Name _____ # _____ PARENT SIGNATURE _____

Unit 2 Test Study Guide

Started in class on Monday/finish for homework Monday night **DUE TUESDAY**

Standards covered: MCC4.OA.1, MCC4.OA.2, MCC4.OA.3, MCC4.OA.4, MCC4.OA.5, MCC4.NBT.5, MCC4.NBT.6

MCC4.OA.1 - Interpret multiplication equations as comparisons

Example: 35 is 5 times as many as 7 and 7 times as many as 5.

Try: Write a comparison sentence for these problems facts.

5 x 9 = 45

_____ times as many as _____ is _____.

24 = 6 x 4

_____ is _____ times as many as _____.

MCC4.OA.2 - Multiply or divide to solve word problems involving multiplicative comparison

Example: A redwood tree is 32 feet tall. It is 4 times as tall as the apple tree. How tall is the apple tree? 32 ÷ 4 = *8 feet* tall

Try: There are 6 times as many dogs as cats. If the total number of dogs and cats is 21, how many dogs are there?

Ben has 3 times as many guppies as goldfish. If he has a total of 20 fish, how many guppies does he have?

MCC4.OA.3 - Solve multistep word problems using the 4 operations, including problems in which remainders must be interpreted; use equations with a letter standing for the unknown quantity

Example: There are 4 students on a team for a relay race. How many teams can be made from 27 students? 27 ÷ 4 = 6 r3, so *6 teams* can be made. 3 students will be leftover.

Try: Hesse is having a pizza night. They think 650 people will come. Each pizza will feed 3 people. How many pizzas should they order?

Jamal has 6 pink pencils, 2 blue pencils, and 4 red pencils. If he puts all of his pencils into two equal piles, how many pencils will be in each pile?

MCC4.OA.4 – Find factor pairs for numbers between 1 and 100; recognize that a number is a multiple of each of its factors; determine if a number 1 through 100 is a multiple of another number; determine if a number 1 through 100 is prime or composite

Examples: *List the factors of 8:* 1, 2, 4, 8. *Is 6 a factor of the number 81?* NO. *Is 56 prime or composite?* Composite

Try: List the factors of 24: _____

Is 3 a factor of the number 27? _____

Is 31 prime or composite? _____

Oranges come in packages of 6. Apples come in packages of 4. Kim will buy the same number of oranges as apples. How many oranges could she buy? _____

MCC4.OA.5 – Generate a number or shape pattern that follows a given rule; identify features of the pattern that the rule may not have told you about

Try:

Rule: Add 3

IN	OUT
1	
2	
	6

Which pattern follows the rule add 3, subtract 1?

(A) 60, 63, 60, 63... (B) 3, 1, 4, 2... (C) 60, 63, 62, 65... (D) 60, 63, 66, 69...

MCC4.NBT.5 – Multiply a whole number of up to four digits by a one-digit number and multiply two two-digit numbers using strategies based on place value and properties of operations

Examples: 2,356 x 5 =

$$\begin{array}{r} 2{,}356 \\ \times \quad 5 \\ \hline 11{,}780 \end{array}$$

56 x 43 =

Grid

$$\begin{array}{r} 56 \\ \times 43 \\ \hline 168 \\ + \ 2240 \\ \hline 2{,}408 \end{array}$$

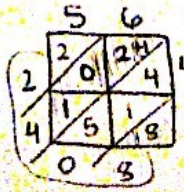
Distributive

50 + 6

2000	240	40
150	18	3

2000 + 240 + 150 + 18 = 2,408

Lattice



Partial Product

50 + 6

40 + 3

Down Down Criss-Cross

50 x 40 = 2000

6 x 3 = 18

40 x 6 = 240

3 x 50 = 150

2408

Try: $9 \times 4{,}000 =$ _____

The skating rink rents 200 pairs of skates in a month. How many pairs of skates does the rink rent in 4 months? _____

Janice eats 19 pieces of popcorn every minute. About how many pieces will she eat in 24 minutes?

Mrs. Buck's class is taking a trip to the zoo. It will cost $23 for each student to go. There are 29 students in her class. How much will it cost for the whole class to go to the zoo?

MCC4.NBT.6 – Find quotients and remainders with up to four-digit dividends and one-digit divisors

Examples: $210 \div 7 =$

$7\overline{)210}$ → 30

Estimate: $685 \div 9 = 80$

$9\overline{)685} \rightarrow 9\overline{)720}$ → 80

9 can't go evenly into 68. but it can go into 72, which is really close to 68! Change the 5 to a 0.

Solve: $3{,}448 \div 8 = 431$ R. 0

$8\overline{)3448}$ → 431 R. 0

-32

24

-24

08

-8

0

Try: A peanut vendor had 640 bags of peanuts. She sold the same number of bags of peanuts at each of 8 baseball games. How many bags of peanuts did she sell at each game?

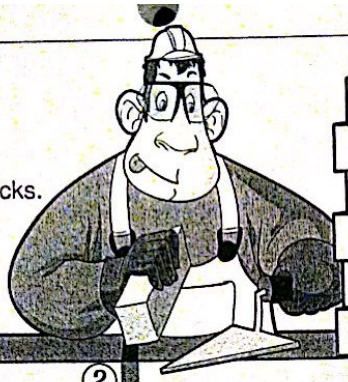
Ana has 2,940 coins in her coin collection. She put the same number of coins in each of 7 jars. How many coins are in each jar?

Three friends are making bracelets. There are 52 beads to be shared equally. Each friend wants the same number of beads. How many beads will be left over?

Name _____

Brick by Brick

Round the numbers in each row as directed.
Find each estimated sum or difference.
Cross off the matching answer on the stack of bricks.
Four numbers will not be crossed off.



6,000	670	100,000	1,190,000
1,360	1,460	50,000	45,000
500	15,900	780,000	400,000
60	12,800	121,000	1,000,000
9,500	600,000	1,300	8,500
598,000	500,000	70	12,000

nearest ten →	① 87 − 28	② 476 + 23	③ 695 − 32	④ 716 + 644
nearest hundred →	⑤ 9,418 + 111	⑥ 11,644 + 4,251	⑦ 22,873 − 14,352	⑧ 17,234 − 4,429
nearest thousand →	⑨ 8,667 + 3,489	⑩ 600,083 − 1,956	⑪ 61,832 + 58,539	⑫ 21,947 − 16,499
nearest ten thousand →	⑬ 161,789 − 58,618	⑭ 841,650 − 787,004	⑮ 652,941 + 128,653	⑯ 405,601 + 783,999
nearest hundred thousand →	⑰ 789,055 − 364,988	⑱ 161,718 + 253,545	⑲ 887,868 + 131,415	⑳ 807,050 − 166,227

Due Friday!