

5th Grade Math Unit 1 Study Guide

Vocabulary

Find the definition for each term and provide an example or picture.

Term	Definition	Example/Picture
Expression		
Equation		
Product		
Quotient		
Sum		
Difference		
Value		
Place Value		
Exponent		
Power of 10		
Standard Algorithm		
Area Model		
Partial Products		

Name the Place

Fill in the blanks. The first one has been done for you.

	7	2	3	4	8	1	5
Place	Thousand						
Value	7,000						

Place Value Comparison

How does the value of 7 dimes compare to the value of 7 pennies?

- A. The value of 7 dimes is 10 times as much as the value of 7 pennies
- B. The value of 7 dimes is $\frac{1}{10}$ times as much as the value of 7 pennies
- C. The value of 7 dimes is 70 times as much as the value of 7 pennies
- D. The value of 7 dimes is $\frac{1}{70}$ times as much as the value of 7 pennies

What number has a digit 5 with a value that is 100 times greater than the value of the digit 5 in 7,825?

- A. 1,457
- B. 4,582
- C. 5,963
- D. 1,825

Evaluate Expressions

Which expression shows triple the difference of nine and six? Solve.

- A. $9 - 6 \times 3$
- B. $3 \times 9 - 6$
- C. $9 - (6 \times 3)$
- D. $3(9 - 6)$

Answer: _____

Expression Value

Find the expression value and answer the question below.

Teacher	Expression	Value
Mr. Lew	$7 \times 8 \div 4 + 2$	
Ms. Childs	$(10^2 \div 20) \times 3 + 7$	
Mr. Fernandez	$5(4 - 1) + 4 \div 2$	

Sort the teachers from greatest to lowest expression value:

Expression Match-up

Match the expressions to the corresponding word problems.

Expression

$$7 \times (5 - 3)$$

$$1 + 2(5 + 3) + 3$$

$$9 \div 3 - 1$$

Word Problem

Sergio had nine cookies but decided to share it equally among two other friends. Then, he gave one to his dog. How many cookies does Sergio have left?

Mia went home and found that her goldfish had laid five eggs on Monday and three eggs on Tuesday. When they hatched, they were all twins! She bought three more goldfish from the store. How many goldfish does Mia have?

Jaylen attempted to backflip five times, but he wasn't able to land on his feet three of those times. He repeated this cycle seven times. How many times did Jaylen land on his feet?

Powers of Ten

Mr. Williams solved 6×10^5 to equal 600,000. Was he correct? _____

What is the pattern between the exponent and his answer?

Multiplication

Explain the error for each multiplication strategy for multiplying 125 and 56.

Then, solve to find the correct answer

	Standard Algorithm	Area Model	Partial Products
Attempt	$\begin{array}{r} 125 \\ \times 56 \\ \hline 750 \\ + 625 \\ \hline 1,375 \end{array}$	$\begin{array}{r} 1 \quad 2 \quad 5 \\ 5 \quad \boxed{\begin{array}{ c c c } \hline 5 & 10 & 25 \\ \hline 6 & 12 & 30 \\ \hline \end{array}} \\ 6 \quad \boxed{\begin{array}{ c c c } \hline 6 & 12 & 30 \\ \hline \end{array}} \\ 5+1+25 = 31 \\ 6+12+30 = 48 \\ 31+48 = 79 \end{array}$	$\begin{array}{r} 125 \\ \times 56 \\ \hline 100 \times 6 = 600 \\ 20 \times 6 = 120 \\ 5 \times 6 = 30 \\ 100 \times 5 = 500 \\ 20 \times 5 = 100 \\ 5 \times 5 = 25 \\ \hline 600 + 120 + 30 = 750 \\ 500 + 100 + 25 = 625 \\ 750 + 625 = 1375 \end{array}$

Explain the Error			
Correct Answer			

An art museum is setting up 5 new exhibitions. If each exhibition holds 132 paintings, how many total paintings will the museum hold?

Division

Ms. Lemons is reading a historical fiction book that is 672 pages long. If she reads 48 pages each day, how many days will it take her to read the book? Use partial quotients.