Future 5th Graders,

Congratulations on the successful completion of your 4th grade year! We hope you enjoy your much-deserved summer break. In addition to relaxing, we hope you will do some reading and math over the summer months to help prepare you for an exciting year in 5th grade.

Attached you will find a packet of math work to complete over your break. Included in this packet are skills you learned in 4th grade that are important building blocks for what you will learn in 5th grade. To help with the retention of these concepts, we recommend that you complete a few problems from each of the pages each week instead of completing the packet one page at a time. For this reason, we have added suggestions on the margins for when you should complete the work.

Attached you will also find your reading log for the summer. We ask that you read **5 books** of at least **100 pages** each or **500 pages total.**

For the completion of your math work you will earn a free dress day and for the completion of your reading work you will earn an afternoon of fun.

These packets are due to your teacher by **August 31st.**

Enjoy your summer, and we look forward to learning with you next year.

Sincerely,

Mrs. Diaz & Mrs. Fetterhoff

✺ Summer Reading Log ✺
Grade 5
Read 5 books of at least 100 pages or 500 pages total

Name:_____

Please write the book titles and number of pages below.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

Total Pages Read: _____

Student Signature: _____

Parent Signature: _____

Adding Whole Numbers

1. Write the problem vertically, lining up the numbers to the right.

2. Add the ones digits of the numbers. If the sum is 10 or more, carry the tens digit and write the ones digit in the answer.

3. Repeat with the tens digits. Be sure to add in any carried digits, too!

4. Continue working right to left until there are no more digits to add.

ex: 5,938 + 746

$$
\begin{array}{r}
\overset{1}{5}\overset{1}{9}3\,8 \\
+\ \ 7\,4\,6 \\
\hline
6\,6\,8\,4
\end{array}
$$

→ $\boxed{6,684}$

Subtracting Whole Numbers

1. Write the problem vertically, lining up the numbers to the right.

2. Subtract the ones digits of the numbers. If the top digit is less than the bottom digit, borrow. (Cross out the digit next to it and decrease it by one. Add 10 to the ones digit.) Then subtract the bottom digit from the new top one.

3. Repeat with the tens digits of the numbers.

4. Continue working right to left until there are no more digits to subtract.

ex: 458 - 268

$$
\begin{array}{r}
\overset{3}{\cancel{4}}\overset{15}{\cancel{5}}8 \\
-\ 2\,6\,8 \\
\hline
1\,9\,0
\end{array}
$$

→ $\boxed{190}$

Rounding Whole Numbers

hundred-thousands	ten-thousands	thousands	,	hundreds	tens	ones
—	—	—		—	—	—

ex: round 34,647 to the nearest hundred

The 6 is in the hundreds place.

Keep the 34 the same.

After the 6 is a 4, which is less than 5, so the 6 stays the same and the numbers after it turn to zeroes.

1. Keep all digits to the left of the place you are rounding the same.

2. If the digit to the right of the rounding digit is less than 5, keep the rounding digit the same. If it's 5 or greater, increase the rounding digit by 1.

3. Change all places to the right of the digit you are rounding to 0.

→ $\boxed{34,600}$

Find each sum or difference.

1. 89 + 74	2. 627 + 913	3. 723 + 11
4. 2,354 + 3,728	5. 1,925 + 89	6. 7,627 + 836
7. 53 − 31	8. 682 − 426	9. 844 − 79
10. 2,365 − 1,299	11. 3,014 − 45	12. 5,200 − 845

Week 1

Week 2

Week 3

Week 4

Round the number 245,382 to the nearest given place value.

Week 5

13. hundred	14. ten-thousand	15. thousand	16. ten

Multiplying by 1-Digit Numbers

1. Write the problem vertically, with the greater number on top. Be sure to line up the numbers to the right.

2. Multiply the bottom number by the ones digit of the top number. Write down the ones digit of that answer and carry the tens digit.

3. Multiply the bottom number by the tens digit of the top number. If you carried a digit from the first product, be sure to add it to you your new product. Write down the ones digit of the answer and carry the tens digit.

4. Repeat with any remaining digits of the top number, working right to left.

ex: 892 x 6

$$\begin{array}{r} {}^{5}8{}^{1}92 \\ \times \quad 6 \\ \hline 5352 \end{array}$$
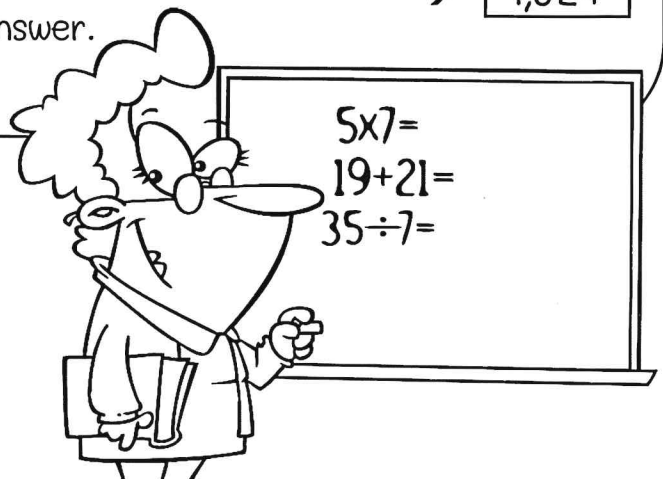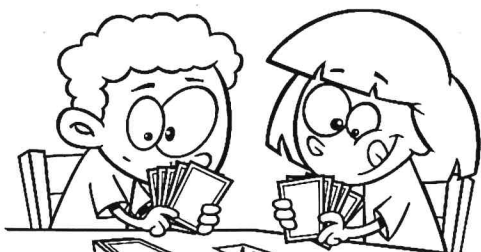
→ $\boxed{5,352}$

Multiplying Two 2-Digit Numbers

1. Write the problem vertically. Be sure to line up the numbers to the right.

2. Multiply the ones digit of the bottom number by each digit of the top number, right to left, (as explained in the multiplying by 1-digit numbers section above).

3. Bring down a zero.

4. Multiply the tens digit of the bottom number by each digit of the top number, right to left, (as explained in the multiplying by 1-digit numbers section above).

5. Add the two products together to get your final answer.

ex: 76 x 24

$$\begin{array}{r} {}^{1}_{2}76 \\ \times \quad 24 \\ \hline + \quad 304 \\ 1520 \\ \hline 1824 \end{array}$$

→ $\boxed{1,824}$

5x7=
19+21=
35÷7=

Find each product.

|		
Week 1		
17. 24 x 7	18. 96 x 3	19. 57 x 2
Week 2		
20. 845 x 5	21. 910 x 8	22. 341 x 6
Week 3		
23. 1,387 x 4	24. 8,452 x 9	25. 5,023 x 8
Week 4		
26. 34 x 21	27. 84 x 13	28. 95 x 64
Week 5		
29. 32 x 20	30. 67 x 89	31. 72 x 44

Dividing with 1-Digit Divisors

1. Write out the long division problem with the first number (dividend) underneath the division symbol and the second number (divisor) to the left of the division symbol.

2. Divide the divisor into the smallest part of the dividend it can go into and write the number of times it can go in on top of the division symbol.

3. Multiply the number on top by the divisor and write the product under the number you divided into in step 2.

4. Subtract your product from the number above it.

5. Bring down the next digit of the dividend.

6. Repeat steps 2-5 until there is nothing left to bring down.

7. If your last subtraction answer is not zero, write the remainder on top.

ex: $6,413 \div 9$

$$
\begin{array}{r}
712 \text{ R }5 \\
9 \overline{)6413} \\
-63 \\
\hline
11 \\
-9 \\
\hline
23 \\
-18 \\
\hline
5
\end{array}
$$
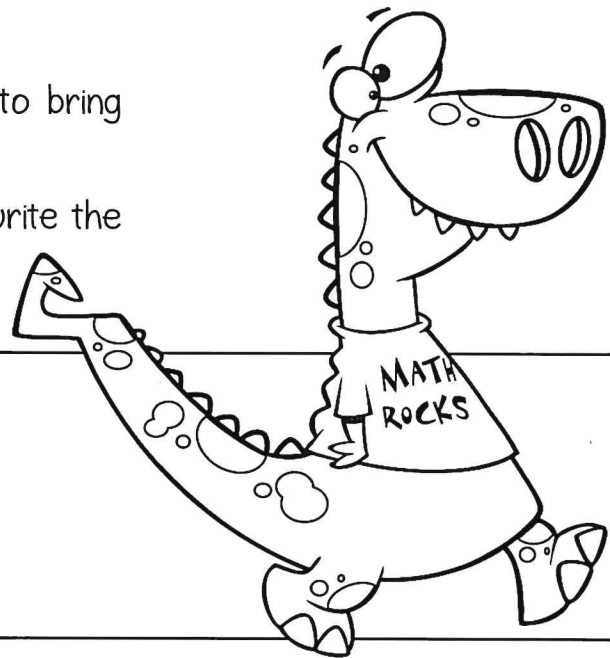
Checking Division Answers Using Multiplication

1. Multiply your quotient (not including the remainder) by the divisor.

2. Add your remainder to the product you get.

3. Make sure the answer you get is the same number as the dividend in the original problem.

ex: $6,413 \div 9 = 712$ R 5

$$
\begin{array}{r}
712 \\
\times \quad 9 \\
\hline
6408
\end{array}
\qquad
\begin{array}{r}
6408 \\
+ \quad 5 \\
\hline
6413
\end{array}
$$

☺

Find each quotient. Check your answers using multiplication.

32. 95 ÷ 6	33. 58 ÷ 2	34. 86 ÷ 3
35. 232 ÷ 4	36. 512 ÷ 7	37. 203 ÷ 8
38. 625 ÷ 5	39. 442 ÷ 9	40. 102 ÷ 3
41. 2,304 ÷ 6	42. 1,832 ÷ 7	43. 9,203 ÷ 8

Week 1

Week 2

Week 3

Week 4

Greatest Common Factor

Factors are numbers that can be multiplied together to equal a given number.

To find the greatest common factor (GCF) of 2 or more numbers:

1. List all the factors of each number.

2. Find the largest number that is a factor of each number.

ex: find the GCF of
12 & 15

$12 = 1 \times 12, 2 \times 6, 3 \times 4$

12: 1, 2, ③, 4, 6, 12

$15 = 1 \times 15, 3 \times 5$

15: 1, ③, 5, 15

GCF = 3

Least Common Multiple

Multiples are numbers that can be divided by a given number without a remainder.

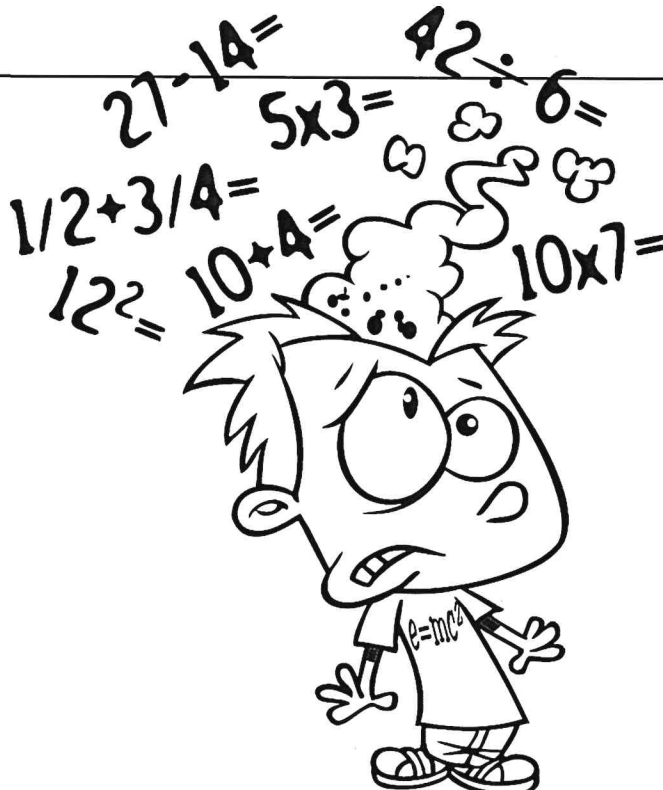To find the least common multiple (LCM) of 2 or more numbers:

1. List the first several multiples of each number.

2. Find the smallest number that is a multiple of each number.

ex: find the LCM of
6 & 8

6: 6, 12, 18, ㉔, 30

8: 8, 16, ㉔, 32, 40

LCM = 24

$27-14=$ $42 \div 6=$

$5 \times 3=$

$1/2+3/4=$

$12^2=$ $10+4=$ $10 \times 7=$

Find the greatest common factor of each pair or group of numbers.

44. 20 & 15	45. 12 & 18	46. 24 & 30	47. 22 & 28
48. 20 & 40	49. 18 & 27	50. 6, 8, & 12	51. 12, 18, & 24

week 1

week 2

Find the least common multiple of each pair or group of numbers

52. 8 & 10	53. 9 & 6	54. 8 & 12	55. 7 & 8
56. 9 & 12	57. 10 & 15	58. 6, 9, & 12	59. 4, 6, & 10

week 3

week 4

Simplifying Fractions

1. Divide the numerator and denominator by a common factor.

2. Repeat until the only common factor of the numerator and denominator is 1.

ex: simplify $\frac{10}{12}$

you can divide both 10 and 12 by 2

$$\frac{10}{12} \begin{array}{c} \div 2 \\ = \\ \div 2 \end{array} \boxed{\frac{5}{6}}$$

the only number you can divide both 5 and 6 by is 1, so you are done!
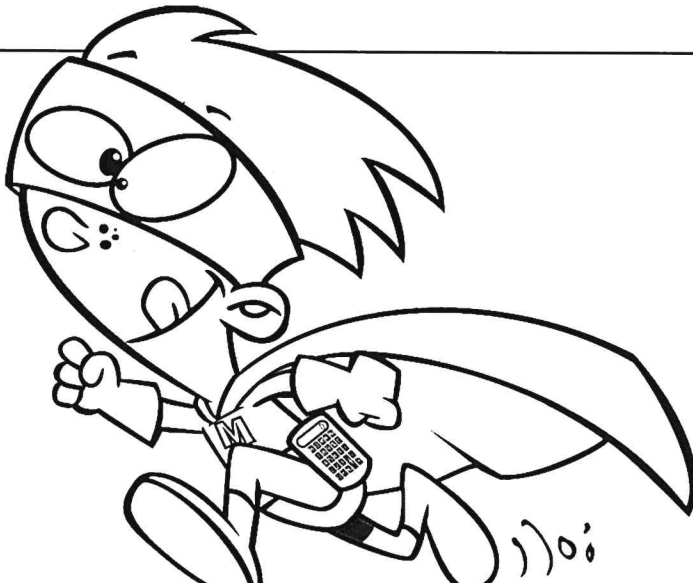
Comparing Fractions

1. Find a common denominator for the fractions by finding a common multiple of the two denominators.

2. For each fraction, determine what you multiplied the denominator by to get that common denominator, and then multiply the numerator by that same number.

3. Now that the fractions are rewritten with common denominators, compare the two fractions. The fraction with the larger numerator is greater.

4. Use the appropriate symbol to compare the fractions.
   <: less than,   >: greater than,   =: equal to

ex: compare: $\frac{3}{4} \bigcirc \frac{5}{6}$

12 is a multiple of both 4 and 6

$$\frac{3}{4} \begin{array}{c} \times 3 \\ = \\ \times 3 \end{array} \frac{9}{12} \qquad \frac{5}{6} \begin{array}{c} \times 2 \\ = \\ \times 2 \end{array} \frac{10}{12}$$

$$\frac{9}{12} \bigcirc< \frac{10}{12}$$

9 is smaller than 10, so the 1st fraction is LESS THAN the 2nd fraction

Simplify each fraction.

60. $\frac{9}{12}$	61. $\frac{6}{8}$	62. $\frac{6}{15}$	63. $\frac{4}{8}$
64. $\frac{8}{24}$	65. $\frac{3}{12}$	66. $\frac{2}{10}$	67. $\frac{10}{30}$

Compare each pair of fractions using <, >, or = by renaming them with a common denominator.

68. $\frac{3}{5}$ ◯ $\frac{2}{10}$	69. $\frac{1}{4}$ ◯ $\frac{1}{6}$	70. $\frac{3}{5}$ ◯ $\frac{7}{10}$
71. $\frac{1}{2}$ ◯ $\frac{4}{8}$	72. $\frac{1}{5}$ ◯ $\frac{4}{15}$	73. $\frac{2}{9}$ ◯ $\frac{1}{3}$
74. $\frac{7}{8}$ ◯ $\frac{3}{4}$	75. $\frac{3}{9}$ ◯ $\frac{2}{6}$	76. $\frac{1}{2}$ ◯ $\frac{1}{3}$