Tip Top Sort

Name each solid, then sort by its pointed tip.

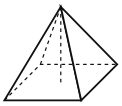
4.MG.6.a "Identify concrete models and pictorial representations of solid figures (cube, rectangular prism, square pyramid, sphere, cone, and cylinder)."

NAME _____ DATE _____

HAS A POINTED TIP

A pointed tip is one sharp place where a solid narrows to one point. A cone or pyramid can have a pointed tip.

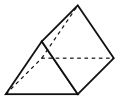
This pyramid model narrows to one pointed tip.



NO POINTED TIP

Some solids do not narrow to one pointed tip. They may have flat faces, curved surfaces, or both.

This triangular prism has no pointed tip.



1 SORT

8 items

For each model, write its name, cube, rectangular prism, square pyramid, sphere, cone, or cylinder, circle its group, then choose two models and explain how you knew their groups.

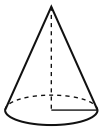
1. 

Figure 1

TIP NO TIP

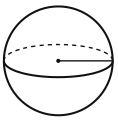
2. 

Figure 2

TIP NO TIP

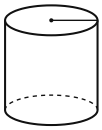
3. 

Figure 3

TIP NO TIP

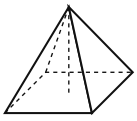
4. 

Figure 4

TIP NO TIP

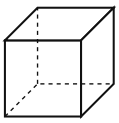
5. 

Figure 5

TIP NO TIP

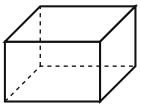
6. 

Figure 6

TIP NO TIP

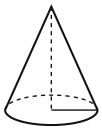
7. 

Figure 7

TIP NO TIP

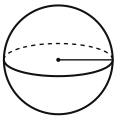
8. 

Figure 8

TIP NO TIP

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 solid example with a pointed tip and one new solid example with no pointed tip.

TIP _____

NO TIP _____

CHALLENGE

Choose one solid with a pointed tip and one with no pointed tip. Write both names, then write one way their surfaces are different.

ANSWER KEY

Tip Top Sort

GRADE 4 · 4.MG.6.a

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (cone)	**TIP**	Cone. It narrows to one pointed tip.
2	Figure 2 (sphere)	**NO TIP**	Sphere. It is round and has no pointed tip.
3	Figure 3 (cylinder)	**NO TIP**	Cylinder. It has two circular flat faces and no pointed tip.
4	Figure 4 (square_pyramid)	**TIP**	Square pyramid. Its faces meet at one pointed tip.
5	Figure 5 (cube)	**NO TIP**	Cube. It has corners, but it does not narrow to one pointed tip.
6	Figure 6 (rectangular_prism)	**NO TIP**	Rectangular prism. It has corners, but no single pointed tip.
7	Figure 7 (cone)	**TIP**	Cone. It has one pointed tip.
8	Figure 8 (sphere)	**NO TIP**	Sphere. It has no pointed tip.

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)

- **TIP**: Pointed tip: a cone.
- **NO TIP**: No pointed tip: a rectangular prism.

Challenge: A cone has a pointed tip, and a rectangular prism has no pointed tip. A cone has a curved surface, and a rectangular prism has only flat faces.

Accept accurate solid names even if students use lowercase letters. In Part 2, students should name each chosen solid and refer to the presence or absence of one pointed tip.