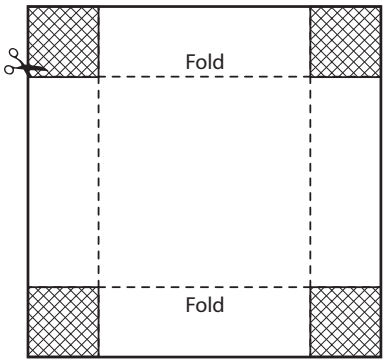
Name _____ Date _____

Volume of Tanks

1. Use the following steps to make a tank that is 2 cm × 11 cm × 11 cm.

- Cut out the 15 cm × 15 cm grid.
- Color a 2 cm × 2 cm square in each corner.
- Cut off the 2 × 2 squares in each corner.
- Fold to make a tank (a box without a top).



Name _____ Date _____

2. What is the volume of the 2 cm × 11 cm tank? _____

3. Work with a group of students to make other tanks from a 15 cm × 15 cm grid. Record the volume of each tank below.

	Height cm	Width cm	Length cm	Volume cm^3
A.	2	11	11	
B.	1	13	13	
C.	3			
D.	4			
E.	5			
F.	6			
G.	7			

4. Which tank in Question 3 has the largest volume? Show or tell how you know.

5. Professor Peabody said he made a tank from the 15 cm by 15 cm grid with a height of 8 cm. Draw and label a picture of his tank.

Name _____ Date _____

6. Use a calculator to complete the table. Each shape is a box.

	Height	Width	Length	Volume
A.	5 cm	15 cm	15 cm	
B.	10 yd.	12 yd.	yd.	960 $yd.^3$
C.	in.	45 in.	70 in.	47,250 $in.^3$
D.	117 ft.	98 ft.	ft.	573,300 $ft.^3$
E.	50 cm	cm	50 cm	125,000 cm^3
F.	m	6.5 m	5.5 m	429 m^3

G. Show or tell how you solved Question 6B.

H. A tank is 5.1 cm × 15.2 cm × 15.2 cm. Circle the best estimate for the volume. Explain your thinking.

1125 cm^3 1200 cm^3 2000 cm^3