Answers

Dear Grade 5 Mathematicians,

Practice makes progress.

We are finishing up **Unit 6** and preparing to show what we learned over the past several weeks. Throughout the unit, we focused on mastering many important skills. To practice these skills, please login to your online SRB (Student Reference Book) to review the **examples** and **Check Your Understanding** problems listed below. Be sure to check the answers in the answer key at the back of the SRB!

Skill	Example	Check your Understanding
*Multiply and divide decimals by powers of 10	Pgs. 133, 136	Pgs. 133, 136
*Convert between measurement units in the metric system (cm and m)	Pgs. 213	Pg. 214 (#3)
*Represent fractional data on line plots	Pgs. 244-245	Pg. 245
*Answer questions about data on line plots	Pg. 247	
*Estimate answers to decimal multiplication and division problems	Pgs. 138-141	Pg. 141
*Multiply decimals	Pg. 135	Pg. 135
*Divide decimals	Pg. 137	Pg. 137

Mathematically Yours,
The Grade 5 Team

Name _____ Date _____

Grade 5, Unit 6 Study Guide

Please use your **Student Reference Book** to complete the problems listed below. All problems are in the **Check Your Understanding** section. **Pay careful attention to the problem numbers and directions listed!**

Pg. 133

1. Answer=

Estimate=

2. Answer=

Estimate=

3. Answer=

Estimate=

4. Answer=

Estimate=

Pg. 136

1 2 3. 4.

Pg. 214

3. 3 meters = _____cm

Pg. 245

1. a. _____

Smallest = Largest =

b. Line Plot

c. Interval =

d. _____

Pg. 141

1. Answer=

2. Answer=

3. Answer=

Estimate=

Estimate=

Estimate=

Pg. 135

1. Answer=

2. Answer=

Estimate=

Estimate=

3. Answer=

4. Answer=

Estimate=

Estimate=

Pg. 137

1. Answer=

2. Answer=

3. Answer=

Estimate=

Estimate=

Estimate=

5th Grade Unit 6 Review

NAME:

1. Multiply.

   a. $1.9 * 10^1 =$ 19

   b. $1.9 * 10^2 =$ 190

   c. $1.9 * 10^3 =$ 1,900

2. Where did you place the decimal point in your answer to $1.9 * 10^2$?
   How did you know to place it there?
   After attaching 1 zero because multiplying by 10^2 or 100 moves the decimal two places to the right making 1.9 100x larger = 190

Divide.

   a. $16.5 \div 10^1 =$ 1.65

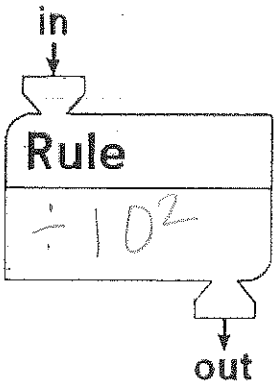
   b. $16.5 \div 10^2 =$ 0.165

   c. $16.5 \div 10^3 =$ 0.0165

4. Where did you place the decimal point in your answer to $16.5 \div 10^2$?
How did you know to place it there?

Before the 1. Dividing by 10^2 or 100 moves the decimal 2 places left making 16.5 1/100 as big = 0.165

5. Convert between centimeters (cm) and meters (m) to complete the "What's My Rule?" table. Then write a rule using a power of 10 in exponential notation. K H D U n D C M



in (cm)	out (m)
200	2
57	0.57
75	0.75
8	0.08
63	0.63
790	7.9

6. Alvaro is putting down flooring in his bathroom. He has a sheet of flooring that is 2.8 meters long. He cuts off 9 centimeters from the end to make it fit. How long is the piece of flooring Alvaro puts in his bathroom?

2.8 m = 280 cm
− 9
271 cm

7. Use an estimate to place the decimal point in each product.

a. 61.2 * 5.3 = 3 2 4 3 6

60 × 5 = 300

b. 3.14 * 19.1 = 5 9 9 7 4

3 × 20 = 60

8. Explain how you determined where to place the decimal point in the problem 3.14 * 19.1 = 5 9 9 7 4

Rounding 3.14 to 3 and 19.1 to 20, I multiplied. 3×20=60. 60 is in the tens, so the closest answer would be 59.974

9. 18.2 * 5.9 =

20
× 5
100

182
× 59
1638
9100
10738

107.38

10. Explain how you solved the problem 18.2 * 5.9.

I multiplied as if there were no decimals (182 × 59). Then I went back + counted the # of digits that came after decimals in the factors 18.2 = 1 digit 5.9 = 1 digit. Thus tells me I move the decimal 2 places in from the end in my product = 107.38

60 × 60 = 3600

11. 61.4 * 58.8 =

614
×588
49120
307000
361032

3,610.32

12. Make an estimate. Then divide as if the dividend were a whole number. Use your estimate to place the decimal point in your answer.

7.84 ÷ 4 = ?

Estimate: 8 ÷ 4 = 2

7.84 ÷ 4 = 1.96

4 | 784 | 100
−400 | 90
384 | 6
−360 | 196
24
−24
0

13. Write an equivalent problem that has a whole-number divisor. Then solve the equivalent problem and complete the number sentence.

3.5 ÷ 0.7 = ?

Equivalent problem: 35 ÷ 7

3.5 ÷ 0.7 = 5

14. a. A rectangular one-story house covers an area of 1,800 square feet. The ceilings are 7 feet high. What is the volume of the interior of the house?

Number model: 1800×7

$$\begin{array}{r} {}^{5}1800 \\ \times \quad 7 \\ \hline 12600 \end{array}$$

Volume: ____ cubic feet

12,600

b. The owners added a second floor to the house. The second floor is 40 feet long and 20 feet wide with ceilings that are 7 feet tall. What is the volume of the interior of the second floor?

Number model: $40 \times 20 \times 7$

$$\begin{array}{r} 800 \\ \times \quad 7 \\ \hline 5600 \end{array}$$

Volume: ____ cubic feet

5,600

c. What is the total volume of the interior of the house?

Number model: $12,600 + 5,600$

Volume: ____ cubic feet

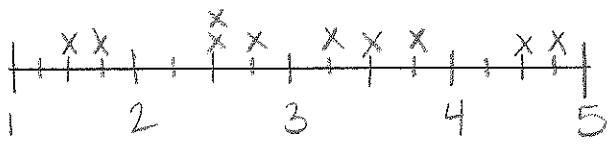
18,200

15. Hina is studying butterflies at a botanical garden. She took careful measurements of the wingspans of 10 different butterflies and recorded the lengths below.

Butterfly Wingspans (inches) title

$2\frac{3}{4}$	$1\frac{3}{4}$	$2\frac{1}{2}$	$3\frac{1}{4}$	$2\frac{1}{2}$	$3\frac{3}{4}$	$4\frac{3}{4}$	$4\frac{1}{2}$	$1\frac{1}{2}$	$3\frac{1}{2}$

a. Complete the line plot using Hina's data. Remember to add a title and label.



inches