## Problem Solving: Use Objects and Reasoning

Find the volume and surface area of each figure of centimeter cubes.
1.

2.

3.

4.

5.

6.

7. Make a figure of cubes that has a volume of $6 \mathrm{~cm}^{3}$ and a surface area of $22 \mathrm{~cm}^{2}$. Draw your figure.
8. Critical Thinking Without building a model, tell whether a long row of 8 cubes or a cube made from 8 cubes would have a greater surface area. Explain.
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9. Make a figure that has the same
volume as the diagram, but a greater surface area. Draw your figure.

10. Writing to Explain Find the volume and surface area of these figures. Then describe the pattern(s) you see. Can you determine the volume of the next element in the pattern? The surface area? Explain.


