#### Loving. Learning. Serving.

June 10, 2021

Dear 4th Grade Parents,

We look forward to seeing your child in 5<sup>th</sup> grade math. Attached is a packet for your child to complete over the summer. The math problems in this packet are designed to <u>reinforce</u> the concepts covered in 4<sup>th</sup> grade and keep them fresh in mind. The top of each page in the packet provides instruction on the concept. Children lose skills over the summer when they don't practice.

The packet, with ALL work shown, will be collected at the beginning of the school year. Additionally, a graded assignment based on the material will be given when the children return to school. The children may use their packets to complete the assignment.

<u>It is crucial that your child has mastered their basic math facts upon entering the</u> <u>5<sup>th</sup> grade</u>. Please practice using flash cards, computer games or any method that works well for your child.

Have a wonderful summer. We look forward to seeing everyone in September.

Sincerely,

Mr. Carlisle and Mrs. Robb

4<sup>th</sup> and 5<sup>th</sup> grade math teachers



		a a

## Patterns With Multiples of 10, 100, and 1,000

Find  $30 \times 2.000$ .

$$3 \times 2 = 3 \times 2$$
 ones = 6 ones = 6

$$3 \times 20 = 3 \times 2$$
 tens = 6 tens = 60

$$30 \times 20 = 3 \text{ tens} \times 2 \text{ tens} = 6 \text{ hundreds} = 600$$

$$30 \times 200 = 3 \text{ tens} \times 2 \text{ hundreds} = 6 \text{ thousands} = 6,000$$

$$30 \times 2,000 = 3 \text{ tens} \times 2 \text{ thousands} = 60 \text{ thousands} = 60,000$$

**Solution:**  $30 \times 2,000 = 60,000$ 

Use basic facts and patterns to find each product.

1. 
$$5 \times 3$$
 \_\_\_\_\_

3. 4 × 3 \_\_\_\_\_

## Zeros in the Quotient

Bring down the ones.  Divide the ones. $107 \text{ R4 Multiply.}$ $5)539$ $7 \times 5 = 35$ $-5 \downarrow$ Subtract. $03$ $39 - 35 = 4$ $-0 \downarrow$ Compare. $4 < 5$ $-0 \downarrow$ Write the tenainder. $-35$ Temainder.	won the tens.  Multiply. $0 \times 5 = 0$ Subtract. $3 - 0 = 3$ $3 - 5 = 3$ Compare. $3 < 5$	abivid do 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	e hundreds.  Multiply.  1 × 5 = 5  Subtract.  5 - 5 = 0  Compare.  0 < 5	= 3 ÷ 653 hit ebivid 1 5-5363 -5
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Divide. Check your answers.

13. 
$$6\overline{)654}$$
 14.  $8\overline{)723}$  15.  $7\overline{)745}$  16.  $3\overline{)307}$ 

#### **Estimate Products**

Estimate 12 × 586.

Step 1 Round 12 to the nearest 10. Use a number line.



The number 12 is closer to 10. Round 12 to 10.

Step 2 Round 586 to the nearest 100. Use a number line.



The number 586 is closer to 600. Round 586 to 600.

Step 3 Estimate the product.

$$\begin{array}{ccc}
586 & \rightarrow & 600 \\
\times & 12 & \rightarrow & \times & 10 \\
\hline
6,000 & & & & \\
\end{array}$$

Solution:  $12 \times 586$  is about 6,000

Estimate each product by rounding each factor to its greatest place.

## Multiply Greater Numbers

7			
7			X
9	1	9	1
	1		
SĻ	SOL	100s	2000, r

;	<u></u>	G	×	$2 \times 6$ ones = 12 ones place. Record the 2 in the ones place. Write the 1 above the tens place.	2 2 2 2	×
sĻ	sor	200 L	2000, r	Multiply the ones.	ı de	15

7	9		
7			×
9	1	9	L
	L	L	
S).	sor	soot	\$000'L

500 L

9

200r

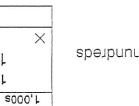
Multiply the hundreds.	Step 3
Record the <b>5</b> in the tens place. Write the <b>1</b> above the hundreds place.	29

Shelf in 1 + 1 = 15 tens  $\frac{2}{1}$ 

anej 1 = 1 = 1 tens  $1 \times 1 = 1$ 

Step 2 Multiply the tens.

Find  $2 \times 1,576$ .



X

| s000, r

Ç	$2 \times 1$ thousand = 2 thousands 2 thousands 2 thousands 4 thousands Place. Record the 3 in the thousands place.	3,15,5 3,152
	Multiply the thousands.	4 qəi2

Multiply. Use a calculator to check.

$$=$$
 6  $\times$  88.9 f  $\Rightarrow$  .8  $=$  4  $\times$  770,2 .7  $=$  5  $\times$  972, f  $\Rightarrow$  .8

7

7 9

5

7

9

9

SOL

## Multiply Three-Digit Numbers by Two-Digit Numbers

Refeach

Find  $139 \times 23$ .

Step 1 Multiply the first factor by the ones digit of the second factor.

Step 2 Multiply the first factor by the tens digit of the second factor. Use a zero to show that you are multiplying by tens.

$$\begin{array}{r}
1\frac{1}{2} \\
139 \\
\times 23 \\
\hline
417 \\
2780 & 20
\end{array}$$

 $2780 \ 20 \times 139 = 2,780$ 

Step 3 Add the products.

**Solution:**  $139 \times 23 = 3{,}197$ 

Multiply.

## Multiply Greater Numbers

Multiply. Estimate to check your work.

 $\times$  33

492,8

en frå om oktypet kolonisterne av de sistet,

Explain how you found your answer. .St bns 522,4 to toubord ett bni 18.

17. How many digits are there in the

Product of 10 and 100?

Name :

Score:

\_\_\_\_\_

Teacher:

Date:

1582 x 26

1818 x 60 1070 x 16

2325 x 96

1962 x 92 2321 x 65

1912 x 65 1648 x 32

1615 x 67 1661 x 14 2039 x 70 1766 x 57

2240 x 43 2438 x 73 1881 x 11 1576 x 52 moO.sbiA-ntsM 문출

247 745		986 987 X	198 198	86Z	288 27 x
		299 X 73	887 07 x	792 77 x	51 X X 13
 	X	ZG X 668	358 71 x	0∠ × ∠6⊅	623 X 70
		↓9 × 9†6	75 x 944	843 243	06 X 799
		Score :			Name :

Name :	Score:	
Teacher:	Date:	
Word Problems	s	
1) Fred has 8 blue marbles, he gave Keith 7 of the marbles. How many blue marbles does he now have?		
2 ) There are five erasers in the drawer. Mike placed eight more erasers in the drawer. How many erasers are now the	ere in all ?	
3 ) Benny has eight violet balloons Jason has six violet balloons How many violet balloons do they have in total?	S.	
4) There are three popular trees currently in the park. Park wor more popular trees today. How many popular trees will the p workers are finished?	87	
5 ) Jason picked 7 lemons from the orchard, and gave 3 lemons Tom. How many lemons does Jason have now?	s to	
6) Fred found 9 seashells and Sally found 4 seashells on the be How many seashells did they find together?	each.	
7) There are 7 oak trees currently in the park. Park workers had 2 oak trees that were damaged. How many oak trees will be in the park when the workers are finished?		
8) Fred had 3 pennies in his bank. He spent 2 of his pennies. How many pennies does he have now?		
9) Sandy's high school played nine football games this year. She seven games. How many football games did Sandy miss?	he attended	
10 ) Keith had baseball cards. He gave three to his friends. He no seven baseball cards left. How many baseball cards did he h		



10 ) Dan has eight books. Benny has seven times more books than Dan. How many books does Benny have?
9) Sally bought five dozen eggs from the grocery store to bake some cakes.
8 ) There are 510 students at a school. If each classrooms are needed at the school?
7) Tom has saved one thousand eight hundred cents from selling lemonade. How many dollars does Tom have?
 νον much money will she make ?
6 ) Melanie earns \$12.50 an hour cleaning houses. If she works from 8:00am to 3:00pm,
5) Melanie has seventy - two muffins, which he needs to box up into dozens. How many boxes does she need?
4) There were a total of 14 soccer games in the season. The season is played for 2 months. How many soccer games were played each month, if each month has the same number of games?
 3 ) Mike bought 450 crayons that came in packs of 15. How many packs of crayons did Mike buy?
than Sally. How many violet balloons does Sally and Jason have ?
2 ) Sally has seven violet balloons. Jason has four times more violet balloons
1) There are 7 calories in a candy bar. How many calories are there in 3 candy bars?
Word Problems
 Teacher: Date:
Name :

N	Vame : Scor	e:
T	eacher: Date	:
	Word Problems	
1)	) Joan has 16 baseball cards. Jason bought 10 of Joan's baseball cards. How many baseball cards does Joan have now?	
2)	There are 40 popular trees currently in the park. Park workers will plant a more popular trees today. How many popular trees will the park have who workers are finished?	
3)	There are 600 students at a school. If each classroom holds 30 students, how many classrooms are needed at the s	chool?
4)	Melanie decided to sell all of her old books. She gathered up 6 books to She sold 3 books in a yard sale. How many books does Melanie now har	
5)	There were a total of 6 football games in the season.  The season is played for 2 months. How many football games were play each month, if each month has the same number of games?	ed
6)	Sara bought 330 crayons that came in packs of 15. How many packs of crayons did Sara buy?	
7)	Sandy found 4 seashells and Dan found 5 seashells on the beach.  How many seashells did they find together?	
8)	Sara has 40 violet marbles. Dan has 15 times more violet marbles than Sara. How many violet marbles does Sara and Dan have?	
9)	Mike has 8 books. Sara has 4 times more books than Mike. How many books does Sara have ?	
10)	Fred, Sam, Benny, and Nancy each have 6 Pokemon cards.  How many Pokemon cards do they have in all?	-



#### Divide Greater Numbers

Use paper and pencil or a calculator to divide.

1. 4)3,124

2. 2)5,317

з. 3)<del>\$2,145</del>

4. 5)8,628

**5.** 2)1,572

6. 6)\$120.90

**7.** 8)3,648

s. 7)\$12,348

9. 9)7,596

10. 3)12,456

11. 5)11,139

12. 2)6,307

13. 56,138 ÷ 6

**14.** 2,015 ÷ 5

**15.** \$685.16 ÷ 7

16. 2,506 ÷ 4

#### Test Prep

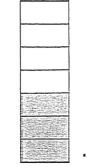
- 17. The cost of 3 airline tickets was \$1,035. What was the cost per ticket?
  - A \$310
- **c** \$305
- в \$315
- **D** \$345
- 18. Joel keeps track of the number of miles he jogs. He jogs 4 miles each day that he jogs. At the end of the year Joel had jogged 1,284 miles. How many days did he jog that year?

#### Represent Fractions

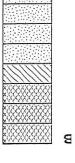
the part that is not shaded. Write a fraction for the shaded part. Then write a fraction for



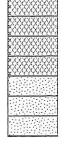




each fraction. On a separate piece of paper, draw a picture to show



10. 3



AO Si seither si  $\frac{8}{8}$  is either si  $\frac{8}{8}$  . It Match the picture to the description. Write A or B.

TON si  $\frac{\varepsilon}{8}$  .41

 $\frac{1}{8}$  si  $\frac{1}{8}$  .sr

्टिस हिंदी

plue? circle. What fraction of the marbles are marbles, and 5 swirled marbles in a 16. There are 3 blue marbles, 7 green

school? week (7 days) does she NOI go to of each week. What fraction of each 15. Jessica goes to school for 5 days out



## Explore Equivalent Fractions

Draw fraction strips to find equivalent fractions for  $\frac{1}{3}$ .

Draw  $\frac{1}{6}$  fraction strips to fit below the  $\frac{1}{3}$  strip.

How many  $\frac{1}{6}$  fraction strips did you use?  $\frac{1}{3} = \frac{1}{3} = \frac{1$ 

Draw fraction strips to find fractions equivalent to  $\frac{6}{8}$ . Complete the table.

Show your work.

	Fractions Equivalent to $\frac{6}{8}$			
	Fraction Strip	How many?	Equivalent Fraction	
1.	<u>1</u> 4	4 4		
2.	<u>1</u> 16			

Draw fraction strips to find fractions equivalent to  $\frac{4}{10}$ . Complete the table.

	Fractions Equivalent to $\frac{4}{10}$			
	Fraction Strip	How many?	Equivalent Fraction	
3.	<u>1</u> 5			
4.	<u>1</u> 20			

# Equivalent Fractions and Simplest Form

Jared read  $\frac{6}{8}$  of a book.

Find an equivalent fraction by multiplying the numerator and denominator by the same number.

$$\begin{array}{c} (2 \times 2) \\ (3 \times 2) \\ (4 \times 2) \\ (5 \times 2) \\$$

 $\frac{\sigma}{8}$  and  $\frac{12}{16}$  are equivalent fractions.

Find the simplest form of a fraction by dividing until 1 is the only number that divides both the numerator and the denominator.

$$\frac{1}{2} \div \frac{1}{8} = \frac{1}{8}$$

 $\cdot \frac{\epsilon}{4}$  si  $\frac{8}{8}$  to mrot tealqmis  $e^{-1}$ 

Write each fraction in simplest form. Then write another equivalent fraction.

$$-\frac{8}{1} = \frac{8 \div 3}{9} = \frac{8}{9}$$

$$-\frac{8}{1} = \frac{8 \div 3}{10 \div 2} = \frac{8}{9}$$

$$-\frac{8}{10 \div 2} = \frac{8}{10 \div 2} = \frac{8}{10}$$

$$-\frac{8}{10 \div 2} = \frac{8}{10 \div 2} = \frac{8}{10}$$

$$-\frac{8}{10 \div 2} = \frac{8}{10}$$

$$-\frac{8}{10} = \frac{8}{10}$$

$$-\frac{8}{10$$

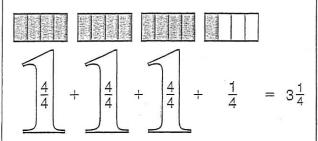
$$\frac{3 \div 5}{2 \div 5} = \frac{4}{5} \cdot 6 \qquad \frac{4}{5} \cdot \frac{5}{5} = \frac{4}{5} \cdot \frac{5}{5} = \frac{4}{5} \cdot \frac{5}{5} = \frac{6}{5} = \frac{$$

$$\frac{6}{18} = \frac{6 \times 2}{18 \times 2} = \frac{20}{15} = \frac{20}{15} = \frac{20}{20} = \frac{22 \times 3}{15} = \frac{6}{15} = \frac{22 \times 3}{15} = \frac{6}{15} = \frac{22 \times 3}{15} = \frac{6}{15} = \frac{6}{$$

## Mixed Numbers and Improper Fractions

Write  $\frac{13}{4}$  as a mixed number.

You can draw a picture.



The picture shows that  $\frac{13}{4} = 3\frac{1}{4}$ .

You can divide the numerator by the denominator.

Remember: The fraction bar stands for "divide by," so  $\frac{13}{4}$  means 13 divided by 4.

\_3 ← number of wholes 4)13 \_\_12 1 ← number of parts

So, 
$$\frac{13}{4} = 3\frac{1}{4}$$
.

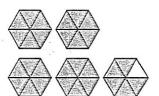
Write an improper fraction for the shaded parts. Then write each as a mixed number or a whole number.

1.

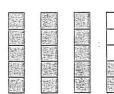




2.



3.



4.



5.



6



7.



8.

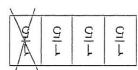


9



## With Like Denominators Add and Subfract Fractions

same and subtract the numerators. denominators, keep the denominator the When subtracting fractions with like



There are three  $\frac{1}{5}$  pieces left, so Count the number of  $\frac{1}{5}$  pieces left.

There are three 
$$\frac{4}{5} - \frac{1}{5} = \frac{3}{5}$$
.

the same and add the numerators. denominators, keep the denominator When adding fractions with like

There are five  $\frac{7}{8}$  pieces, so Count the number of  $\frac{1}{8}$  pieces.

$$\frac{3}{8} + \frac{2}{8} = \frac{5}{8}.$$

Add or subtract. Use fraction strips to help you.

$$\frac{1}{9} \div \frac{2}{9} \div \frac{1}{9}$$

$$\frac{1}{8} + \frac{5}{8}$$

$$\frac{6}{4} + \frac{6}{4}$$

$$\frac{2}{01} + \frac{2}{01}$$
 .7

$$\frac{6}{1} - \frac{6}{7}$$
 '9

5. 
$$\frac{12}{13} - \frac{2}{13}$$

$$\frac{10}{51} - \frac{4}{51}$$

$$\frac{4}{8} + \frac{6}{8}$$
 .11

10. 
$$\frac{1}{2} + \frac{1}{2}$$

$$\frac{6}{01} + \frac{3}{01}$$
 .9

16. 
$$\frac{4}{11} + \frac{5}{11}$$

$$\frac{7}{15} - \frac{9}{12}$$

$$14. \frac{3}{7} - \frac{2}{7}$$

$$\frac{1}{6} + \frac{4}{6}$$