WINTER BREAK LEARNING PACKET

MATH

4TH GRADE STUDENT

DEC 22ND – JAN 5TH

DEPARTMENT OF CURRICULUM & INSTRUCTION

Hello MSCS Family,

This resource packet was designed to provide students with activities that can be completed at home independently or with the guidance and supervision of family members or other adults. The activities are aligned with the TN Academic Standards for Mathematics and will provide additional practice opportunities for students to develop and demonstrate their knowledge and understanding.

A suggested pacing guide is included; however, students can complete the activities in any order over the course of several days. Below is a table of contents which lists each activity.

Table of Contents

Week 1: Rounding Whole Numbers	
Grade Level Standard(s)	**4.NBT.A.3** Round multi-digit whole numbers to any place (up to and including the hundred-thousand place) using understanding of place value and use a number line to explain how the number was rounded.
Caregiver Support Option	The student may use a sibling or a guardian as a partner. For additional support, have the student access the video link below by logging into iReady from their Clever account. Video
Materials Needed	Recording Sheet
Question(s) to Explore	What do you think about when rounding to the nearest ten, hundred, thousand and/or ten thousand?

Multiplying by Two-Digit Numbers

Name: _____

Estimate each multiplication problem to check if the student's answer is reasonable. If not, cross out the answer and write the correct answer.

Multiplication Problems	Student Answers
14 × 17	~~2,380~~ 238 Estimate: 14 × 20 = 280
15 × 19	285
21 × 18	3,078
16 × 13	28

Multiplying by Two-Digit Numbers *continued*

Name: _____

Multiplication Problems	Student Answers
13×31	*403*
18×17	*3,056*
21×15	*3,015*
12×22	*2,604*

1 How does estimating a multiplication problem help you know if an answer is reasonable?

Week 2: Modeling Multi-Step Problems	
Grade Level Standard(s)	**4.OA.A.3** Solve multi-step contextual problems (posed with whole numbers and having whole-number answers using the four operations) including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity.
Caregiver Support Option	The student may use a sibling or a guardian as a partner. For additional support, have the student access the video link below by logging into iReady from their Clever account. Video Video
Materials Needed	Recording Sheet
Question(s) to Explore	How can I represent multi-step problems?

Modeling Multi-Step Problems

What You Need

- Recording Sheet

Check Understanding

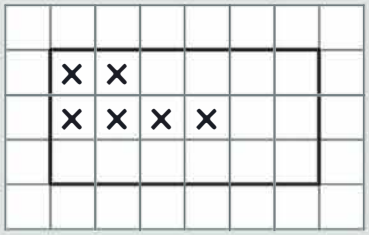
A book has 4 poems on each of 7 pages. Joe read 3 poems every day for 5 days. How many poems are left to read?

What You Do

1. Read aloud the first problem on the **Recording Sheet**.
2. Your partner draws a model of the problem.
3. Use the model to write and solve an equation for the problem.
4. Your partner checks your work and uses mental math or estimation to explain why the answer is reasonable or not.
5. Change roles and repeat the steps above for the second problem.

Example

Aiden earns $6 for mowing each of 3 lawns. He spends $2 for a snack and $4 for a notebook. How much money does Aiden have left?



$L = (3 \times 6) - (2 + 4)$

$L = 12$

Aiden has $12 left.

Go Further!

Write and solve a different equation for the problem in the example. Exchange papers with your partner to check your work.

Center Activity 4.5 ★★ Recording Sheet

Partner A _____

Partner B _____

Modeling Multi-Step Problems

Problem

Keisha puts 4 oranges into each of 5 baskets. She puts 6 lemons into each of 2 baskets. What is the total number of oranges and lemons in the baskets?

Model

_____

Equation

_____

Problem

Dave has 5 stamps from Asia, 4 stamps from Europe, and 10 stamps from Africa. He can fit 8 stamps on each page of his stamp book. How many pages of the book can he fill?

Model

_____

Equation

_____

I can draw a bar model, a number line, or an array to represent multi-step problems.

Answer Key

Multiplying by Two-Digit Numbers

Name: _____

Estimate each multiplication problem to check if the student's answer is reasonable. If not, cross out the answer and write the correct answer.

Multiplication Problems	Student Answers	
14 × 17	~~2,380~~ 238	Estimate: 14 × 20 = 280
15 × 19	285	**Estimate: 15 × 20 = 300**
21 × 18	~~3,078~~ **378**	**Estimate: 20 × 18 = 360**
16 × 13	~~28~~ **208**	**Estimate: 16 × 10 = 160**

Multiplying by Two-Digit Numbers *continued*

Name: _____

Multiplication Problems	Student Answers	
13 × 31	*403*	**Estimate: 13 × 30 = 390**
18 × 17	~~*3,056*~~ **306**	**Estimate: 20 × 20 = 400**
21 × 15	~~*3,015*~~ **315**	**Estimate: 20 × 15 = 300**
12 × 22	~~*2,604*~~ **264**	**Estimate: 12 × 20 = 240**

1 How does estimating a multiplication problem help you know if an answer is reasonable?

Answers will vary. Possible answer: If the answer is much greater or much less than the estimate, it tells you to check your work.

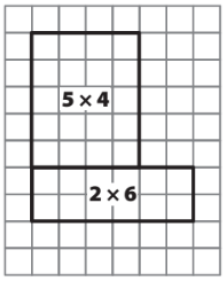
Modeling Multi-Step Problems

★★ **Check Understanding**

13 poems

Recording Sheet

Sample answer:

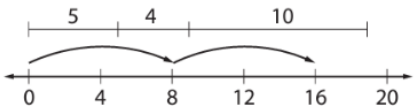


$T = (5 \times 4) + (2 \times 6)$

$T = 32$

32 oranges and lemons

Sample answer:



$P = (5 + 4 + 10) \div 8$

$19 \div 8 = 2$ R 3

2 pages