4th Grade Parent Information

April 13-24

- Recommended daily math practice time: 30 minutes
- There are 10 "practice" pages – Recommendation is 1 page per day.
- There are 8 "fluency practice" pages – addition, subtraction, multiplication, and division. Recommendation is to work 15-20 problems per day from pages of your child's choice. However, the goal is practice and remembering how to work problems correctly. Adjust the number of problems based on how long it takes your child to complete.
- There are 6 "Activity" pages – Recommendation is 2-3 "Activities" per week for 10-15 minutes each activity. These activities can be repeated for extra practice. If cutting pieces out is needed for an activity, your child may need to re-create on their own paper depending on how it prints.
- Answer keys are at the end of the document for pages that can't be checked easily with a calculator.

Additional Ideas that can be practiced daily or every other day:

- Read and write numbers less than or equal to 1,000,000 using standard form, word form, and expanded form.
    - Example: four thousand two hundred fifty six = 4,256 = 4 x 1000 + 2 x 100 + 5 x 10 + 6 x 1
- Add and subtract within 1,000,000 – Have your child create numbers to add or subtract. Use a calculator to check.
- Multiply up to four digits by one digit numbers. Use a calculator to check
- Multiply two two-digit numbers. Use a calculator to check.
- Continue practicing multiplication and division facts up to 12x12 (or higher if desired). Your child could create their own flash cards with a fact and a picture/array to illustrate. Another option is to write the fact families for the facts. Example: 5 x 2 = 10; 2 x 5 = 10; 10 ÷ 2 = 5; 10 ÷ 5 = 2

Understanding of Place Value

Name: _____

Set A

1 Write the number 78,215 in the place-value chart.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

Write 78,215 in expanded form and word form.

2 Write the number 540,632 in the place-value chart.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

Write 540,632 in expanded form and word form.

Set B

3 Show different ways to make 25,302.

_____ thousands + _____ hundreds + _____ ones

_____ hundreds + _____ ones

_____ ones

4 Show different ways to make 708,496.

_____ hundred thousands + _____ thousands + _____ hundreds + _____ tens + _____ ones

_____ thousands + _____ hundreds + _____ tens + _____ ones

_____ hundreds + _____ tens + _____ ones

Comparing Multi-Digit Numbers

Name: _____

Set A

Write the symbol that makes each statement true. Use >, <, or =.

1. 23,230 _____ 2,323
2. 33,003 _____ 33,030
3. 9,999 _____ 10,000
4. 40,404 _____ 40,040
5. 52,177 _____ 52,771
6. 421,073 _____ 412,730

Set B

7. Circle all the numbers that are less than 78,265.

78,000 79,000 70,000 80,000 78,200 78,300

8. Circle all the numbers that are less than 45,763.

46,000 40,000 50,000 45,700 45,800 45,000

9. Circle all the numbers that are greater than 108,427.

108,000 108,400 108,500 109,000 108,430 108,420

10. How did you solve problem 7?

Multiplication in Word Problems

Name: _____

Use a strategy of your choice to solve each problem.

1 The library has 5 mystery books on a shelf. It has 4 times as many fiction books on another shelf. How many fiction books are on the shelf?

There are _____ fiction books on the shelf.

2 Paul runs 2 laps around the gym. Carrie runs 6 times as many laps as Paul. How many laps does Carrie run?

Carrie runs _____ laps.

3 Violet has 3 markers. She has 6 times as many colored pencils as markers. How many colored pencils does she have?

Violet has _____ colored pencils.

4 Owen draws 7 comics in April. He draws 3 times as many comics in May. How many comics does Owen draw in May?

Owen draws _____ comics in May.

5 Tasha used 8 tomatoes to make salsa. She used 4 times as many tomatoes to make sauce. How many tomatoes did Tasha use to make sauce?

Tasha used _____ tomatoes to make sauce.

6 There are 7 pear trees on a farm. There are 7 times as many apple trees as pear trees. How many apple trees are on the farm?

There are _____ apple trees.

7 There are 9 school buses in the parking lot. There are 6 times as many cars as school buses in the parking lot. How many cars are in the parking lot?

There are _____ cars in the parking lot.

8 There are 8 vases at an art show. There are 9 times as many paintings as vases at the art show. How many paintings are at the art show?

There are _____ paintings at the art show.

9 Write and solve a word problem for this equation: $5 \times 6 = ?$

Multiplying a Three-Digit Number by a One-Digit Number

Name: _____

Find the product.

1 $500 \times 4 =$ _____ $501 \times 4 =$ _____ $506 \times 4 =$ _____

2 $300 \times 2 =$ _____ $299 \times 2 =$ _____ $298 \times 2 =$ _____

3 $400 \times 3 =$ _____ $405 \times 3 =$ _____ $410 \times 3 =$ _____

4 $499 \times 6 =$ _____ **5** $706 \times 3 =$ _____ **6** $195 \times 5 =$ _____

7 What pattern do you notice in problem 2? How could it help you solve a problem such as 297×2?

8 Choose problem 4, 5, or 6. Explain how you could check your answer.

Multiplying a Four-Digit Number by a One-Digit Number

Name: _____

Estimate. Circle all the problems that will have products between 18,000 and 32,000. Then find the exact products of only the problems you circled. Show your work.

1 $8{,}491 \times 2 =$ _____

2 $6{,}148 \times 4 =$ _____

3 $7{,}062 \times 5 =$ _____

4 $4{,}362 \times 5 =$ _____

5 $1{,}789 \times 8 =$ _____

6 $2{,}206 \times 9 =$ _____

7 $7{,}218 \times 4 =$ _____

8 $9{,}821 \times 3 =$ _____

9 $4{,}762 \times 6 =$ _____

10 $6{,}739 \times 6 =$ _____

11 $7{,}964 \times 4 =$ _____

12 $3{,}618 \times 7 =$ _____

13 What strategies did you use to solve the problems? Explain.

Division in Word Problems

Name: _____

Use a strategy of your choice to solve each problem.

1 There are 5 times as many tulips as rose bushes in a garden. There are 15 tulips. How many rose bushes are in the garden?

There are _____ rose bushes in the garden.

2 Kelly has 2 times as many quarters as dimes. She has 18 quarters. How many dimes does she have?

Kelly has _____ dimes.

3 There are 18 blueberries in a bowl. There are 3 times as many blueberries as strawberries in the bowl. How many strawberries are in the bowl?

There are _____ strawberries in the bowl.

4 Amanda swims for 16 minutes. This is 4 times as many minutes as Julio swims. How many minutes does Julio swim?

Julio swims _____ minutes.

5 A tile pattern has 6 times as many white squares as gray squares. There are 48 white tiles in the pattern. How many gray tiles are there?

There are _____ gray tiles in the pattern.

6 Leah has 3 times as many country songs as she has pop songs on her MP3 player. She has 27 country songs. How many pop songs does Leah have?

Leah has _____ pop songs.

7 Erik sees 42 stars in the sky on Tuesday night. This is 7 times as many stars as he sees on Monday night. How many stars does Erik see on Monday night?

Erik sees _____ stars on Monday night.

8 Lucas spends 72 minutes cleaning his room. This is 8 times as long as it takes him to wash the dishes. How long does it take Lucas to wash the dishes?

It takes Lucas _____ minutes to wash the dishes.

9 Write and solve a word problem for this equation: $6 \times n = 54$

Dividing with Arrays and Area Models

Name: _____

The answers to problems 1–12 are mixed up at the bottom of the page. Cross out the answers as you complete the problems.

1. 606 ÷ 2 = _____
2. 606 ÷ 3 = _____
3. 903 ÷ 3 = _____
4. 408 ÷ 8 = _____
5. 243 ÷ 3 = _____
6. 721 ÷ 7 = _____
7. 545 ÷ 5 = _____
8. 488 ÷ 8 = _____
9. 816 ÷ 4 = _____
10. 728 ÷ 8 = _____
11. 459 ÷ 9 = _____
12. 366 ÷ 6 = _____

13. What strategies did you use to solve the problems?

14. Explain how to use multiplication to check your answer to problem 10.

Answers

91	303	61	202	204	109
81	51	301	103	51	61

Dividing Four-Digit Numbers

Name: _____

Estimate. Circle all the problems with quotients between 500 and 1,500. Then find the exact quotients of only the problems you circled.

1 2,508 ÷ 4 = _____ **2** 7,058 ÷ 9 = _____ **3** 2,726 ÷ 9 = _____

4 7,429 ÷ 5 = _____ **5** 3,506 ÷ 9 = _____ **6** 8,318 ÷ 8 = _____

7 7,645 ÷ 2 = _____ **8** 4,113 ÷ 4 = _____ **9** 3,196 ÷ 5 = _____

10 5,018 ÷ 7 = _____ **11** 8,127 ÷ 6 = _____ **12** 6,155 ÷ 3 = _____

13 What strategies did you use to estimate the quotients? Explain.

14 Check one of your answers by solving it with a different strategy. Show your work.

Understanding of Equivalent Fractions

Name: _____

Write the missing numbers in the boxes to make each equation true.

1 $\frac{2}{4} \times \frac{\square}{\square} = \frac{8}{16}$

2 $\frac{2}{3} \times \frac{\square}{\square} = \frac{12}{18}$

3 $\frac{5}{6} \times \frac{\square}{\square} = \frac{25}{30}$

4 $\frac{2}{3} \times \frac{\square}{3} = \frac{6}{\square}$

5 $\frac{3}{8} \times \frac{5}{\square} = \frac{15}{\square}$

6 $\frac{5}{6} \times \frac{\square}{\square} = \frac{\square}{12}$

7 $\frac{5}{\square} \times \frac{\square}{\square} = \frac{15}{24}$

8 $\frac{2}{\square} \times \frac{4}{\square} = \frac{\square}{12}$

9 $\frac{\square}{8} \times \frac{2}{\square} = \frac{\square}{16}$

10 Which strategies did you use to solve the problems? Explain why.

Using Common Numerators and Denominators

Name: _____

Compare the fractions. Write <, >, or = .

1. $\frac{3}{4}$ ◯ $\frac{3}{8}$
2. $\frac{2}{3}$ ◯ $\frac{4}{5}$
3. $\frac{1}{5}$ ◯ $\frac{2}{10}$
4. $\frac{2}{10}$ ◯ $\frac{23}{100}$
5. $\frac{7}{8}$ ◯ $\frac{3}{4}$
6. $\frac{7}{12}$ ◯ $\frac{5}{6}$
7. $\frac{10}{12}$ ◯ $\frac{5}{6}$
8. $\frac{53}{100}$ ◯ $\frac{1}{2}$
9. $\frac{2}{8}$ ◯ $\frac{9}{12}$
10. $\frac{1}{6}$ ◯ $\frac{3}{12}$
11. $\frac{4}{5}$ ◯ $\frac{77}{100}$
12. $\frac{1}{3}$ ◯ $\frac{5}{12}$
13. $\frac{1}{4}$ ◯ $\frac{2}{12}$
14. $\frac{9}{10}$ ◯ $\frac{90}{100}$
15. $\frac{2}{3}$ ◯ $\frac{3}{6}$

16. Show a model you can use to check your answer to problem 12.

Multi-Digit Addition—Skills Practice

Name: _____

Add within 10,000. **Form A**

1 2,145 + 653	**2** 5,260 + 417	**3** 1,083 + 2,513	**4** 2,864 + 7,135
5 1,248 + 532	**6** 3,709 + 152	**7** 4,561 + 1,054	**8** 5,726 + 3,742
9 3,750 + 456	**10** 2,538 + 167	**11** 1,659 + 3,291	**12** 4,806 + 3,255
13 6,725 + 385	**14** 5,218 + 938	**15** 6,002 + 2,999	**16** 8,375 + 1,625
17 4,278 + 3,956	**18** 9,407 + 396	**19** 3,098 + 2,574	**20** 2,710 + 5,690

Multi-Digit Addition—Skills Practice

Name: _____

Add within 100,000. **Form A**

1 10,352 + 1,430	**2** 16,164 + 1,325	**3** 20,753 + 10,104	**4** 50,618 + 24,350
5 15,200 + 999	**6** 32,145 + 4,625	**7** 64,102 + 17,254	**8** 24,390 + 56,180
9 93,752 + 598	**10** 46,250 + 23,805	**11** 12,643 + 52,794	**12** 54,622 + 34,588
13 23,856 + 15,246	**14** 47,423 + 19,836	**15** 49,999 + 3,999	**16** 90,187 + 9,783
17 84,678 + 6,395	**18** 27,329 + 15,896	**19** 52,098 + 28,107	**20** 48,365 + 51,635

Multi-Digit Subtraction—Skills Practice

Name: _____

Subtract within 10,000. **Form A**

1 4,865 − 2,341	**2** 1,788 − 1,263	**3** 2,592 − 1,271	**4** 7,342 − 4,132
5 8,790 − 6,688	**6** 3,743 − 626	**7** 9,487 − 1,394	**8** 6,427 − 2,515
9 2,637 − 2,419	**10** 3,780 − 671	**11** 8,618 − 3,425	**12** 4,756 − 3,813
13 8,403 − 6,520	**14** 1,438 − 839	**15** 4,725 − 1,439	**16** 7,275 − 4,188
17 5,274 − 2,778	**18** 2,923 − 1,976	**19** 5,824 − 2,948	**20** 6,743 − 2,878

Multi-Digit Subtraction—Skills Practice

Name: _____

Subtract within 100,000. **Form A**

1 47,863 − 251	**2** 19,038 − 11,018	**3** 28,682 − 3,270	**4** 76,429 − 20,306
5 81,235 − 20,017	**6** 36,725 − 1,582	**7** 94,130 − 20,125	**8** 64,728 − 3,914
9 28,236 − 8,915	**10** 58,623 − 26,374	**11** 72,160 − 2,087	**12** 38,412 − 25,651
13 34,210 − 8,105	**14** 10,714 − 9,456	**15** 63,258 − 21,399	**16** 40,805 − 15,912
17 53,126 − 45,928	**18** 80,052 − 71,963	**19** 24,350 − 9,582	**20** 100,000 − 86,932

Multi-Digit Multiplication—Skills Practice

Name: _____

Multiply a 2-digit number by a 1-digit number. **Form A**

1 12 × 2	**2** 10 × 3	**3** 21 × 4	**4** 23 × 1	**5** 33 × 2
6 11 × 8	**7** 35 × 4	**8** 46 × 5	**9** 51 × 3	**10** 70 × 5
11 10 × 9	**12** 88 × 4	**13** 78 × 5	**14** 29 × 6	**15** 61 × 6
16 12 × 7	**17** 26 × 8	**18** 58 × 9	**19** 81 × 7	**20** 75 × 3
21 72 × 3	**22** 92 × 3	**23** 49 × 7	**24** 31 × 6	**25** 56 × 4
26 34 × 6	**27** 58 × 5	**28** 37 × 7	**29** 64 × 8	**30** 98 × 9

Multi-Digit Multiplication—Skills Practice

Name: _____

Multiply 2-digit numbers. **Form A**

1 21×35	2 18×16	3 24×12	4 32×15	5 12×37
6 11×77	7 54×92	8 64×35	9 75×28	10 43×15
11 42×96	12 40×88	13 57×64	14 96×70	15 61×54
16 82×27	17 26×45	18 82×34	19 63×36	20 35×27
21 20×16	22 41×30	23 98×20	24 36×79	25 28×49

Multi-Digit Division—Skills Practice

Name: _____

Divide 2-digit dividends.

Form A

1 $3\overline{)81}$	**2** $4\overline{)52}$	**3** $5\overline{)90}$	**4** $2\overline{)78}$
5 $6\overline{)85}$	**6** $9\overline{)63}$	**7** $3\overline{)92}$	**8** $7\overline{)81}$
9 $2\overline{)73}$	**10** $5\overline{)70}$	**11** $8\overline{)99}$	**12** $4\overline{)95}$
13 $9\overline{)98}$	**14** $3\overline{)99}$	**15** $6\overline{)38}$	**16** $5\overline{)95}$
17 $7\overline{)87}$	**18** $8\overline{)62}$	**19** $4\overline{)82}$	**20** $2\overline{)87}$

Multi-Digit Division—Skills Practice

Name: _____

Divide 3-digit dividends.

Form A

1 $3\overline{)642}$

2 $4\overline{)328}$

3 $5\overline{)745}$

4 $2\overline{)563}$

5 $9\overline{)918}$

6 $6\overline{)905}$

7 $5\overline{)844}$

8 $7\overline{)498}$

9 $8\overline{)407}$

10 $3\overline{)975}$

11 $2\overline{)416}$

12 $4\overline{)592}$

13 $6\overline{)693}$

14 $5\overline{)457}$

15 $3\overline{)860}$

Multiplying by One-Digit Numbers

Check Understanding

Multiply.

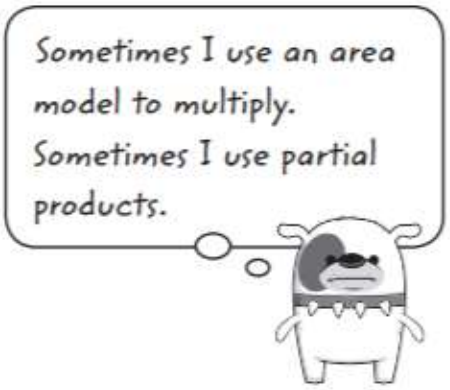
4,106 × 7 = _____

What You Need

- Recording Sheet

What You Do

1. Take turns. Pick a problem on the **Recording Sheet.**
2. Multiply. Tell what method you used.
3. Your partner checks the answer, using a different method.
4. Continue until all the problems are solved.
5. Circle the smallest product from the problems you solved on the **Recording Sheet.** Your partner does the same with the problems he or she solved.
6. The player with the smallest product wins.



Go Further!

On a separate sheet of paper, work together to solve this problem: Carlos has collected 6 albums of baseball cards. His friend gives him 5 more cards. If each album has 245 cards, how many cards does Carlos have now?

Center Activity 4.23 ★★ Recording Sheet

Partner A _____

Partner B _____

Multiplying by One-Digit Numbers

$2{,}403 \times 6 =$ _____	$516 \times 4 =$ _____
$174 \times 8 =$ _____	$4{,}023 \times 5 =$ _____
$7{,}158 \times 2 =$ _____	$491 \times 3 =$ _____

Multiplying by Two-Digit Numbers

Check Understanding

Multiply.

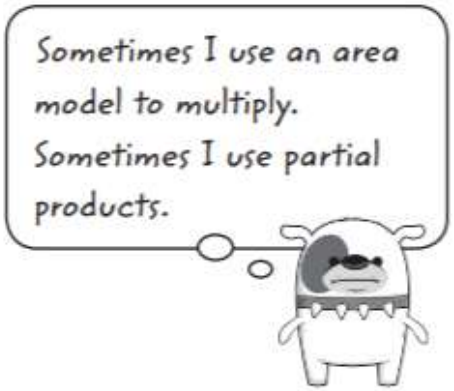
$32 \times 24 =$ _____

What You Need

- 7 game markers in one color
- 7 game markers in another color
- Recording Sheet and Game Board

What You Do

1. Take turns. Pick a problem on the **Recording Sheet.**
2. Find the product. Tell what method you used.
3. Your partner checks the answer, using a different method.
4. If you are correct, cover the product on the **Game Board** with your game marker. If you are incorrect, your turn ends.
5. The first person to get three in a row wins. If no one gets three in a row on the **Game Board,** players add the numbers under their game markers. The player with the greater sum wins.



Go Further!

Choose a problem on the **Recording Sheet** that you solved. Show two different ways to break apart the factors.

Center Activity 4.24 ★★ Recording Sheet and Game Board

Partner A _____

Partner B _____

Multiplying by Two-Digit Numbers

$14 \times 36 =$ _____	$21 \times 23 =$ _____	$35 \times 16 =$ _____
$43 \times 22 =$ _____	$33 \times 17 =$ _____	$25 \times 32 =$ _____
$12 \times 44 =$ _____	$15 \times 34 =$ _____	$24 \times 13 =$ _____

312	**528**	**946**
800	**510**	**483**
560	**504**	**561**

Center Activity 4.25 ★★

Dividing by One-Digit Numbers

Check Understanding

What is the quotient?

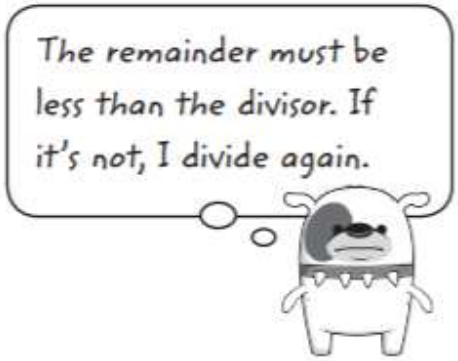
3,265 ÷ 4 = _____

What You Need

- 6 game markers in one color
- 6 game markers in a different color
- Recording Sheet and Game Board

What You Do

1. Take turns. Pick a problem on the **Recording Sheet.**
2. Divide. Write the quotient including the remainder.
3. Your partner uses multiplication to check the answer.
4. If your answer is correct, cover the remainder on the **Game Board** with your game marker. If it is incorrect, your turn ends.
5. Continue until all problems have been solved. The player with the greater number of game markers on the **Game Board** wins.



Go Further!

On a separate sheet of paper, rewrite the dividend of the problem 342 ÷ 5 so there is a remainder of 5. Use multiplication and addition to check your answer. Exchange papers with your partner to check.

Center Activity 4.25 ★★ **Recording Sheet and Game Board**

Partner A _____

Partner B _____

Dividing by One-Digit Numbers

342 ÷ 5 = _____	2,176 ÷ 6 = _____	388 ÷ 3 = _____
4,632 ÷ 9 = _____	735 ÷ 8 = _____	5,178 ÷ 7 = _____
638 ÷ 2 = _____	4,519 ÷ 4 = _____	242 ÷ 9 = _____

3	**6**	**0**
7	**2**	**1**
5	**8**	**4**

Center Activity 4.26 ★★

Division Methods

What You Need

- Recording Sheet

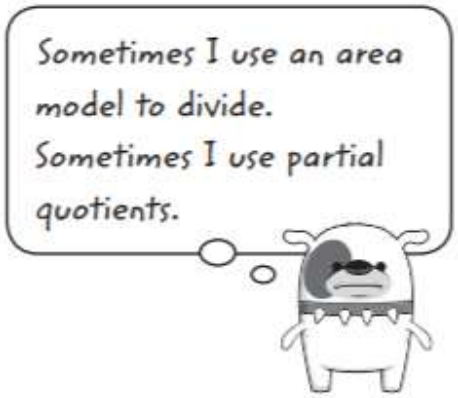
Check Understanding

Divide.

7,799 ÷ 7 = _____

What You Do

1. Take turns. Pick a problem on the **Recording Sheet.**
2. Divide. Tell what method you used.
3. Your partner checks the answer, using a different method. Correct your work, if necessary.
4. Continue until all the problems are solved.
5. Find the difference between the greatest and the least quotient that you calculated. Do not include remainders. Your partner does the same.
6. The player with the greater difference wins.



Go Further!

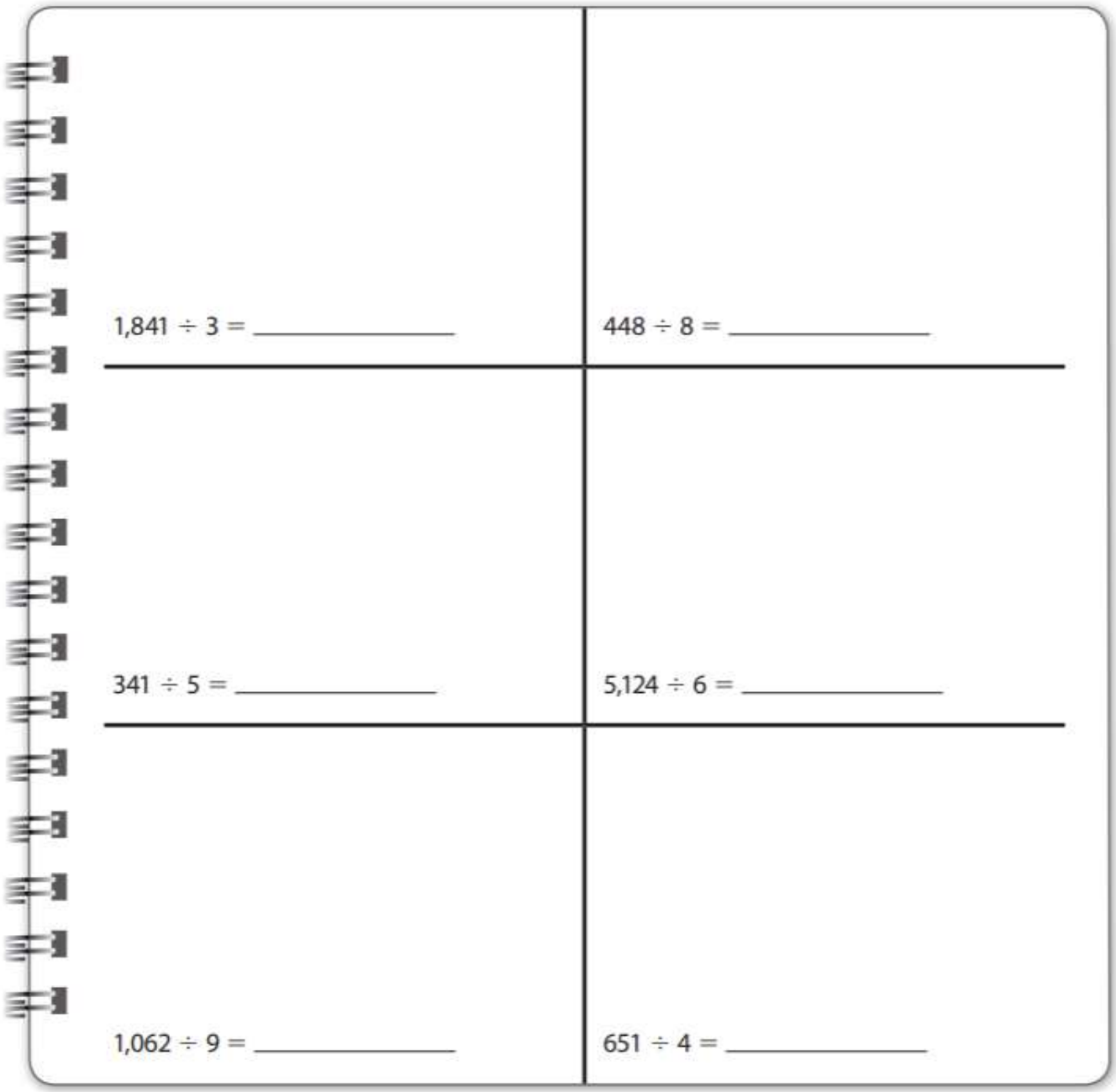
Choose a problem on the **Recording Sheet** with a quotient that includes no remainder. On a separate sheet of paper, change the divisor so that the quotient includes a remainder. Exchange papers with your partner to solve.

Center Activity 4.26 ★★ Recording Sheet

Partner A _____

Partner B _____

Division Methods



The Value of a Digit

Check Understanding

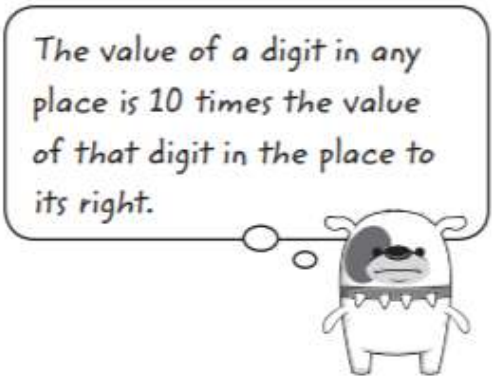
What is the value of the digit 7 in 73,245?

What You Need

- Recording Sheet and Game Board

What You Do

1. Take turns. Pick a statement on the **Recording Sheet.**
2. Write the value of the digit.
3. Circle a number on the **Game Board** that has a digit with the same value. Check each other's work.
4. The first player to circle three numbers in a row wins.



Go Further!

Choose two six-digit numbers from the **Game Board.** Change the digit in the ten thousands place to 10 times the value of the digit in the place to its right. Write the new numbers.

Partner A _____

Partner B _____

The Value of a Digit

The value of the digit is 10 times 2 tens. _____	The value of the digit is 10 times 6 hundreds. _____	The value of the digit is 10 times 9 ten thousands. _____
The value of the digit is 10 times 5 ones. _____	The value of the digit is 10 times 3 thousands. _____	The value of the digit is 10 times 1 ten. _____
The value of the digit is 10 times 8 thousands. _____	The value of the digit is 10 times 7 hundreds. _____	The value of the digit is 10 times 4 thousands. _____

784,823	**34,512**	**267,801**
246,039	**190,358**	**2,136**
943,704	**142,633**	**65,245**

Comparing Numbers

What You Need

- two sets of number cards (0–7)
- Recording Sheet

Check Understanding

Write <, =, or > to compare 13,754 and 13,732.

What You Do

1. Pick five cards without looking. Your partner does the same.
2. Use your cards to make the greatest possible five-digit number.
3. Write the numbers on the **Recording Sheet.** Write <, =, or > to compare the numbers.
4. The partner with the greater number wins the round and writes their initials in the Winner column.
5. Mix up the cards after each round.
6. Play for five rounds. The partner who wins the most rounds is the winner.
7. Play again!

Example

Start with five cards each.

6	7	0	5	4
3	1	1	6	7

Make the greatest numbers.

7	6	5	4	0
7	6	3	1	1

Compare the numbers.

76,540 > 76,311

Go Further!

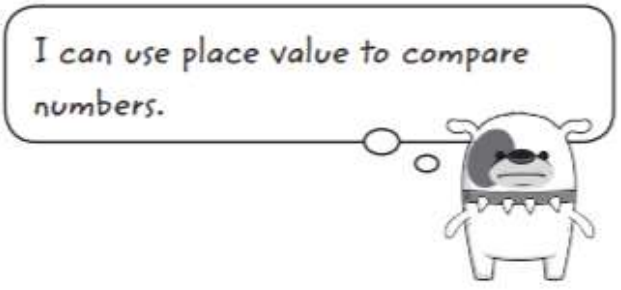
Choose a number from the **Recording Sheet.** On a separate sheet of paper, write a number that is less, using the same digits. Exchange papers with your partner to check.

Partner A _____

Partner B _____

Comparing Numbers

Round	Player A	Player B	Winner
1			
2			
3			
4			
5			



1 Write the number 78,215 in the place-value chart.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	7	8	2	1	5

Write 78,215 in expanded form and word form.

70,000 + 8,000 + 200 + 10 + 5; seventy-eight thousand, two hundred fifteen

2 Write the number 540,632 in the place-value chart.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
5	4	0	6	3	2

Write 540,632 in expanded form and word form.

500,000 + 40,000 + 600 + 30 + 2; five hundred forty thousand, six hundred thirty-two

Set B

3 Show different ways to make 25,302.

25 thousands + 3 hundreds + 2 ones

253 hundreds + 2 ones

25,302 ones

4 Show different ways to make 708,496.

7 hundred thousands + 8 thousands + 4 hundreds + 9 tens + 6 ones

708 thousands + 4 hundreds + 9 tens + 6 ones

7,084 hundreds + 9 tens + 6 ones

Set A

Write the symbol that makes each statement true. Use >, <, or =.

1. 23,230 ___>___ 2,323
2. 33,003 ___<___ 33,030
3. 9,999 ___<___ 10,000
4. 40,404 ___>___ 40,040
5. 52,177 ___<___ 52,771
6. 421,073 ___>___ 412,730

Set B

7. Circle all the numbers that are less than 78,265.

(78,000) 79,000 (70,000) 80,000 (78,200) 78,300

8. Circle all the numbers that are less than 45,763.

46,000 (40,000) 50,000 (45,700) 45,800 (45,000)

9. Circle all the numbers that are greater than 108,427.

108,000 108,400 (108,500) (109,000) (108,430) 108,420

10. How did you solve problem 7?

Answers will vary.
Possible answer: I compared each number with 78,265. If the digits were the same in the ten-thousands place, I compared the digit to the right. I repeated this until I could tell if the number was less than 78,265.

Use a strategy of your choice to solve each problem.

1. The library has 5 mystery books on a shelf. It has 4 times as many fiction books on another shelf. How many fiction books are on the shelf?

   There are 20 fiction books on the shelf.

2. Paul runs 2 laps around the gym. Carrie runs 6 times as many laps as Paul. How many laps does Carrie run?

   Carrie runs 12 laps.

3. Violet has 3 markers. She has 6 times as many colored pencils as markers. How many colored pencils does she have?

   Violet has 18 colored pencils.

4. Owen draws 7 comics in April. He draws 3 times as many comics in May. How many comics does Owen draw in May?

   Owen draws 21 comics in May.

5. Tasha used 8 tomatoes to make salsa. She used 4 times as many tomatoes to make sauce. How many tomatoes did Tasha use to make sauce?

   Tasha used 32 tomatoes to make sauce.

6. There are 7 pear trees on a farm. There are 7 times as many apple trees as pear trees. How many apple trees are on the farm?

   There are 49 apple trees.

7. There are 9 school buses in the parking lot. There are 6 times as many cars as school buses in the parking lot. How many cars are in the parking lot?

   There are 54 cars in the parking lot.

8. There are 8 vases at an art show. There are 9 times as many paintings as vases at the art show. How many paintings are at the art show?

   There are 72 paintings at the art show.

9. Write and solve a word problem for this equation: $5 \times 6 = ?$

   Answers will vary. Possible answer: There are 6 brown hens. There are 5 times as many white hens as brown hens. How many white hens are there? There are 30 white hens.

Multiplying a Four-Digit Number by a One-Digit Number

Estimate. Circle all the problems that will have products between 18,000 and 32,000. Then find the exact products of only the problems you circled. Show your work.

1. 8,491 × 2 = _____
2. 6,148 × 4 = 24,592
3. 7,062 × 5 = _____
4. 4,362 × 5 = 21,810
5. 1,789 × 8 = _____
6. 2,206 × 9 = 19,854
7. 7,218 × 4 = 28,872
8. 9,821 × 3 = 29,463
9. 4,762 × 6 = 28,572
10. 6,739 × 6 = _____
11. 7,964 × 4 = 31,856
12. 3,618 × 7 = 25,326

13. What strategies did you use to solve the problems? Explain.

Answers will vary. Possible answer: I rounded the greater number to the nearest thousand to estimate the product. Then I used place value to multiply.

Use a strategy of your choice to solve each problem.

1 There are 5 times as many tulips as rose bushes in a garden. There are 15 tulips. How many rose bushes are in the garden?

There are 3 rose bushes in the garden.

2 Kelly has 2 times as many quarters as dimes. She has 18 quarters. How many dimes does she have?

Kelly has 9 dimes.

3 There are 18 blueberries in a bowl. There are 3 times as many blueberries as strawberries in the bowl. How many strawberries are in the bowl?

There are 6 strawberries in the bowl.

4 Amanda swims for 16 minutes. This is 4 times as many minutes as Julio swims. How many minutes does Julio swim?

Julio swims 4 minutes.

5 A tile pattern has 6 times as many white squares as gray squares. There are 48 white tiles in the pattern. How many gray tiles are there?

There are 8 gray tiles in the pattern.

6 Leah has 3 times as many country songs as she has pop songs on her MP3 player. She has 27 country songs. How many pop songs does Leah have?

Leah has 9 pop songs.

7 Erik sees 42 stars in the sky on Tuesday night. This is 7 times as many stars as he sees on Monday night. How many stars does Erik see on Monday night?

Erik sees 6 stars on Monday night.

8 Lucas spends 72 minutes cleaning his room. This is 8 times as long as it takes him to wash the dishes. How long does it take Lucas to wash the dishes?

It takes Lucas 9 minutes to wash the dishes.

9 Write and solve a word problem for this equation: $6 \times n = 54$

Answers will vary. Possible answer: Maggie has 6 times as many unicorn stickers as robot stickers. She has 54 unicorn stickers. How many robot stickers does Maggie have? Maggie has 9 robot stickers.

Estimate. Circle all the problems with quotients between 500 and 1,500. Then find the exact quotients of only the problems you circled.

1. 2,508 ÷ 4 = 627
2. 7,058 ÷ 9 = 784 R 2
3. 2,726 ÷ 9 = _____
4. 7,429 ÷ 5 = 1,485 R 4
5. 3,506 ÷ 9 = _____
6. 8,318 ÷ 8 = 1,039 R 6
7. 7,645 ÷ 2 = _____
8. 4,113 ÷ 4 = 1,028 R 1
9. 3,196 ÷ 5 = 639 R 1
10. 5,018 ÷ 7 = 716 R 6
11. 8,127 ÷ 6 = 1,354 R 3
12. 6,155 ÷ 3 = _____

13. What strategies did you use to estimate the quotients? Explain.

Answers will vary. Possible answer: I rounded each dividend to the nearest hundred. Then used basic facts and place value to estimate the quotient.

14. Check one of your answers by solving it with a different strategy. Show your work.

Answers will vary.

Write the missing numbers in the boxes to make each equation true.

Possible answers are shown.

1 $\frac{2}{4} \times \frac{\boxed{4}}{\boxed{4}} = \frac{8}{16}$

2 $\frac{2}{3} \times \frac{\boxed{6}}{\boxed{6}} = \frac{12}{18}$

3 $\frac{5}{6} \times \frac{\boxed{5}}{\boxed{5}} = \frac{25}{30}$

4 $\frac{2}{3} \times \frac{\boxed{3}}{3} = \frac{6}{\boxed{9}}$

5 $\frac{3}{8} \times \frac{5}{\boxed{5}} = \frac{15}{\boxed{40}}$

6 $\frac{5}{6} \times \frac{\boxed{2}}{\boxed{2}} = \frac{\boxed{10}}{12}$

7 $\frac{5}{\boxed{8}} \times \frac{\boxed{3}}{\boxed{3}} = \frac{15}{24}$

8 $\frac{2}{\boxed{3}} \times \frac{4}{\boxed{4}} = \frac{\boxed{8}}{12}$

9 $\frac{\boxed{7}}{8} \times \frac{2}{\boxed{2}} = \frac{\boxed{14}}{16}$

10 Which strategies did you use to solve the problems? Explain why.

Answers will vary. Possible answer: I looked at the numbers I was given. If I knew two numbers for the numerators I could use multiplication facts to figure out the third number, or apply the same strategy to the denominators. Then, since the second fraction should have the same numerator and denominator, I can use that information to fill in the other boxes.

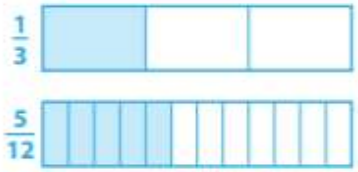
Using Common Numerators and Denominators

Compare the fractions. Write <, >, or = .

1. $\frac{3}{4}$ > $\frac{3}{8}$
2. $\frac{2}{3}$ < $\frac{4}{5}$
3. $\frac{1}{5}$ = $\frac{2}{10}$
4. $\frac{2}{10}$ < $\frac{23}{100}$
5. $\frac{7}{8}$ > $\frac{3}{4}$
6. $\frac{7}{12}$ < $\frac{5}{6}$
7. $\frac{10}{12}$ = $\frac{5}{6}$
8. $\frac{53}{100}$ > $\frac{1}{2}$
9. $\frac{2}{8}$ < $\frac{9}{12}$
10. $\frac{1}{6}$ < $\frac{3}{12}$
11. $\frac{4}{5}$ > $\frac{77}{100}$
12. $\frac{1}{3}$ < $\frac{5}{12}$
13. $\frac{1}{4}$ > $\frac{2}{12}$
14. $\frac{9}{10}$ = $\frac{90}{100}$
15. $\frac{2}{3}$ > $\frac{3}{6}$

16. Show a model you can use to check your answer to problem 12.

Answers will vary. Possible model:



Activity Answer Keys

4.23

Check Understanding

28,742

Recording Sheet

Row 1: 14,418; 2,064

Row 2: 1,392; 20,115

Row 3: 14,316; 1,473

4.24

Check Understanding

768

Recording Sheet

Row 1: 504; 483; 560

Row 2: 946; 561; 800

Row 3: 528; 510; 312

4.25

Check Understanding

816 R 1

Recording Sheet

Row 1: 68 R 2; 362 R 4; 129 R 1

Row 2: 514 R 6; 91 R 7; 739 R 5

Row 3: 319; 1,129 R 3; 26 R 8

4.26

Check Understanding

1,114 R 1

Recording Sheet

Row 1: 613 R 2; 56

Row 2: 68 R 1; 854

*Row 3:*118; 162 R 3

4.15

Check Understanding

70,000

Recording Sheet

Row 1: 200; 65,245

6,000; 246,039

900,000; 943,704

Row 2: 50; 190,358

30,000; 34,512

100; 2,136

Row 3: 80,000; 784,823

7,000; 267,801

40,000; 142,633

4.18

Check Understanding

13,754 > 13,732

Recording Sheet

Sample answer: 76,211 > 75,433