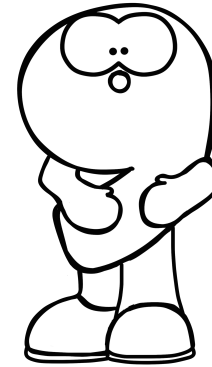


Name: _____ # _____ Teacher: _____ Test Date: _____

Grade 3: Everyday Math: Unit+

Student Learning Map/ Test Review



Key Learning:

Further development of an understanding of multiplication and division is built as application of basic fact knowledge is used to mentally solve number stories and multiply larger factors. Interpretations of length-of-day data will be made and calculations of elapsed time become more efficient.

Unit Essential Question:

How do you apply operations to multi-digit numbers?

Unit Vocabulary:

basic fact, break-apart strategy, decompose, doubling, efficient, elapsed time, extended fact, extended multiplication fact, length of day, multiplication/division diagram, partition

Lesson 9.1: (CC.2.2.3.A.1, CC.2.2.3.A.3)

How do you apply your basic fact knowledge to help you make comparisons between products?

For each number sentence, fill in the blank with a factor from 1 to 10 to make it true.

a. $4 \times 6 < 6 \times \underline{\quad}$

b. $5 \times 4 > 5 \times \underline{\quad}$

c. $9 \times 7 < \underline{\quad} \times \underline{\quad}$

Lesson 9.2: (CC.2.1.3.B.1, CC.2.2.3.A.1, CC.2.2.3.A.2, CC.2.2.3.A.3, CC.2.4.3.A.1)

What strategies are applied to solve number stories when the problems involve multiples of 10?

For problems 1-2, write a number model with a letter for the unknown. Then solve the problem and write the answer. Write your number model again with the answer to check that your answer makes sense.

1. Eight eggs each have a mass of about 70 grams.
What is their total mass?

(number model with letter)

The letter _____ stands for _____.

Eight eggs have a total mass of about _____ grams.

(number model with answer)

Lesson 9.2: Continued

2. About how many 50-gram boxes have a mass equal to one 600-gram box?

(number model with letter)

The letter _____ stands for _____.

It would take about _____ 50-gram boxes to equal the mass of one 600-gram box.

(number model with answer)

Lesson 9.3: (CC.2.1.3.B.1, CC.2.2.3.A.1, CC.2.2.3.A.2, CC.2.2.3.A.3, CC.2.2.3.A.4, CC.2.4.3.A.1)

How do you solve problems involving larger factors using mental strategies?

Write a number model with a letter for the unknown. Then solve the problem and write the answer. Write your number model again with the answer to check that your answer makes sense.

Together, 70 rocks have a mass of about 120 kilograms. One cement block has a mass of about 12 kilograms. About how many 12-kilogram cement blocks would it take to equal the mass of the rocks?

(number model with letter)

The letter _____ stands for _____.

It would take about _____ cement blocks to equal the mass of 70 rocks.

(number model with answer)

Lesson 9.4: (CC.2.3.3.A.1, CC.2.3.3.A.2, CC.2.4.3.A.1, CC.2.4.3.A.2)

Exploration A: How do you solve problems involving elapsed time?

Maria wants to know how long each Fun Day activity lasts. Use the table below to find the length of each activity. You may use open number lines, clocks, or another strategy.

Fun Day Activities		
Activity	Schedule	Length, in minutes
Relay Races	9:10 A.M.- 10:10 A.M.	
Snack	10:10 A.M.- 10:35 A.M.	
Art	10:35 A.M.- 11:50 A.M.	

Exploration B: How do you use your understanding of polygons to reassemble a deconstructed shape?

Were you able to put back together the square using all of your pieces? _____

Can you make the larger square by cutting the squares into smaller squares? _____

Exploration C: How does the construction of an object affect the amount of mass it is able to support?

Rank, from strongest to weakest, the three bridges you made.

 Bridge One

 Bridge Two

 Bridge Three

Do squares or triangles make stronger bridges? _____

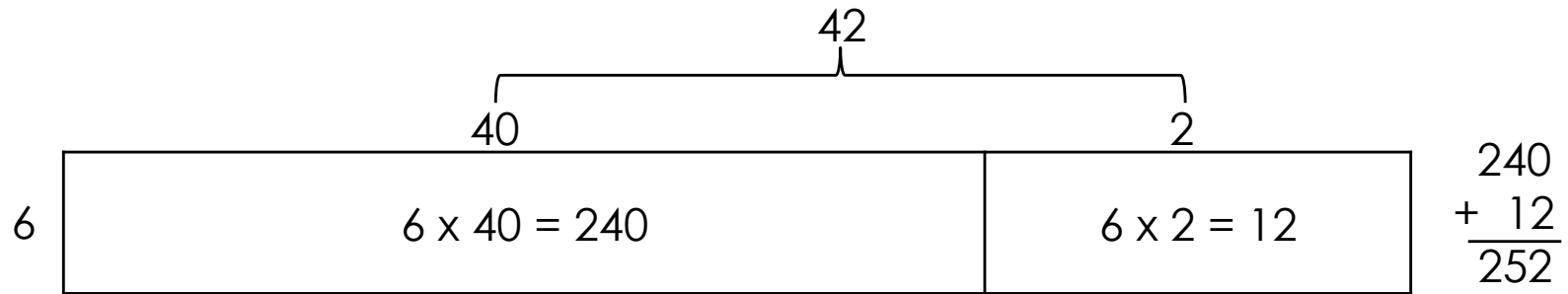
Lesson 9.5: (CC.2.1.3.B.1, CC.2.2.3.A.1, CC.2.2.3.A.2, CC.2.2.3.A.3, CC.2.2.3.A.4, CC.2.4.3.A.5, CC.2.4.3.A.6)

How do you solve multi-digit multiplication problems?

Use the break-apart strategy to solve the problem. You may use mental math, drawings, number sentences, or words. Show your thinking.

a. $3 \times 52 = \underline{\hspace{2cm}}$

b. Adalyn drew a rectangle to help solve 6×42 . Here is her work:



Explain how Adalyn solved the problem.

Lesson 9.7: (CC.2.4.3.A.2, CC.2.4.3.A.4)

How do you analyze data in a graph?

It starts snowing at 1:35 P.M. and stops at 4:10 P.M.

How long did it snow?

Show your thinking. You may use an open number line, your toolkit clock, or other representations.

_____ hours _____ minutes