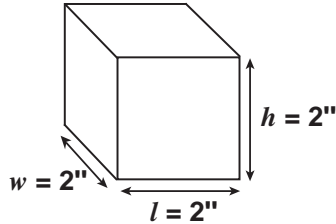


Table of Contents

How to Use This Book	3	Practice Multiplying 3-Digit Numbers Without Regrouping	27
NCTM Standards	4	Practice Multiplying 4-Digit Numbers Without Regrouping	28
Unit 1		Unit 7	
How to Multiply by Repeated Addition and Counting Sets	5	How to Multiply 2-, 3-, and 4-Digit Numbers with Regrouping	29
Practice Multiplying by Repeated Addition	6	Practice Regrouping One Time	30
Practice Counting Sets.	7	Practice Regrouping More Than One Time	31
Practice Using Factors to Find the Products	8	Practice Multiplying by Regrouping	32
Unit 2		Unit 8	
How to Multiply by 2's and 3's	9	How to Use Multiplication in Different Ways	33
Practice Doubling	10	Practice Finding the Volume	34
Practice Using Multiplication Order.	11	Practice Estimating Products	35
Practice Multiplying by 2's and 3's	12	Practice Multiplying with Decimals	36
Unit 3		Unit 9	
How to Multiply by 0's, 1's, 4's, and 5's	13	How to Use Graphs and Order of Operation in Multiplication Problems.	37
Practice Multiplying by 0's and 1's	14	Practice Using Graphs to Multiply	38
Practice Multiplying by 4's	15	Practice Order of Operation in Multiplication Problems	39
Practice Multiplying by 5's	16	Practice Multiplication Word Problems	40
Unit 4		Unit 10 (Brain Teasers)	
How to Multiply by 6's, 7's, and 8's	17	How to Use Multiplication in Brain Teasers, Problem Solving, and Technology	41
Practice Multiplying by 6's	18	Uncover the Multiplication Pattern.	42
Practice Multiplying by 7's	19	Multiply to Decipher the Hidden Message	43
Practice Multiplying by 8's	20	Unit 11 (Problem Solving)	
Unit 5		Graph It!	44
How to Put It All Together.	21	Using Multiplication at the Candy Shop.	45
Practice Multiplying by 9's	22	Unit 12 (Technology)	
Practice Multiplication by Playing Six-in-a-Row	23	Math Games on the Internet.	46
Practice Completing a Multiplication Table	24	Answer Key.	47
Unit 6			
How to Multiply 2-, 3-, and 4-Digit Numbers Without Regrouping.	25		
Practice Multiplying 2-Digit Numbers Without Regrouping	26		

The number of small cubes that will fit into a large cube (box) is the volume. To find the volume of a cube, multiply the length times the width times the height.

The formula looks like this: $V = l \times w \times h$



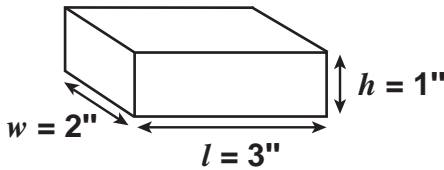
$$V = 2'' \times 2'' \times 2''$$

$$V = 4'' \times 2''$$

$$V = 8 \text{ cubic inches}$$

Directions: Find the volume for each shape.

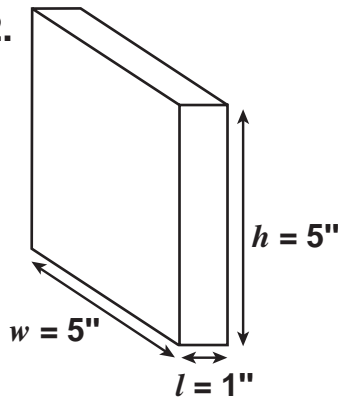
1.



$$\frac{\quad}{l} \times \frac{\quad}{w} \times \frac{\quad}{h} = \underline{\quad}$$

The volume is
 _____ cubic inches.

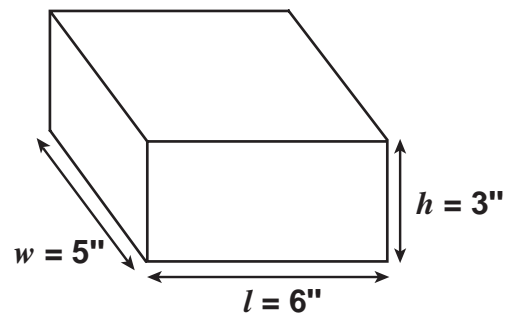
2.



$$\frac{\quad}{l} \times \frac{\quad}{w} \times \frac{\quad}{h} = \underline{\quad}$$

The volume is
 _____ cubic inches.

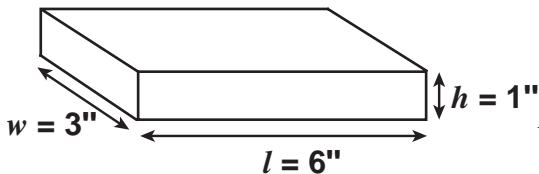
3.



$$\frac{\quad}{l} \times \frac{\quad}{w} \times \frac{\quad}{h} = \underline{\quad}$$

The volume is
 _____ cubic inches.

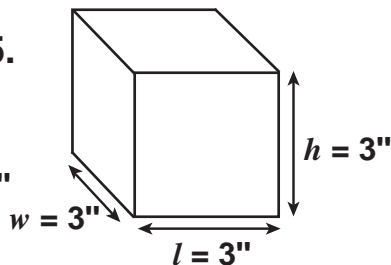
4.



$$\frac{\quad}{l} \times \frac{\quad}{w} \times \frac{\quad}{h} = \underline{\quad}$$

The volume is
 _____ cubic inches.

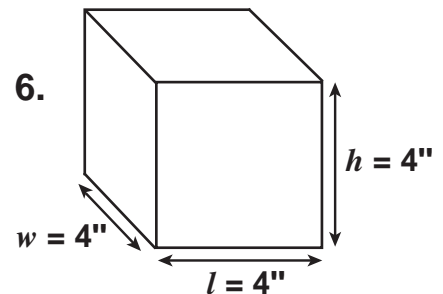
5.



$$\frac{\quad}{l} \times \frac{\quad}{w} \times \frac{\quad}{h} = \underline{\quad}$$

The volume is
 _____ cubic inches.

6.



$$\frac{\quad}{l} \times \frac{\quad}{w} \times \frac{\quad}{h} = \underline{\quad}$$


The volume is
 _____ cubic inches.

Directions: Use the picture graph below to answer the questions.






























Remember, to show your work for each problem and that each animal picture stands for 7 animals.

How many of each animal are there in all?

Legend



Each animal picture represents 7 animals.

bat								
owl								
cat								
skunk								
dog								

1.
$$\begin{array}{r} \square \\ \times \square \\ \hline \end{array}$$

There are _____ bats in all.

2.
$$\begin{array}{r} \square \\ \times \square \\ \hline \end{array}$$

There are _____ owls in all.

3.
$$\begin{array}{r} \square \\ \times \square \\ \hline \end{array}$$

There are _____ cats in all.

4.
$$\begin{array}{r} \square \\ \times \square \\ \hline \end{array}$$

There are _____ skunks in all.

5.
$$\begin{array}{r} \square \\ \times \square \\ \hline \end{array}$$

There are _____ dogs in all.

6. How many animals are there in all?

There are _____ animals in all.