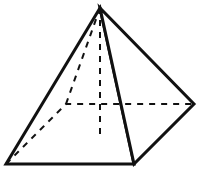


Figure 4

FLAT **CURVED**

5.

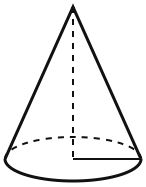


Figure 5

FLAT **CURVED**

6.



Figure 6

FLAT **CURVED**

7.

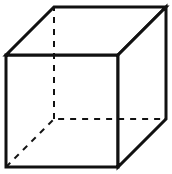


Figure 7

FLAT **CURVED**

8.

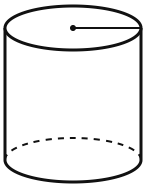


Figure 8

FLAT **CURVED**

2 PROVE IT

Explain your thinking

Pick one figure from each group and explain how you knew where it belonged.

ITEM # _____ **HOW I KNEW** _____

ITEM # _____ **HOW I KNEW** _____

3 MAKE YOUR OWN

One of each

Write the name of one real-life object with only flat faces and one with a curved surface. Use objects not named on this page.

FLAT _____

CURVED _____

CHALLENGE

Challenge: Name a solid that has both a flat face and a curved surface. Tell what each part is like.

ANSWER KEY # Surface Sort

GRADE 2 · 2.GM.1.4

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (cube)	**FLAT**	All six faces are flat.
2	Figure 2 (prism)	**FLAT**	All its faces are flat.
3	Figure 3 (cylinder)	**CURVED**	Its side is curved.
4	Figure 4 (pyramid)	**FLAT**	All its faces are flat.
5	Figure 5 (cone)	**CURVED**	Its side is curved.
6	Figure 6 (hemisphere)	**CURVED**	Its rounded part is curved.
7	Figure 7 (cube)	**FLAT**	All six faces are flat.
8	Figure 8 (cylinder)	**CURVED**	Its side is curved.

PART 2 · PROVE IT

Task: Pick one figure from each group and explain how you knew where it belonged.
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 brick
- **CURVED**: A soda can

Challenge: A cone has a flat circle on the bottom and a curved side.

For Part 2, a student might write, “Figure 1 has only flat faces. Figure 3 has a curved side.” Accept other correct objects for Part 3.