

Name \_\_\_\_\_

## Going into 6<sup>th</sup> Grade Summer Packet

You worked so hard all year, especially learning reading, writing, and math skills. Complete this packet over the summer to keep your skills fresh and prepare you for 6<sup>th</sup> grade! Your teacher will collect it the first week of school for a completion grade.

Here is what you need to accomplish:

1. Practice *XtraMath* fact fluency (on the computer, 10 min, 3x per week)
2. Complete math skills sheets (in this packet)
3. Read two books (fiction and nonfiction)
4. Complete writing assignments (in this packet)

Please continue reading to find your instructions and assignments attached. This review will be most effective if you work towards completion a little bit each day, rather than all at once!

Hope you have a great summer!

Sincerely,

Miss Rhine



You will need to practice XtraMath for 10 minutes, 3x per week. Your teacher and parent will keep a close watch on your progress towards fact fluency, but also record the date and times you practiced below for your own record-keeping.

Log in to [https://xtramath.org/#/signin/student\\_other](https://xtramath.org/#/signin/student_other)

Sign in

Think of XtraMath as a math vitamin! Practicing regularly will only take a few minutes, so make it a part of your daily routine. Math facts are the building blocks of your child's math education and your child will be well rewarded for the time they spend practicing on XtraMath.

<b>Date</b>							
<b>Minutes</b>							

<b>Date</b>							
<b>Minutes</b>							

<b>Date</b>							
<b>Minutes</b>							

<b>Date</b>							
<b>Minutes</b>							

**Addition**

Find the sum of the two numbers in each problem.  
Show all work.

$$\begin{array}{r} 652 \\ + 345 \\ \hline \end{array}$$

$$\begin{array}{r} 203 \\ + 525 \\ \hline \end{array}$$

$$\begin{array}{r} 726 \\ + 268 \\ \hline \end{array}$$

Example:

$$\begin{array}{r} 11 \\ 448 \\ + 188 \\ \hline 636 \end{array}$$

Decimal Addition:

Remember to line up the decimals before adding. Bring the decimal straight down in your answer.

$$\begin{array}{r} 7.75 \\ + 1.46 \\ \hline \end{array}$$

$$51.4 + 2.86$$

$$.1274 + 8.25$$

**Subtraction**

Find the difference between the two numbers in each problem. Show all work.

$$\begin{array}{r} 407 \\ - 198 \\ \hline \end{array}$$

$$\begin{array}{r} 7,007 \\ - 2,426 \\ \hline \end{array}$$

$$\begin{array}{r} 3,414 \\ - 1,218 \\ \hline \end{array}$$

Example:

$$\begin{array}{r} 313 \\ 748 \\ - 218 \\ \hline 525 \end{array}$$

Decimal Subtraction:

Remember to line up the decimals before subtracting. Bring the decimal straight down in your answer.

$$\begin{array}{r} 338.38 \\ - 149.27 \\ \hline \end{array}$$

$$80.401 - 44.23$$

$$75.89 - 9.4$$

**Multiplication**

Find the product of the two numbers in each problem. Show all work.

Example:

$$\begin{array}{r} 54 \\ \times 16 \\ \hline 324 \\ + 540 \\ \hline 864 \end{array}$$

$$\begin{array}{r} 65 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 42 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 84 \\ \times 39 \\ \hline \end{array}$$

**Decimal Multiplication:**

Multiply as you would with whole numbers. Count the decimal places in each factor. The product (answer) has the same number of decimal places.

$$\begin{array}{r} 0.13 \\ \times 70 \\ \hline \end{array}$$

$$\begin{array}{r} 5.1 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 0.108 \\ \times 2.5 \\ \hline \end{array}$$

**Division**

Find the quotient in each problem. If there is a remainder, state the remainders as R=\_\_\_\_. Show all work. Feel free to use a separate sheet of paper.

$$7 \overline{)591}$$

$$12 \overline{)264}$$

$$43 \overline{)2815}$$

Decimal Division:

If the divisor (outside number) is a decimal, you must move the decimal point (using multiplication) to the right until it becomes a whole number. Then, move the decimal in the dividend (inside number) the same number of times. Divide to find your answer (quotient).

Then, move the decimal straight up from the dividend to the quotient.

Remember, no remainders.

$$\begin{array}{r} \text{quotient} \\ \text{divisor} \overline{) \text{dividend}} \end{array}$$

$$3 \overline{) 31.8}$$

$$0.5 \overline{) 7.45}$$

$$0.12 \overline{) 12.24}$$

**Rounding**

Underline the given place value. Look to the right. If this digit is 5 or greater, increase the underlined digit by 1. If the digit to the right is less than 5, keep the underlined digit the same.

Round to the nearest...

hundredth

0.547      0.55

Round to the nearest....

tenth

0.3479

hundredth

0.7553

whole number

3.268

ten

162.21

thousandth

0.0036

hundred

990.54

Compare using <, >, or =

1.2 ○ 1.20      1.2 = 1.20

Compare the decimals.

0.205 ○ 0.21

1.03 ○ 0.03

0.04 ○ 0.050

0.1 ○ 0.1000

52 ○ 0.500

0.41 ○ 0.405

**Prime Number:** A whole number greater than 1 that has only two factors, 1 and itself.  
Examples: 2, 3, 5, 7, 11, 13, 17, and 19 are all prime numbers.

**Composite Number:** A whole number greater than 1 that has more than two factors.  
Example: 8 is a composite number since its factors are 1, 2, 4, 8.

Determine if the following numbers are prime or composite. If the numbers are composite, please list all of the factors.

27: \_\_\_\_\_

39: \_\_\_\_\_

43: \_\_\_\_\_

49: \_\_\_\_\_

### Exponents

A way to show repeated multiplication by the same factor is to use an exponent. In this example:  $2^3 = 2 \times 2 \times 2 = 8$ . The small raised three is the exponent. It tells how many times the number 2, called the base, is multiplied by itself.

Solve the following expressions by writing the expanded notation (repeated multiplication) and find the value.

$6^2$

$2^6$

$3^4$

eight squared

five cubed

**Greatest Common Factor**

The greatest factor that two or more numbers have in common (GCF).

1. List all the factors of **four** in order
2. List all the factors of **twenty** in order
3. List the common factors
4. Write the greatest common factor

**Finding Common Factors:**

4: 1, 2, 4

20: 1, 2, 4, 5, 10, 20

Common Factors: 1, 2, 4    GCF= 4

List all the factors for each number. Circle the common factors.

18 : \_\_\_\_\_

30 : \_\_\_\_\_

Common Factors: \_\_\_\_\_      Greatest Common Factor: \_\_\_\_\_

60 : \_\_\_\_\_

45 : \_\_\_\_\_

Common Factors: \_\_\_\_\_      Greatest Common Factor: \_\_\_\_\_

23: \_\_\_\_\_

29: \_\_\_\_\_

Common Factors: \_\_\_\_\_      Greatest Common Factor: \_\_\_\_\_

56: \_\_\_\_\_

72: \_\_\_\_\_

Common Factors: \_\_\_\_\_      Greatest Common Factor: \_\_\_\_\_

**Least Common Multiple**

The smallest nonzero multiple that two or more numbers have in common.

1. List the first 6 multiples of 4
2. List the first 6 multiples of 6
3. List the common multiples
4. Write the least common multiple.

**Finding Common Multiples:**

4: 4, 8, 12, 16, 20, 24

6: 6, 12, 18, 24, 30, 36

Least Common Multiple= 12

8 : \_\_\_\_\_

12 : \_\_\_\_\_

Common Multiples: \_\_\_\_\_ Least Common Multiple: \_\_\_\_\_

7 : \_\_\_\_\_

11 : \_\_\_\_\_

Common Multiples: \_\_\_\_\_ Least Common Multiple: \_\_\_\_\_

25 : \_\_\_\_\_

10 : \_\_\_\_\_

Common Multiples: \_\_\_\_\_ Least Common Multiple: \_\_\_\_\_

24 : \_\_\_\_\_

36 : \_\_\_\_\_

Common Multiples: \_\_\_\_\_ Least Common Multiple: \_\_\_\_\_



### Area and Volume

The number of square units needed to cover a region is the **area**. (square units)

The amount of space inside a solid figure is the **volume** of the figure. (cubic units)

### Formulas

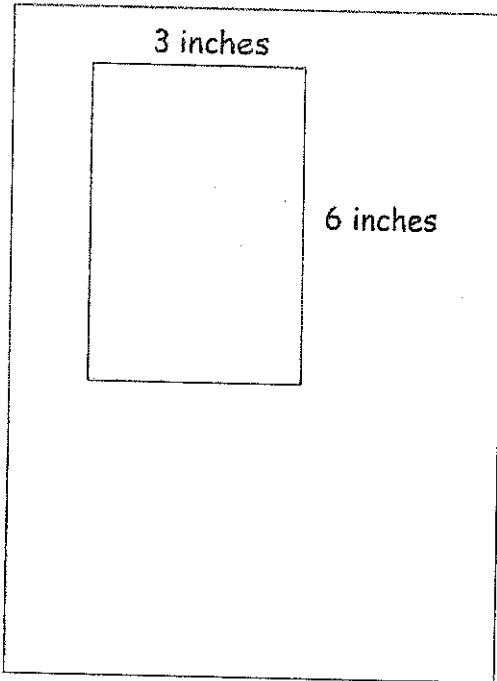
Area of a rectangle:

$$l \times w$$

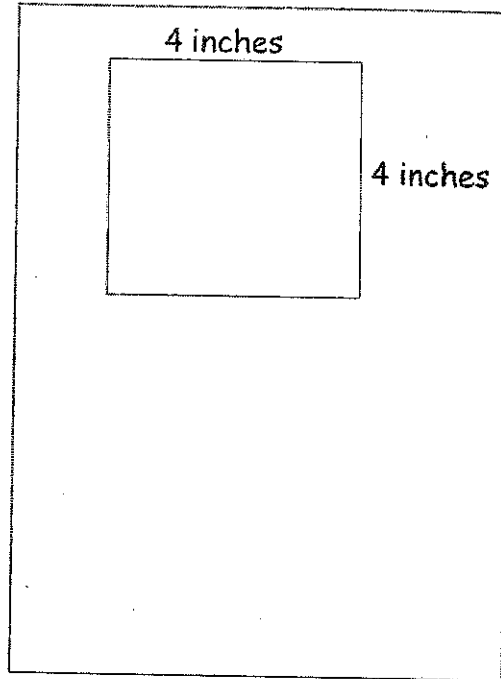
Volume of a rectangular prism:

$$l \times w \times h$$

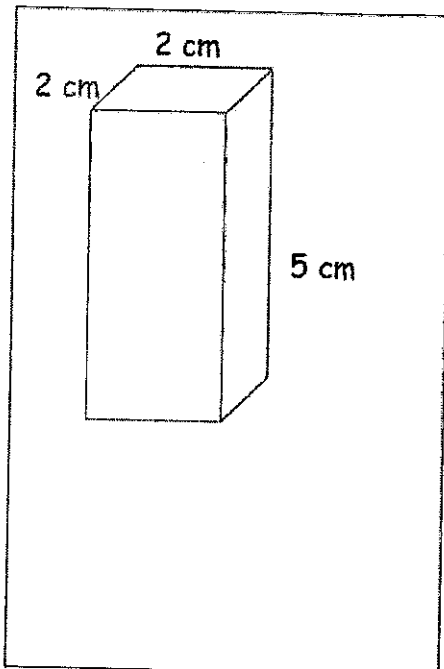
Find the area of the figure below.



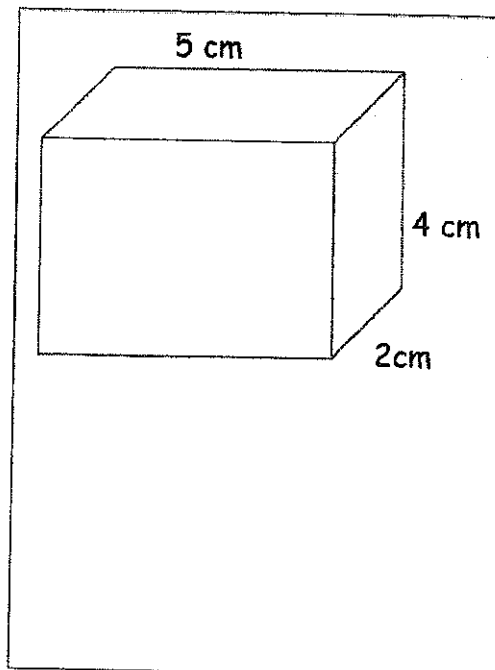
Find the area of the figure below.



Find the volume of the figure below.



Find the volume of the figure below.



### Comparing Fractions

Compare each pair of numbers. Write the correct comparison symbol ( $<$ ,  $>$ ,  $=$ ) in each circle. Make sure you have common denominators before comparing numerators.

Example:

$$\begin{array}{ccc} \frac{1}{3} & \bigcirc & \frac{3}{4} \\ \downarrow & & \downarrow \\ \frac{4}{12} & & \frac{9}{12} \end{array}$$

$$\frac{3}{8} \bigcirc \frac{5}{8}$$

$$\frac{3}{4} \bigcirc \frac{3}{8}$$

$$\frac{1}{2} \bigcirc \frac{4}{8}$$

$$\frac{3}{7} \bigcirc \frac{1}{4}$$

$$\frac{3}{5} \bigcirc \frac{5}{6}$$

$$\frac{7}{8} \bigcirc \frac{3}{4}$$

### Ordering Fractions

Order the following fractions from least to greatest.

$$\frac{3}{8} \quad \frac{5}{8} \quad \frac{4}{8} \quad \frac{2}{8} \quad \frac{7}{8}$$

$$\frac{1}{5} \quad \frac{4}{5} \quad \frac{1}{10} \quad \frac{6}{10} \quad \frac{7}{10}$$

$$\frac{1}{2} \quad \frac{1}{4} \quad \frac{1}{6} \quad \frac{1}{3} \quad \frac{1}{5}$$

$$\frac{1}{2} \quad \frac{5}{16} \quad \frac{30}{64} \quad \frac{3}{8} \quad \frac{9}{32}$$

**Order of Operations**

Solve the following problems. Show your work. Be sure to follow the order of operations.

Parenthesis

Exponents

Multiplication or Division: Which ever comes first  
from left to right.

Addition or Subtraction: Which ever comes first  
from left to right.

Example:  $8 - 4 \div 2 + 2 =$

$$8 - 2 + 2 =$$

$$6 + 2 =$$

$$8$$

$15 \times 8 - 3 =$

$36 \div 4 \times 3 =$

$(30 + 8) \times 6 - 1 =$

$(30 + 8) \times (6 - 1) =$

$(29 - 18) + 14 \div 2 + 6 =$

$64 \div 8 \times 2$

## Simplify Fractions

Simplify the following fractions. If the fractions are improper, change them to mixed numbers then simplify.

$$\frac{14}{28}$$

$$\frac{15}{55}$$

$$\frac{12}{51}$$

$$\frac{34}{48}$$

$$\frac{17}{4}$$

$$\frac{80}{25}$$

## Adding Fractions and Mixed Numbers

Add the following fractions. Make sure you have common denominators before adding. Remember, you only add the numerator (top number) and you keep the denominator (bottom number) the same! Simplify your final answers.

Example:

$$\begin{array}{r} \frac{1}{3} + \frac{1}{5} = \\ \downarrow \quad \downarrow \\ \frac{5}{15} + \frac{3}{15} = \frac{8}{15} \end{array}$$

$$\frac{6}{10} + \frac{3}{10} =$$

$$2\frac{3}{8} + 1\frac{2}{8} =$$

$$\frac{1}{9} + \frac{5}{6} =$$

$$\frac{1}{12} + 1\frac{2}{3} =$$

### Subtracting Fractions

Subtract the following fractions. Make sure you have common denominators before subtracting. Remember, you only subtract the numerator (top number) and you keep the denominator (bottom number) the same! Simplify your final answers.

$$\frac{5}{6} - \frac{3}{6} =$$

$$2\frac{8}{12} - 1\frac{3}{12} =$$

$$\frac{7}{10} - \frac{2}{4} =$$

$$3\frac{4}{5} - \frac{1}{4} =$$

Example:

$$\begin{array}{r} \frac{5}{6} - \frac{1}{3} = \\ \downarrow \quad \downarrow \\ \frac{5}{6} - \frac{2}{6} = \frac{3}{6} = \frac{1}{2} \end{array}$$

### Multiplying Fractions

Multiply the following fractions. Multiply the numerators; then multiply the denominators. Simplify, if necessary.

$$\frac{3}{4} \times \frac{1}{3} =$$

$$\frac{2}{3} \times \frac{5}{8} =$$

$$\frac{1}{3} \times \frac{2}{5} =$$

$$\frac{7}{8} \times 2 =$$

Example:

$$\frac{3}{5} \times \frac{5}{9} = \frac{15}{45} = \frac{1}{3}$$

## Word Problems-Please show work.

Ms. Smith fills up her gas tank at Super America Gas Station. She put 9 gallons in her tank. Each gallon cost \$3.79. How much money did Ms. Smith have to pay to fill her tank?

Jill reads 4 chapters in her book every day. If she reads at this rate for 11 days, how many chapters did she read in all?

Jenny had the following money in her pocket: 3 dollars, 2 quarters, 3 dimes, and 1 nickel. How much money did Jenny have in all?

The Rangers scored 45 points in the first half of the game and 65 points in the second half. The Cowboys scored 36 points in the first half of the game and 76 points in the second half. Which team won?

## Word Problems-Please show work.

Ben scored 9,345 points playing his favorite computer game. Drew scored 8,715 points playing the same game. How many more points did Ben score than Drew?

Madeline collected 236 box tops. Alexis collected 291 box tops, and Maggie collected 305 box tops. How many box tops did they collect in all?

Ali is making bracelets for a school fundraiser. It takes her 23 minutes to make one bracelet. She makes 8 bracelets in all. How long does it take Ali to make the bracelets?

The fourth grade collected 936 box tops. Each box top earns them one nickel. How much money did the fourth graders make on the box top collections?

## Reading Assignment Directions

**Choose 2 chapter books** to read this summer.

One book must be a **fiction** book.

Title and Author: \_\_\_\_\_

One book must be a **nonfiction** book.

Title and Author: \_\_\_\_\_

Please consult a DRA list in order to choose a book that is at your appropriate reading level. An excellent and easy website for finding the reading level of common books is:

<https://www.scholastic.com/teachers/bookwizard/#>

Keep in mind, you should be reading a book at your "Independent" DRA Level.

To practice fluency and comprehension, I would also encourage you from time to time to read your book out loud to someone, and talk about what you are reading with family and friends! You are still registered for RAZ Kids (<https://www.kidsa-z.com/main/Login>), so I would encourage you to utilize this resource, however this does not count towards the two books you must read.

There are two writing assignments to go with each book. As you complete your reading, please follow the next directions to complete each corresponding writing assignment.



# Learning A-Z Correlation Chart

Learning A-Z	Ages	Grade	Accelerated Reader (ATOS)	Fountas & Pinnell	Reading Recovery	DRA	PM Readers	Lexile
aa	4-6	K	.1 - 1.5	A	1	A-1	Starters 1	BR-70
A	4-6	K	.1 - 1.5	A	1	A-1	Starters 1	BR-70
B	4-6	K	.1 - 1.5	B	2	2	Starters 2	BR-70
C	4-6	K	.1 - 1.5	C	3-4	3-4	3-4 red	BR-70
D	4-7	1	1.6 - 3.3	D	5-6	6	5-6 red/yellow	80-450
E	6-7	1	1.6 - 3.3	E	7-8	8	7-8 yellow	80-450
F	6-7	1	1.6 - 3.3	F	9-10	10	9-10 blue	80-450
G	6-7	1	1.6 - 3.3	G	11-12	12	11-12 blue/green	80-450
H	6-7	1	1.6 - 3.3	H	13-14	14	13-14 green	80-450
I	6-7	1	1.6 - 3.3	I	15-16	16	15-16 orange	80-450
J	6-8	1	1.6 - 3.3	J	17	18	17 turquoise	451-500
K	7-8	2	2.8 - 4.2	J	17	18	18 turquoise	451-550
L	7-8	2	2.8 - 4.2	K	18	20	19-20 purple	501-550
M	7-8	2	2.8 - 4.2	L	19	24	21 gold	551-600
N	7-8	2	2.8 - 4.2	M	20	28	22 gold	551-650
O	7-8	2	2.8 - 4.2	M	20	28	22 gold	601-650
P	7-8	2	2.8 - 4.2	M	28	28	22 gold	601-650
Q	7-9	3	3.9 - 5.1	N	30	30	23 silver	651-690
R	8-9	3	3.9 - 5.1	N	30	30	23 silver	651-730
S	8-9	3	3.9 - 5.1	O	34	34	24 silver	691-770
T	8-9	3	3.9 - 5.1	P	38	38	25 emerald	731-770
U	8-11	4	5.0 - 6.1	Q	40	40	26 emerald	771-800
V	9-11	4	5.0 - 6.1	R	40	40	26 emerald	771-830
W	9-11	4	5.0 - 6.1	S	40	40	27 ruby	801-860
X	9-11	5	6.0 - 7.0	S	40	40	28 sapphire	831-860
Y	9-11	5	6.0 - 7.0	T	40	40	29 sapphire	861-890
Z	9-11	5	6.0 - 7.0	U-V	N/A	50	30 sapphire	891-980
Z <sup>1</sup>	9-11+	5+	7.0 - 8.0	W-X	N/A	60	N/A	920-1070
Z <sup>2</sup>	9-11+	5+	8.0 - 9.0	Y-Z	N/A	70+	N/A	980-1140

This correlation chart illustrates how Learning A-Z levels approximately correlate to other leveling systems commonly found in leveled reading materials. Learning A-Z uses objective (quantitative) and subjective (qualitative) Leveling Criteria to measure text complexity.

## Writing Assignment Directions

### Fiction Writing Assignment

1. Take notes on the **Story Plot Graphic Organizer** as you read.
2. Write a **Summary** of your fiction story on the paper provided.
  - a. Include the characters, setting, and problem in the beginning.
  - b. Explain the major events with details in the middle.
  - c. Describe the resolution at the conclusion of the story.
3. Use RACE Writing, to answer one **Reading Response Question** on the paper provided.
4. Use the CUPS Anchor Chart to check your writing before you turn it in!

### Nonfiction Writing Assignment

1. Complete **two** assignments from the **Writing Menu**.
2. Use the RACE Anchor Chart to write these reading responses on the paper provided.
3. Use the CUPS Anchor Chart to check your writing before you turn it in!

<b>R</b>	<b>RESTATE THE QUESTION</b> Restate or reword the question and turn it into a statement.
<b>A</b>	<b>ANSWER THE QUESTION</b> What is being asked? Answer all parts of the question.
<b>C</b>	<b>CITE THE SOURCE</b> Tell where you found examples and details in the text. In paragraph 2... The text states... The author says...
<b>E</b>	<b>EXPLAIN</b> your response. Give evidence from the text to support your answer Add your thoughts. For example... This shows... This means... I believe...

<b>RACE</b> Think CUPS
<b>C</b> apitalization: <ul style="list-style-type: none"><li>• Names</li><li>• Titles</li><li>• ANY proper nouns</li></ul>
<b>U</b> sage: <ul style="list-style-type: none"><li>• Match nouns and verbs</li></ul>
<b>P</b> unctuation: <ul style="list-style-type: none"><li>• Periods</li><li>• Quotes</li><li>• Question marks</li><li>• Exclamation marks</li><li>• Commas</li></ul>
<b>S</b> pelling: <ul style="list-style-type: none"><li>• Check all words</li></ul>

## Fiction Book Notetaking

As you read your fiction story, select the important information to record on the graphic organizer below.

Setting _____
Characters _____ _____
Problem _____
Events _____ _____ _____ _____ _____ _____ _____ _____
Resolution _____ _____ _____







## Non-Fiction Book Reading Response

Choose two questions from the Writing Menu. Use the RACE Anchor Chart to write these reading responses on the paper provided, in paragraph form. Use the CUPS Anchor Chart to check your writing before you turn it in.

<p><b>1. Why did you choose this book and why do you think the author wrote this book?</b></p>	<p><b>4. What is the most interesting thing you learned from the book?</b></p>
<p><b>2. What else would you like to learn about the topic, person, or events you read about in this book? Where could you go to find out more information about this topic?</b></p>	<p><b>5. What text-to-text, text-to-self, or text-to-world connections can you make to this book?</b></p>
<p><b>3. How will you use the information you learned throughout your life?</b></p>	<p><b>6. What are three interesting words that you learned in this book and what do they mean?</b></p>





