

Name \_\_\_\_\_

**Commutative  
Property of  
Multiplication**

Lesson 3-1

**Associative  
Property of  
Multiplication**

Lesson 3-1

**Identity  
Property of  
Multiplication**

Lesson 3-1

**Zero  
Property of  
Multiplication**

Lesson 3-1

**factors**

Lesson 3-2

**product**

Lesson 3-2



**Associative  
Property of  
Multiplication**

Factors can be regrouped  
and the product remains  
the same

*Example:*

$$2 \times (4 \times 10) = (2 \times 4) \times 10$$

**Commutative  
Property of  
Multiplication**

The order of factors can  
be changed and the  
product remains the same.

*Example:*  $3 \times 5 = 5 \times 3$

**Zero  
Property of  
Multiplication**

The product of any  
number and 0 is 0.

**Identity  
Property of  
Multiplication**

The product of any  
number and 1 is  
that number.

**product**

The number that is the  
result of multiplying two  
or more factors.

**factors**

Numbers that are  
multiplied to get a  
product.



Name \_\_\_\_\_

**multiple**

Lesson 3-2

**underestimate**

Lesson 3-3

**overestimate**

Lesson 3-3

**partial products**

Lesson 3-5

**base**

Lesson 3-7

**exponent**

Lesson 3-7



**underestimate**

The result of using lesser numbers to estimate a sum or product. The estimate is smaller than the actual answer.

**multiple**

The product of a given whole number and another whole number.

**partial products**

Products found by breaking one of two factors into ones, tens, hundreds, and so on, and then multiplying each of these by the other factor.

**overestimate**

The result of using larger numbers to estimate a sum or product. The estimate is larger than the actual answer.

**exponent**

A number that tells how many times the base is used as a factor.  
*Example:*  $10^3 = 10 \times 10 \times 10$ ; the exponent is 3 and the base is 10.

**base**

The number that is multiplied by itself when raised to a power.  
*Example:*  
In  $5^3$ , the 5 is the base.



Name \_\_\_\_\_

**exponential  
notation**

Lesson 3-7

**expanded form  
(exponents)**

Lesson 3-7

**standard form**

Lesson 3-7

**squared**

Lesson 3-7

**cubed**

Lesson 3-7



**expanded form  
(exponents)**

A way to write a number involving exponents that shows the base as a factor.

**exponential notation**

A way to write a number using a base and an exponent.

**squared**

A name for a number to the second power.

**standard form**

A common way of writing a number with commas separating groups of three digits starting from the right.  
*Example: 3,458*

**cubed**

A name for a number to the third power.

