Solid Shape Sort

Look at the faces to sort each solid.

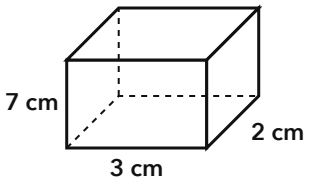
5.GM.1.2 "Describe, identify, and classify three-dimensional figures (cubes, rectangular prisms, and pyramids) and their attributes (number of edges, faces, vertices, shapes of faces), given various mathematical models."

NAME _____ DATE _____

BOX-SHAPED PRISM

A box-shaped prism has six faces. Every face is a rectangle, and a square counts as a rectangle.

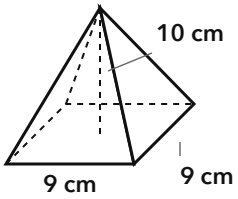
A juice box



PYRAMID

A pyramid has one base. Its triangular side faces meet at one vertex, or point.

A pyramid-shaped tent



1 SORT

8 items

For Part 1, circle PRISM or PYRAMID for each figure; for Part 2, choose one figure from each group and explain how its faces helped you decide.

1.

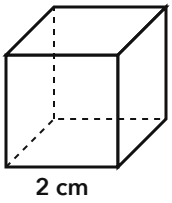


Figure 1

PRISM PYRAMID

2.

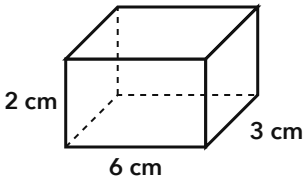


Figure 2

PRISM PYRAMID

3.

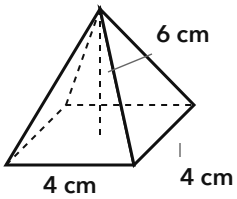


Figure 3

PRISM **PYRAMID**

4.

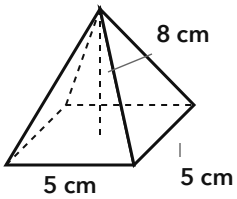


Figure 4

PRISM **PYRAMID**

5.

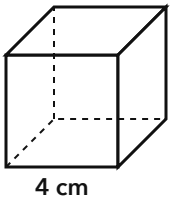


Figure 5

PRISM **PYRAMID**

6.

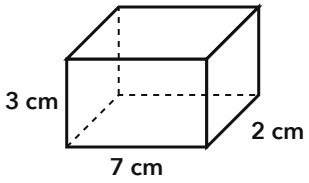


Figure 6

PRISM **PYRAMID**

7.

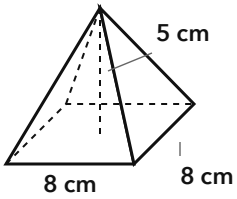


Figure 7

PRISM **PYRAMID**

8.

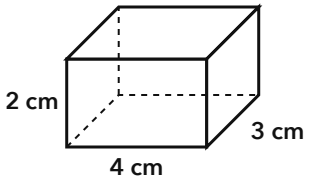


Figure 8

PRISM **PYRAMID**

2 PROVE IT

Explain your thinking

Choose one figure from each group and explain how its faces helped you decide.

ITEM # _____ **HOW I KNEW** _____

ITEM # _____ **HOW I KNEW** _____

3 MAKE YOUR OWN

One of each

For Part 3, write one real-world example of each category that is different from the examples in the rule box.

PRISM _____

PYRAMID _____

CHALLENGE

A cube has square faces. Explain why it belongs with box-shaped prisms instead of pyramids.

ANSWER KEY

Solid Shape Sort

GRADE 5 · 5.GM.1.2

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (cube)	**PRISM**	All six faces are squares, which are rectangles.
2	Figure 2 (prism)	**PRISM**	It has six rectangular faces.
3	Figure 3 (pyramid)	**PYRAMID**	Its triangular side faces meet at one vertex.
4	Figure 4 (pyramid)	**PYRAMID**	It has one base and triangular side faces that meet at one vertex.
5	Figure 5 (cube)	**PRISM**	Its six square faces are also rectangular faces.
6	Figure 6 (prism)	**PRISM**	It has six rectangular faces.
7	Figure 7 (pyramid)	**PYRAMID**	Its triangular side faces meet at one vertex.
8	Figure 8 (prism)	**PRISM**	It has six rectangular faces.

PART 2 · PROVE IT

Task: Choose one figure from each group and explain how its faces helped you decide.
Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 · MAKE YOUR OWN (SAMPLE ANSWERS)

- **PRISM**: A cereal box is shaped like a box-shaped prism.
- **PYRAMID**: A pyramid-shaped paperweight has triangular sides that meet at one point.

Challenge: A cube has six square faces, and squares are rectangles. It does not have triangular side faces that meet at one vertex.

Part 1 answers are PRISM, PRISM, PYRAMID, PYRAMID, PRISM, PRISM, PYRAMID, PRISM. For Part 2, accept explanations that identify rectangular faces for a prism and triangular side faces meeting at one vertex for a pyramid.