Entering 5th Grade Summer Math Work



WCS

Dear Families,

It is so important for children to keep learning over the summer! Research shows that students can lose up to 2.6 months of math learning during the summer months. Research also shows that just 2 hours of work each week in math can help prevent this summer learning loss. This year, it is incredibly important that students complete their summer math work. This will also be your child's first math grade of the year and you will need to send it to school when we return in the fall.

In this packet, you will find 10 weeks of work, about 2 hours of work each week. We suggest you create a schedule that works for your family each week. Maybe you spend 15-30 minutes in the mornings working on this math work each day or maybe your child completes it all on Sunday evenings-- whatever works for you. Please do try to spread it over 10 weeks- don't try to do it all the last week of summer!

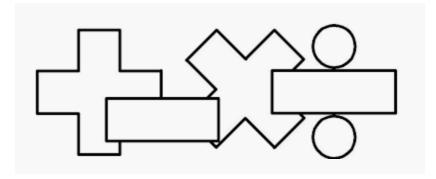
Directions are on the following page. If you have any questions, please reach out to Donna Green, our math coordinator at d.green@wissahickoncharter.org.

Happy summer!



Directions

- 1. Read the student and family page each week.
- 2. Complete 6 lessons on <u>Dreambox</u>.
- 3. Try the activity of the week.
- 4. Complete the math pages.



New 5th graders should..

- ☐ Do dreambox each week.

 Make sure you do 6 lessons.

 It won't count unless you
 finish the lesson (fill up that
 green bar on the bottom!)

 Remember your new teacher
 can check that you are
 completing dreambox lessons!
- ☐ Talk to your family about completing the activity of the week. Write or draw about what you did.
- ☐ Do your math pages each week. Make sure you show your work!

Families should...

- Ensure your child can log in to dreambox. Remember, dreambox should be done totally independently (so you can go get some rest or work done while your child plays!)
- ☐ Talk to your child about the math they are doing. There are questions you can ask on the family instruction page and activities to do together as a family.
- ☐ Reach out to Ms. Melissa with any questions!

Week 1

I can... understand and compare big numbers.

	Millions			Thousands			Ones			
Hundred	Ten	One	Hundred	Ten	One	Hundreds	Tens	Ones		
1	2	3,	4	5	6,	7	8	9		

For Families

Understanding the math: Place value means understanding numbers in our "base ten" system which means numbers are made up of groups of 10s. 7 tens is 70, 10 hundreds is 1,000, 10 hundred-thousands is a million! When students can name the value of each digit (ie, in the example above, the 6 is equal to 6,000) they develop a deeper understanding of our number system and can use those skills to help with many other math activities. Understanding place value will also help students with rounding and helps with the work they did with decimals this year and in future years.

Resources:

- -There is an online version of this place value chart at:

 https://toytheater.com/place-value-chart/
- -Talk to your child about numbers!
 Read big numbers together.
 This will help strengthen
 their understanding.

- What is the value of the 5 in this number?
- Can your round this number to the nearest 100? 1,000?
- How can we read this number?
- What digit is in the thousands place?

Complete a total of 6 lessons. You can do this over multiple days or all on one day.

Lessons Completed	Signature
	Lessons Completed

Activity of the Week

Go on a big number hunt! Find three big numbers in your house or your
neighborhood. Write what you found and then round each number to the
nearest 100.

Solve the problems below. Show all your work.

		535
324	648	202
+ 538	<u>+ 397</u>	+ 169

Round the numbers below to the nearest ten. When you round to the nearest ten, look at the number in the ones place. If it is 5 or higher, round up to the next highest ten. If it is less than 5, keep the number in the tens place the same.

ех	63	60	ex	186 90	а	47	b	52
C	35		d	94	е	122	f	856
g	267		h	993	i	1,247	j	2,052

Round the numbers below to the nearest hundred. When you round to the nearest hundred, look at the number in the tens place. If it is 5 or higher, round up to the next highest hundred. If it is less than 5, keep the number in the hundreds place the same.

ех	163	200	ex	627	600	ex	82	100	а	203
b	254		C	822		d	439		е	67
f	153		g	764		h	449		i	657

CHALLENGE Write two different numbers that round up or down to each number shown.

ex	400 438	384	а	20	b	80
C	100		d	300	е	700

20,137,408 people went to see the Los Angeles Dodgers play baseball between 2001 and 2006. That's twenty million, one hundred thirty-seven thousand, four hundred eight baseball fans!

1 Here's a chart that shows the place value of every digit in the number 20,137,408. Use the information on the chart to answer questions a–i below.

М	100 Millions	10 Millions	Millions	100 Thousands	10 Thousands	Thousands	Hundreds	Tens	Ones
		2	0	1	3	7	4	0	8

a	The digit in	the millions	place is:	_
---	--------------	--------------	-----------	---

i	The digit in the tens	place is	
	The digit in the tens	prace is.	

Write each number in words.

ex	17,329	seventeen thousand, three hundred twenty-nine
a	33,072	
b	86,105	
C	74,629	

I can... find factors and multiples of a number.



For Families

Understanding the math: Factors are the numbers that can evenly go into a larger number. For example, the factors of 8 are 1, 8, 2, and 4. 5 is not a factor of 8 because 8 divided by 5 is not a whole number. Multiples are numbers we get when multiplying our original number by any number For example, some multiples of 8 are 8, 16, 24, 32, 40, 800, 80 (there are an infinite amount of multiples). Understanding factors and multiples will not only help your child with multiplication and division, but will also greatly help your child with fractions. If they can understand factors and multiples, they can easily find common denominators to add and subtract fractions. One other thing to note, is your child also learned about prime and composite numbers this year. Prime numbers only have two factors: 1 and the number itself. For example, 7 is a prime number because its only two factors are 1 and 7. Composite numbers are numbers that have more factors!

Resources:

-Multiplication charts like the one here:

https://toytheater.com/multiplication-chart/

can help students see factors and multiples of numbers.

- -What are some factors of ____?
- -ls ____ a factor of ____? How do you know?
- -What are some multiples of ____?
- -Is ____ a multiple of ___? How do you know?
- -ls ___ a prime or composite number? Can you prove it?

Complete a total of 6 lessons. You can do this over multiple days or all on one day.

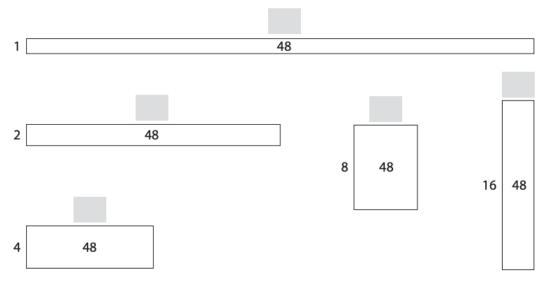
Lessons Completed	Signature
	Lessons Completed

Activity of the Week

List all the factors of 24 and 100. Write 5 multiples of 12 and 14.

24:		
100:		
12:		
17:		

1 Imagine using 48 tiles to build each rectangle below. Write in the missing dimensions on the rectangle sketches.



2 The factors of 48 are:

1 and _____ 2 and ____ 4 and ____ 8 and ____ 16 and ____

- **3** a Is 48 a prime number or a composite number?
 - **b** How do you know?

4 Study your list of factors for 48. What patterns do you observe?

Mrs. Carter is organizing some of her school supplies that came in square boxes. She is trying to figure out the best way to arrange them. She knows she wants everything to be arranged in a single layer as a rectangle, but she is not sure how to arrange the boxes to make the rectangles. Can you help Mrs. Carter? Solve each problem below. Show your work using numbers, sketches, or words.

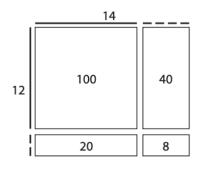
- **1** Mrs. Carter has 18 square boxes of tacks.
 - **a** How many different rectangles can she make with the 18 boxes of tacks? What are the dimensions of each of the different rectangles?

b How do you know that you found all of the possible rectangles?

2 Mrs. Carter has 24 square boxes of paperclips. How many different rectangles can she make with the 24 boxes of paperclips? What are the dimensions of each of the different rectangles?

Mrs. Carter is out of storage space, so she is going to keep her paperclip boxes on the windowsill. What are the dimensions of the rectangle you think Mrs. Carter should use? Explain your thinking.

I can... multiply big numbers.



$$32 \times 16 = 512$$

$$\begin{array}{c|cccc}
 & 32 \\
\hline
 & 10 & 320 \\
\hline
 & 5 & 160 \\
\hline
 & 16 & 512 \\
\end{array}$$

Area Model

Ratio Table

For Families

Understanding the math: In fourth grade, your child learned many strategies for multiplying larger numbers including the area model and ratio tables. They did also learn the standard algorithm for multiplication (the traditional way). In the area model, you break up numbers into smaller and easier to work with pieces. So for the example above (12x14), you break 12 into 10 and 2 and 14 into 10 and 4. Then you multiply each section. 10x10=100, 4x10=40, 10x2=20, and 2x4=8. You then add up each section. This is a visual model for what you essentially do in the standard method, however it shows students why that method works. In the ratio table, students multiple known facts and then add up the pieces. Your child should be comfortable with all three strategies and use the one that fits best for the problem they are working on.

Resources:

-You can learn more about the area model and ratio table by searching for each on the internet. There is also a video posted on your child's google classroom.

- What strategy will you use to solve this problem? Why did you choose that one?
- What will you do first (second, etc)?

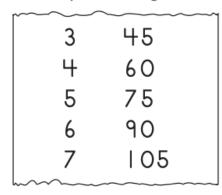
Complete a total of 6 lessons. You can do this over multiple days or all on one day.

Date	Lessons Completed	Signature

Activity of the Week

 strategy an	ıd explain v	vhy you lik	e that bet	ter than o	thers.

This is part of a ratio table made by a fourth grade student.



- What number was the student multiplying for this ratio table? _____
- b What number would come next in each column? _____ and _____
- Fill in the ratio table below.

1	7
2	14
3	
	28
5	
	42

- Is 21 a prime number? How do you know?
- **4** Fill in the blanks in the table below.

$$4 \times 14 =$$

$$9 \times 8 =$$

$$4 \times 12 =$$

- 1 Lida is solving 6×15 .
 - **a** Sketch and label an open array for 6×15 .

- **b** What is the product of 6×15 ?
- **2** Tomas is solving 3×22 .
 - **a** Sketch and label an open array for 3×22 .

- **b** What is the product of 3×22 ?
- **3** Rowan is solving 7×12 .
 - **a** Sketch and label an open array for 7×12 .

- **b** What is the product of 7×12 ?
- 4 True or False?

a
$$6 \times 15 = (6 \times 10) + (6 \times 5)$$

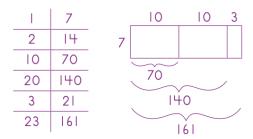
b
$$3 \times 22 = (3 \times 20) + (3 \times 10)$$

$$7 \times 12 = (7 \times 10) - (7 \times 2)$$

d
$$9 \times 17 = (9 \times 10) + (9 \times 7)$$

I can... solve big division problems.

Solve 161 ÷ 7 using a ratio table or an array.



For Families

Understanding the math: Just as they did for multiplication, your child learned many strategies for division. They did not learn the traditional method for big division problems, called long division. They will learn this in 5th and 6th grades. You might be wondering, why teach all these strategies for multiplication and division? Why not just teach the way I learned? The traditional strategies are great and work perfectly if you follow every step. However, students often can't remember to follow every step at first and they don't understand why they are doing these steps! Working with these different strategies helps students understand why they are doing what they are doing and helps ensure they are not making mistakes in the steps of the process. It also helps develop their number sense and helps develop their future understanding of math in middle and high school!

Resources:

-Your child might help these online number pieces helpful when solving division problems: https://apps.mathlearningcenter.org/number-pieces/

- What strategy will you use to solve this problem.? Why did you choose that one?
- Is there a remainder? How will you use the remainder?

Complete a total of 6 lessons. You can do this over multiple days or all on one day.

Date	Lessons Completed	Signature

Activity of the Week

		etter than o	

Story Problem Instructions:

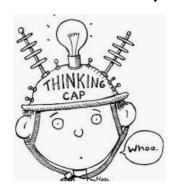
- Work with a partner to share ideas and problem-solving strategies.
- Use numbers, labeled sketches, or words to model and solve each problem.
- Show all your work, as well as the answer.
- You do not have to work the problems in order.
- **1** Mrs. Sanchez gave her three grandchildren \$78.00 to share equally. How much money did each grandchild receive?

2 James, Kendra, Nick, and Natasha spent \$56.00 to buy a present for their Aunt Jane. If they all contributed the same amount, how much did each person contribute?

3 Students at Shoreham School held a bake sale to raise money to buy books. They earned \$90. If five classes share the money equally, how much will each class get?

1	Jeremy and his mom are getting ready for his birthday party. His mom got 31 balloons for the party.				
	a	If Jeremy divides the balloons evenly among 4 tables, how many balloons will each table get? Show your work.			
		Answer:			
	b	How did you handle the remainder in this problem? Curred it into a fraction. Turned it into a decimal number.			
	c	Explain your choice.			
2		emy got \$53.00 from his grandparents for his birthday. He wants to spend exactly f of the money on a new toy, and put the other half in his savings account.			
	a	How much money will Jeremy put into his savings account? Show your work.			
		Answer:			
	b	How did you handle the remainder in this problem?			
		 Left it as a whole number. 			
		O Turned it into a fraction.			
		○ Turned it into a decimal number.			
	C	Explain your choice.			

I can... solve word problems.



For Families

Understanding the math: Word problems can be particularly challenging for any age student and are particularly challenging for fourth and fifth graders. In these grades, students are expected to solve word problems using addition, subtraction, multiplication, and division and often the problems have multiple steps. One of the best ways you can help your child with word problems is by helping them visualize the problem. There are lots of ways to do this. You can physically act out the problem together. You can use a tool like the number pieces. You can also have them draw a picture of what is happening. Once they can clearly visualize the problem, they can then focus on the math to solve it!

Resources:

Depending on the type of problem, your child could use any of these virtual tools:

- -https://apps.mathlearningcenter.org/number-line/
- -https://apps.mathlearningcenter.org/partial-product-finder/
- -https://apps.mathlearningcenter.org/ number-pieces/

- What do you know/don't know in this problem?
- -Can you act out what is happening? Can you draw it?
- -Can you write a number sentence to match this problem?
- -What operation do you need to do to solve this problem?
- -Can you write an equation to match this problem?

Complete a total of 6 lessons. You can do this over multiple days or all on one day.

Date	Lessons Completed	Signature

Activity of the Week

Write your own multiplication or division problem! Make up a story problem that has multiplication or division. Write it down and draw a model of your problem. Don't forget to find the answer!	t

Kyra is putting up streamers for a party. She uses 75 feet of streamers to decorate one wall. Two more walls also each use 75 feet of streamers. Kyra cuts 75 feet of streamers for the last wall, but this wall has a large poster on it, and she only needs to use 68 feet of streamers. How many feet of streamers did Kyra use in all?

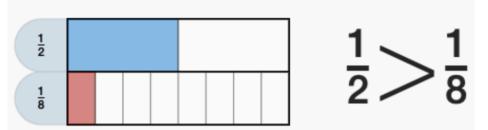
CHALLENGE Luis and Kyra are getting ready for the party. Luis makes 6 sheets of cookies. Each sheet has 13 cookies on it. He also makes 4 trays of brownies. Each tray has 16 brownies on it. How many cookies and brownies did Luis make in all?

For each proble	em:
-----------------	-----

- Decide if the problem is best solved using multiplication or division.
- Write an equation with a letter to stand for the unknown number.
- Use a ratio table or a labeled area model to solve it. Show all of your work.

Alexandra brought water for her hockey team. There are 14 players on her team and she brought 24 ounces of water for each. How many ounces of water did she bring?
Equation:
Answer:
Mr. White, the gym teacher at Kennedy School, is planning Field Day for his students. He wants to organize the 280 students into teams of 8 for the different events. How many teams can he make?
Equation:

I can... compare fractions.



For Families

Understanding the math: When you ask adults about their experience with fractions, many tell you they hated fractions! This is often because they didn't have a deep understanding of fractions before they tried to add, subtract, multiply, and divide them! One of the best ways you can help your child understand fractions is by having them use models One thing to be careful of when working with your child to draw models, is that the size of the whole is the same. In the model above, the two rectangles are exactly the same size, which means we can compare the fractions. We cannot compare fractions with different size wholes. If I compared ½ of a fun size hershey bar and ¼ of a jumbo hershey bar (the kind as big as a table!), even though ½ is bigger than ¼, the size of the whole is different so the ¼ of the jumbo hershey bar would actually be larger.

Resources:

-There is an online fraction tool you might want to use with your child. In it students build their own rectangle or circle pieces to create fractions. https://apps.mathlearningcenter.org/fractions/

- -How many pieces will you divide into?
- -How many fourths make one whole? Two wholes?
- -How do you know ___ is equivalent to ____?

Complete a total of 6 lessons. You can do this over multiple days or all on one day.

Date	Lessons Completed	Signature		

Activity of the Week

Dean Kristi might buy every kid pizza next year. She has two options. She can give every kid ½ of a mini pizza OR ¼ of an x-large pizza. Write a short note to Dean Kristi explaining which you think she should get and why. Use the pictures to help you. Be sure to use the word fraction in your note.

Dear Dean Kristi,	
I think you should buy the	pizza because
Mini Pizza	X-Large Pizza

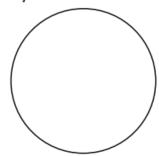
Ariel got a new box of 8 crayons and a set of 10 markers for her birthday. Use this information as you solve each problem below. Use numbers, labeled sketches, or words to show your thinking.

to s	show your thinking.
1	Ariel used 5 crayons to make a thank-you card. What fraction of the box did she use?
2	Ariel gave her brother 4 crayons. What fraction does she have left out of her box of 8?
3	After she gave some crayons to her brother, Ariel's dog ate 2 of her crayons.
	a Now what fraction does Ariel have left of her original box of 8 crayons?
	b What fraction of the crayons went to Ariel's brother and her dog?
4	Ariel took 6 markers out of her marker set. What fraction of the markers are left in the set?
5	Two of Ariel's markers are green, 2 are red, and 3 are blue. What fraction of the markers are
	green?
	red?
	blue?

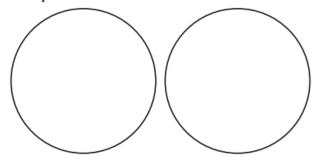
On Tuesday, David and three friends shared a large pizza for an after-school treat. Each of the four boys ate the same amount of pizza. On Thursday, David shared 2 large pizzas with 7 friends from his soccer team. Each of the 8 team members got equal amounts.

1 Use the circles below to draw labeled models showing how much pizza David got to eat on both days.

a Tuesday's Pizza Shares



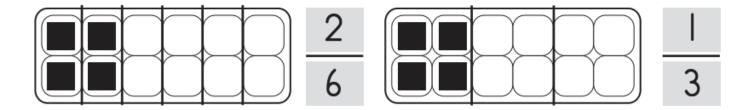
b Thursday's Pizza Shares



- **2** What fraction of a large pizza did David eat on Tuesday? _____
- **3** What fraction of a large pizza did David eat on Thursday? _____
- 4 Did David eat more pizza on Tuesday or on Thursday? _____
- **5** Write at least three mathematical observations that you can make from your sketches for this situation.



I can... find equivalent fractions to help me add and subtract fractions.



For Families

Understanding the math: Your child learned many strategies to find equivalent fractions. One they worked with frequently was the egg carton model (above). These visual models really helped them to see that certain fractions really do represent the same amount. They also worked a lot with finding equivalent fractions with mixed numbers and improper fractions. An example of a mixed number is $2\frac{1}{4}$. Students learned that mixed numbers could be rewritten as improper fractions. $2\frac{1}{4}$ would be rewritten as 9/4.

Resources:

-This online fraction tool will again be helpful this week: https://apps.mathlearningcenter.org/fractions/

- -How many 4ths make one whole? 3 wholes?
- -How could you rewrite this improper fraction as a mixed number? (and vice versa)
- -What are some fractions that are equivalent to ¼? How do you know? Can you draw a model to prove it?

Complete a total of 6 lessons. You can do this over multiple days or all on one day.

Date	Lessons Completed	Signature

Activity of the Week

receivity of the vveck						
Build shapes out of playdoh, clay or sand OR paint or draw some shapes. Create the following fractions: 7/10, 10/4, 6/2, and 1/5. What's another name for that						
fraction? Write the other name and how you created the shapes.						

For each of the problems on this page:

- Solve the problem and show your thinking with numbers, words, or labeled sketches. Use your fraction pieces to help if you want.
- If the answer turns out to be an improper fraction (like $\frac{3}{2}$ or $\frac{7}{4}$) rename it as a mixed number (like $1\frac{1}{2}$ or $1\frac{3}{4}$).
- Carlos and his mom went out on a bike ride. They rode $\frac{5}{8}$ of a mile to the park, and then $\frac{5}{8}$ of a mile back home. How far did they ride in all?



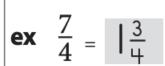
b It takes $\frac{3}{4}$ of a cup of orange juice to make 1 smoothie. Erin wants to make 2 smoothies. How much orange juice will she need?

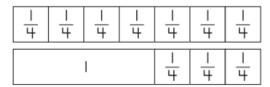


Change each of the mixed numbers below into a fraction. Use your fraction pieces to help.

ex	$1\frac{3}{4} = \frac{7}{4}$	а	$1\frac{3}{8} =$	b	$1\frac{5}{16} =$
c	$2\frac{1}{2} =$	d	$2\frac{2}{4} =$	e	$1\frac{7}{8} =$

Change each of the fractions below into a mixed number. Use a labeled sketch and words to explain your answers. Use your fraction pieces to help if you want.



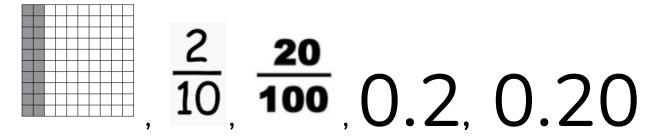


a
$$\frac{9}{8}$$
 =

b
$$\frac{19}{16}$$
 =

c
$$\frac{10}{4}$$
 =

I can... compare decimals and fractions



For Families

Understanding the math: Fourth grade was the first year students were introduced to decimals. They will need to use decimals frequently in the coming years so their understanding this year is very important. They drew models for decimals using a grid like the one above and then named the grid using fractions and decimals. It is important that your child can read decimals. 0.2 is read as two tenths. 0.20 is read as twenty hundredths (these two are both equivalent). 0.34 would be read as thirty-four hundredths.

Resources:

- -Using number pieces again might be helpful to your child with decimals: https://apps.mathlearningcenter.org/number-pieces/
- -Decimals are everywhere- especially in money. Have your child read money amounts as if they were a decimal. So \$2.99 would be read as two and ninety-nine hundredths.

Questions to Ask Your Child

•

- -How could you read this decimal?
- -What is another way to write this decimal? Can you write it as a fraction?
- -Can you draw a model to represent this decimal?
- -Which is bigger ___ or ___? How do you know?
- -Can you prove that 0.4 is equivalent to 0.40?

Complete a total of 6 lessons. You can do this over multiple days or all on one day.

Date	Lessons Completed	Signature

Activity of the Week
Look at the picture below. Try to come up with 5 different fractions or decimals that name this picture (hint: use the picture on the last page to help)

Fill in the bubble to show the equation that is correct.

$$\bigcirc 1\frac{1}{4} + 1\frac{1}{4} = 2\frac{3}{4}$$

$$\bigcirc 5\frac{2}{8} - 3\frac{1}{8} = 2\frac{3}{8}$$

$$\bigcirc \quad 4\frac{3}{12} + 2\frac{9}{12} = 6\frac{11}{12}$$

$$\bigcirc \quad \frac{3}{10} + \frac{32}{100} = \frac{62}{100}$$

Fill in the bubble to show the equation that is *not* correct.

$$\bigcirc \quad \frac{6}{10} + \frac{15}{100} = \frac{75}{100}$$

$$\bigcirc \quad \frac{7}{8} - \frac{3}{8} = \frac{1}{3}$$

$$\bigcirc \quad \frac{5}{12} + \frac{7}{12} = \frac{12}{12}$$

$$\bigcirc \quad \frac{10}{12} - \frac{4}{12} = \frac{1}{2}$$

Fill in the bubbles to show the comparison statements that are correct. (There is more than one.)

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

$$\bigcirc$$
 0.6 > 0.49

$$\bigcirc$$
 0.7 = 0.70

Fill in the bubbles to show the comparison statements that are *not* correct. (There is more than one.)

$$\bigcirc$$
 0.05 = $\frac{1}{2}$

$$\bigcirc$$
 0.4 = $\frac{60}{100}$

$$\bigcirc$$
 $\frac{6}{10} < \frac{60}{100}$

Put the fractions and decimal numbers in the correct places on the number line:

0.75

1.5

 $\frac{1}{4}$

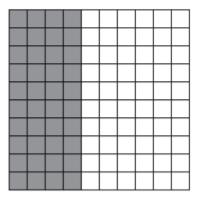
 $1\frac{3}{4}$

 $\frac{3}{8}$

 $1\frac{1}{4}$



Sara says that $\frac{40}{100}$ of the grid below is shaded in. DJ says that $\frac{4}{10}$ of the grid below is shaded in.



- a Who is correct?
- **b** Why? Explain your answer.

Mark each equation true (T) or false (F)

a
$$\frac{2}{4} < \frac{8}{12}$$

b
$$\frac{3}{10} = \frac{30}{100}$$

$$c = \frac{5}{6} < \frac{2}{4}$$

d
$$\frac{70}{100} > \frac{7}{10}$$

Fill in the blank with the correct symbol, <, >, =.

a 0.10 _____ 0.25

b 0.49 _____ 0.51

C 0.90 _____ 0.09

d 0.80 _____ 0.8

Write each fraction as a decimal number.

a
$$\frac{34}{100} =$$

b
$$\frac{2}{10} =$$

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

d
$$\frac{73}{100} =$$

I can... convert between measurement units.

For Families

Understanding the math: Besides basic length measurements (like 12 inches in foot and 3 feet in a yard), the first time your child worked with measurement conversations was in 4th grade. This is something that they will need to do consistently in science and math throughout their school career. One way they learned to do this was a ratio table, like the one above. Encourage your child to use one if they get stuck!

Resources:

- -It can be tricky even as adults to remember all the measurement conversions! A tool to help you: https://www.calculator.net/convers ion-calculator.html
- -It is so important that your child remembers to label their answers with units. An answer of 2 is not acceptable-- 2 could mean anything--2 inches, 2 miles, 2 light years! Encourage your child to always add a label, especially when working with measurement.

- -How many ___ in a ____?
- -Which is bigger: a liter or a milliliter?
- -Can you draw a ratio table to help you solve this problem?-What unit are you working in?Don't forget to label your
- answer!

Complete a total of 6 lessons. You can do this over multiple days or all on one day.

Date Lessons Completed		Signature		

Activity of the Week

Throughout this week, look for ways your family uses measurement (the kitchen is
one place measurement is often used!). Write or draw about three ways you
found.

Each runner in the 5K race was given a liter of water to drink as she crossed the finish line. How many milliliters total were in the first 10 bottles handed out? Show your work.

Answer:	milliliters

Carly bought a 2-liter bottle of water on the morning of her race. She drank 450 milliliters before the race began and 250 milliliters during the race. How much was left for after the race? Show your work.

Answer: ____ milliliters

Jon bought a 6-pack of sports drink bottles that each had a volume of 350 ml.

a If Jon drank 4 of them, how many milliliters did he drink? Show your work.

Answer: _____ milliliters

b How many more milliliters would Jon need to drink to have 2 liters? Show your work.

Answer: _____ milliliters

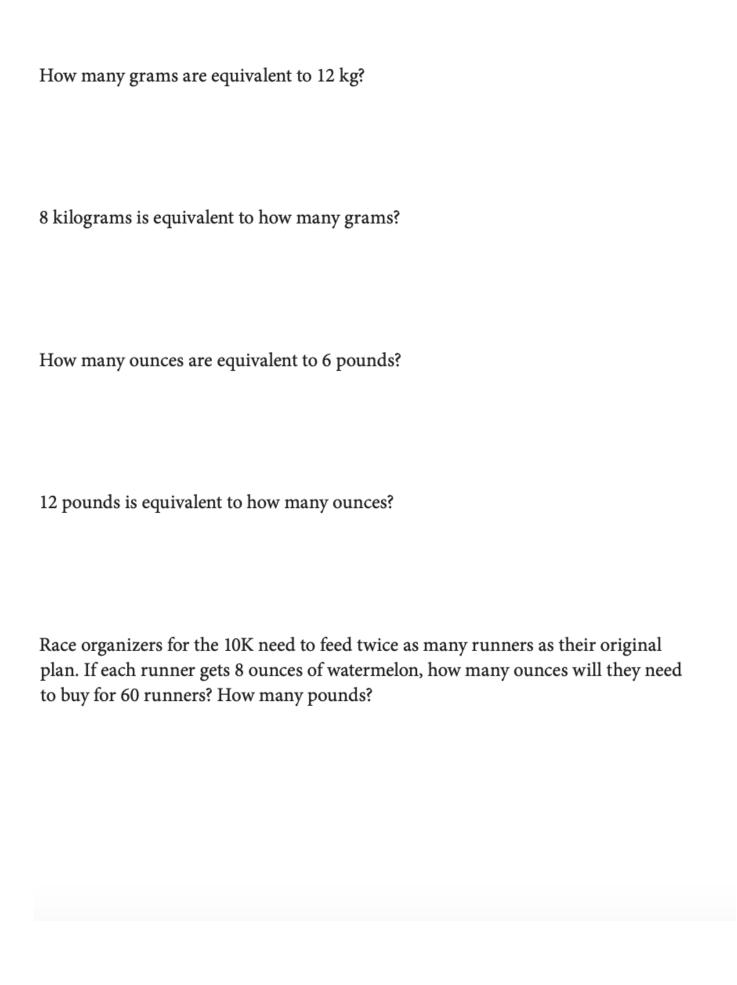
Fill in the ratio table to convert liters to milliliters.

liters	1	2		5		12
milliliters	1,000		4,000		9,000	

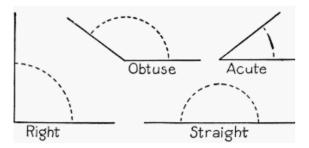
Fill in the blanks with the correct relational symbol: < , > , or =

a 13,050 _____ 13,500

c four hundred thousand, sixty two _____ 400,062



I can... name and describe lines and angles.



For Families

Understanding the math: Fourth graders worked to understand angles and lines more deeply this year. There are many terms to remember in geometry, below is a list to help you:

Acute angle: an angle measuring smaller than 90 degrees.

Obtuse Angle: an angle measuring larger than 90 degrees.

Right Angle: an angle that equals 90 degrees (a perfect corner)

Straight Angle: an angle measuring exactly 180 degrees.

Parallel Lines: lines that would go on and on forever and never

touch

Perpendicular Lines: lines that form a right angle **Congruent Sides**: Sides that are the same length

Resources:

-An online geo board and pattern blocks are fun ways to explore with lines and angles.

https://apps.mathlearningcenter.or g/geoboard/

https://apps.mathlearningcenter.or g/pattern-shapes/

- -Can you describe this shape using math words?
- -What kind of angle is this? How do you know?
- -Are these lines parallel? How do you know?

Complete a total of 6 lessons. You can do this over multiple days or all on one day.

Lessons Completed	Signature
	Lessons Completed

Activity of the Week

Go on an angle hunt in your house or neighborhood! Look for: straight, right, acute, obtuse. Keep track of what you find.

Angle	What did you find?
Straight	
Right	
Acute	
Obtuse	

1 Draw at least two examples of each term below. If you can't remember what the words mean, look at the guide to geometry terms on page 95.

Term Your Drawings													
					_	_]		_	_	_		
	•	•	٠	٠	٠		•	•	٠	•	•		
		•	•	•	•	•		•	•	•	•	•	
а	parallel lines	•	•	•	•	•		•	•	•	•	•	
		•	•	•	•	•		•	•	•	•	•	
		•	•	•	•	•		•	•	•	•	•	
		•	•	•	•	•		•	•	•	•	•	
		•	•	•	•	•		•	•	•	•	•	
b	perpendicular lines	•	•	•	•	•		•	•	•	•	•	
		•	•	•	•	•		•	•	•	•	•	
			•	•	•	•			•	•	•		
							<u>'</u>						
		•	•	•	•	•		•	•	•	•	•	
			•	•	•	•		•	•	•	•	•	
c	right angle		•	•	•	•			•	•	•		
			•	•	•	•			•	•	•		
			•	•	•	•			•	•	•		
							J						
		•	•	•	•	•		•	•	•	•	•	
				•	•	•			•	•	•		
d	obtuse angle												
u	obtuse angle		-	•	•	•			•	•	•		
		•	•	•	•	•		•	•	•	•	•	
		•	•	•	•	•		•	•	•	•	•	
		Ţ.				_	1			_	_		
		•	•	•	•	•		•	•	•	•		
	_	•	•	•	•	•		•	•	•	•	•	
е	acute angle	•	•	•	•	•		•	•	•	•	•	
		•	•	•	•	•		•	•	•	•	•	
		•	•	•	•	•		•	•	•	•	•	
									ontin				

(continued on next page)

2 Draw at least one shape that matches each description below. For each shape, use arrows and words to show how your shape matches the description.

	Description	Your Shape
ex	A quadrilateral with 2 pairs of parallel sides	2nd pair of parallel sides 4 sides in all makes it a quadrilateral
a	A <i>quadrilateral</i> with only 1 pair of <i>parallel</i> sides	
b	A pentagon with exactly 1 right angle and exactly 1 acute angle	
c	A hexagon with exactly 1 pair of perpendicular sides	
d	A <i>hexagon</i> with exactly 1 pair of <i>parallel</i> sides	