WINTER BREAK LEARNING PACKET

MATH

5TH 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: Round Decimal Numbers	
Grade Level Standard(s)	**5.NBT.A.4** Round decimals to the nearest hundredth, tenth, or whole number 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 links below by logging into iReady from their Clever account. Video 1 Video 2
Materials Needed	Recording Sheet, Colored pencil for Partner A, Colored pencil for Partner B
Question(s) to Explore	How can I use benchmark numbers to help me round?

Round Decimal Numbers

What You Need

- colored pencil for Partner A
- colored pencil in different color for Partner B
- Recording Sheet

Check Understanding

Which numbers round to 8.23? Explain your reasoning.

8.227 8.224 8.231

What You Do

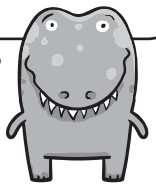
1. Take turns. Choose any number from the column on the left side of the **Recording Sheet.**
2. Decide which category the number goes with on the table to the right of the number—*Rounds to* or *Does Not Round to* the given number.
3. Say why you think your answer is correct.
4. If your partner agrees, write the number in the correct category. Score 1 point.
5. If your partner proves you are incorrect, your turn ends.
6. The first player to get 10 points wins.

I can use a benchmark number to help me round. The digit 5 is a benchmark.

0.5 is halfway between 0 and 1.0.

0.25 is halfway between 0 and 0.5.

I always round up at a halfway point.



Go Further!

Copy the six decimal numbers from the last table on the **Recording Sheet** onto a separate sheet of paper. Underline the digits in the hundredths place. Round each number to the nearest tenth.

Center Activity 5.13 ★★ Recording Sheet

Partner A _____

Partner B _____

Round Decimal Numbers

5.634
5.714
5.678
5.578
5.509
5.539

Rounds to 5.6	Does Not Round to 5.6

8.306
8.429
8.37
8.351
8.044
8.412

Rounds to 8.4	Does Not Round to 8.4

0.313
0.324
0.327
0.319
0.302
0.318

Rounds to 0.32	Does Not Round to 0.32

6.402
6.387
6.329
6.383
6.309
6.392

Rounds to 6.39	Does Not Round to 6.39

Week 2: Equivalent Multiplication Expressions	
Grade Level Standard(s)	**5.NBT.B.5** Fluently multiply multi-digit whole numbers (up to three-digit by four-digit factors) using efficient strategies and algorithms.
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. https://bit.ly/4i3KJLa
Materials Needed	Recording Sheet
Question(s) to Explore	Can you distinguish between simplifying expressions, displaying on an area model, and applying the distributive property.

Equivalent Multiplication Expressions

What You Need

- Recording Sheet

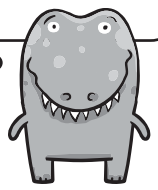
Check Understanding

Write an expression that is equivalent to 312×25. Find the value of both expressions. Show your work.

What You Do

1. Take turns. Pick any table on the **Recording Sheet.** Read the multiplication expression in the header row of the table.
2. Pick an expression in the table. Decide if the expression is equivalent to the multiplication expression in the header row. Use any method to determine if the expressions are equivalent.
3. Explain your reasoning. If your partner agrees, check the correct answer—*Yes* or *No*. If you are incorrect, your turn ends.
4. Continue until all the expressions are marked *Yes* or *No*.

I can decide if expressions are equivalent by drawing area models, applying the distributive property, multiplying partial products, or using mental math and reasoning.



Go Further!

Find the product of each multiplication expression in the header row of each table on the **Recording Sheet** using the standard multiplication algorithm. Exchange papers with your partner to check.

Partner A _____

Partner B _____

Equivalent Multiplication Expressions

Equivalent to 723 × 28	Yes	No
(723 × 20) + (723 × 8)		
723 × (2 × 8)		
(700 × 28) + (20 × 28) + (3 × 28)		
(700 × 20) + (200 × 20) + (20 × 8)		

Equivalent to 617 × 49	Yes	No
(617 × 40) + (10 × 40) + (7 × 49)		
(600 × 10 × 7) + (40 × 9)		
(600 × 40) + (600 × 9) + (10 × 40) + (10 × 9) + (7 × 40) + (7 × 9)		
(600 + 10 + 7) + (40 × 9)		

Equivalent to 105 × 65	Yes	No
(325) + (6,500)		
(105 × 60) + (105 × 5)		
(60 × 100) + (60 × 5) + (5 × 100) + (5 × 5)		
(100 × 60) + (100 × 5) + (5 + 60)		

Answer Key

Round Decimal Numbers

★★ **Check Understanding**

8.227, 8.231; Sample answer: 8.227 rounds to 8.23 because the 7 in the thousands place is greater than the benchmark number 5, so I round up. 8.231 rounds to 8.23 because the 1 in the thousandths place is less than 5, so I do not round up.

Recording Sheet

Rounds to 5.6: 5.634, 5.578; *Does Not Round to* 5.6: 5.714, 5.678, 5.509, 5.539

Rounds to 8.4: 8.429, 8.37, 8.351, 8.412; *Does Not Round to* 8.4: 8.306, 8.044

Rounds to 0.32: 0.324, 0.319, 0.318; *Does Not Round to* 0.32: 0.313, 0.327, 0.302

Rounds to 6.39: 6.387, 6.392; *Does Not Round to* 6.39: 6.402, 6.329, 6.383, 6.309

Equivalent Multiplication Expressions

★★ **Check Understanding**

7,800; Sample answers:
$(300 \times 20) + (300 \times 5) + (10 \times 20) + (10 \times 5) + (2 \times 20) + (2 \times 5)$; $(300 \times 25) + (12 \times 25)$;
$1{,}560 + 6{,}240$

Recording Sheet

Table 1: Yes, No, Yes, No

Table 2: No, No, Yes, No

Table 3: Yes, Yes, Yes, No