## Dear Parent \& Student (incoming Grade 6),

The Wallington Board of Education has approved a Summer Math Program for all students entering grades 4-8 for the 2020-2021 school year. We encourage all parents and students to fully participate in this important program that is designed to help maintain and improve math skills during the summer month

Attached, please find a grade level Math Packet that should be completed by your child during the summer vacation. Many educators argue that children learn best when instruction is continuous. The long summer vacation disrupts the rhythm of instruction, leads to forgetting, and requires time be spent reviewing old material when students return to school in September. This packet is designed to help review and reinforce math skills that your child has already learned during the current school year that he/she just completed. It is meant to be completed a little at a time over two months, not in one sitting. The packet should be returned to school on the first day of the new school year and will be reviewed in September by your child's math teacher. Please be aware that the completed packet will be counted as extra credit.
**Additionally, you will need to make sure that the math computations (the work for the problems) are written and shown on a separate piece of paper to be returned with the packet. Packets without written work will not be accepted.
It is important to return the math packet and accompanying work so that your child receives credit for their work completed over the summer. It is our hope that participation in this program will provide your child with a good opportunity to maintain and reinforce their math skills.

Should you have any questions, please feel free to contact my office.

Sincerely,

Nancy J. Giambrone
Principal
Frank W. Gavlak

Nicole Alessio
5th Grade Math Teacher
Frank W. Gavlak

## Multiplying and Dividing Whole Numbers

1) $385 \div 12=$
2) $837 \div 36=$ $\qquad$
3) $612 \times 486=$ $\qquad$
4) $6,440 \div 28=$ $\qquad$
5) $1,650 \div 55=$ $\qquad$ 9) $5,256 \div 52=$ $\qquad$
6) $5,634 \div 18=$ $\qquad$ 10) $1,955 \div 85=$ $\qquad$
7) $86 \times 33=$ $\qquad$ 11) $7,894 \times 84=$ $\qquad$
8) $309 \times 23=$ $\qquad$ 12) $336 \div 7=$ $\qquad$
9) A company shipped 48 boxes of canned dog food. Each box contained 24 cans. How many cans of dog food did the company ship in all?
10) To make fruit salad, Sara uses 28 ounces of pineapple, 21 ounces of apple, 19 ounces of bananas, and 16 ounces of mango. How many 6 -ounce servings of fruit salad can Sara make?

## Adding Decimals

1) $5.04+6.8=\square$
2) $198.476+8.58=$ $\qquad$
3) $0.09+2.0654=$ $\qquad$
4) $46.005+5.8=$ $\qquad$
5) $458+97.058=$ $\qquad$
6) $87.6+49=$ $\qquad$
7) $65+6.048=$ $\qquad$
8) $9,458.6+235.089=$ $\qquad$
9) $0.065+0.48=$ $\qquad$
10) $693+15.07=$ $\qquad$
11) $3,264,546.28+748,005.319=$ $\qquad$
12) $246.576+95,377.05=$ $\qquad$

## Subtracting Decimals

1) $9,874.6-56.84=$
2) $56.28-6.7=$ $\qquad$
3) $93-16.4=$ $\qquad$
4) $7,002-6.532=$ $\qquad$
5) $0.976-0.48=$ $\qquad$
6) $79.1-6=$ $\qquad$

## Multiplying Decimals

7) $6,945-859.2=$ $\qquad$
8) $76.593-15=$ $\qquad$
9) $6-0.256=$ $\qquad$
10) $118.6-20=$ $\qquad$
11) $4,795,650.63-76,395.345=$ $\qquad$
12) $5,000,000-2,567,999.5=$ $\qquad$
13) $859.2 \times 15=$ $\qquad$
14) $42.6 \times 7=$ $\qquad$
15) $49 \times 76.2=$ $\qquad$
16) $7,583 \times 0.009=$ $\qquad$
17) $87 \times 5.32=$ $\qquad$
18) $0.67 \times 0.53=$ $\qquad$
19) $8 \times 76.59=$ $\qquad$
20) $56.21 \times 43.2=$ $\qquad$
21) $4.406 \times 27.8=$ $\qquad$
22) $9.768 \times 0.25=$ $\qquad$
23) $27 \times 597.6=$ $\qquad$
24) $0.065 \times 0.4=$ $\qquad$

## Dividing Decimals

1) $4.9 \div 7=\square$
2) $5.04 \div 6=$ $\qquad$
3) $86.4 \div 36=$ $\qquad$
4) $4.8 \div 0.7=$ $\qquad$
5) $0.45 \div 0.05=$ $\qquad$
6) $1.62 \div 0.27=$ $\qquad$
7) $1.52 \div 1.9=$ $\qquad$
8) $16.8 \div 0.07=$ $\qquad$
9) $405 \div 25=$ $\qquad$ (decimal answer)
10) $30 \div 0.8=$ $\qquad$
11) $52.2 \div 12=$ $\qquad$
12) $76 \div 8=$ $\qquad$ (decimal answer)
13) Natalia is making cloth headbands. She has 4.2 yards of cloth. She used 0.2 yard of cloth for each headband. How many headbands can Natalia make from the length of cloth she has?
14) Jacob is on the track team. For practice and exercise, he runs 2.25 miles each day. At the end of 14 days, how many total miles did Jacob run?
15) Some friends go to the store to buy school supplies. Noel spends $\$ 4.89$. Holly spends 3 times as much as Noel. Kris spends $\$ 12.73$ more than Holly. How much does Kris spend?
16) Jill bought 6.5 meters of blue lace and 4.12 meters of green lace. What was the total length of lace?
17) Zack bought a coat for $\$ 69.78$. He paid with a $\$ 100$ bill. What was his change?
18) Tim cut a 2.3 foot length of wood from a piece that was 4.1 feet long. How long is the remaining piece of wood?
19) At the market, grapes cost $\$ 0.85$ per pound. Victoria buys grapes and pays a total of $\$ 2.55$. How many pounds of grapes does she buy?
20) Mark has a board that is 12 feet long. He cuts the board into 8 pieces that are the same length. How long is each piece? (decimal answer)
21) One cup of cooked zucchini has 1.9 grams of protein. How much protein is in 0.5 cup of zucchini?
22) Patrick bought a pack of paper for $\$ 5.69$ and printer ink for $\$ 9.76$. He paid with a $\$ 20$ bill. What was his change?

## Adding Fractions \& Mixed Numbers Answers must be in simplest form.

1) $\frac{3}{4}+\frac{3}{8}=$ $\qquad$ 7) $1 \frac{3}{4}+3 \frac{2}{3}+5 \frac{3}{4}=$ $\qquad$
2) $\frac{5}{6}+\frac{1}{3}=$ $\qquad$ 8) $\frac{5}{6}+\frac{2}{5}=$ $\qquad$
3) $2 \frac{2}{3}+\frac{3}{4}=$ $\qquad$
4) $\frac{9}{10}+\frac{3}{5}=$ $\qquad$
5) $2 \frac{5}{8}+1 \frac{1}{4}=$ $\qquad$ 10) $7 \frac{2}{3}+3 \frac{1}{5}=$ $\qquad$
6) $4 \frac{1}{8}+2 \frac{5}{12}=$ $\qquad$ 11) $\frac{5}{8}+\frac{2}{5}=$ $\qquad$
7) $\frac{7}{8}+\frac{1}{2}=$ $\qquad$ 12) $2 \frac{1}{10}+1 \frac{2}{4}+7 \frac{1}{2}=$ $\qquad$

Subtracting Fractions \& Mixed Numbers Answers must be in simplest form.

1) $\frac{7}{10}-\frac{1}{2}=$ $\qquad$ 8) $8-6 \frac{1}{9}=$ $\qquad$
2) $\frac{3}{4}-\frac{2}{5}=$ $\qquad$
3) $6 \frac{3}{4}-1 \frac{5}{8}=$ $\qquad$
4) $6 \frac{1}{3}-1 \frac{2}{5}=$ $\qquad$
5) $9-3 \frac{7}{8}=$ $\qquad$
6) $1 \frac{7}{8}-1 \frac{1}{2}=$ $\qquad$
7) $\frac{2}{3}-\frac{1}{2}=$ $\qquad$
$\qquad$
8) $2 \frac{6}{25}-1 \frac{1}{10}=$ $\qquad$
9) $8 \frac{1}{8}-7 \frac{2}{5}=$ $\qquad$
10) $9 \frac{1}{16}-6 \frac{1}{8}=$ $\qquad$

Multiplying Fractions \& Mixed Numbers Answers must be in simplest form.

1) $\frac{3}{7} \times 9=$ $\qquad$ 7) $\frac{1}{4} \times 2 \frac{1}{2}=$ $\qquad$
2) $\frac{2}{7} \times \frac{3}{8}=$ $\qquad$ 8) $2 \frac{3}{4} \times 9 \frac{1}{3}=$ $\qquad$
3) $3 \times \frac{3}{4}=$ $\qquad$ 9) $2 \frac{1}{2} \times 10 \frac{1}{5}=$ $\qquad$
4) $\frac{5}{7} \times \frac{5}{9}=$ $\qquad$ 10) $\frac{4}{9} \times 2 \frac{3}{5}=$ $\qquad$
5) $1 \frac{1}{4} \times 8 \frac{2}{3}=$ $\qquad$
6) $12 \frac{2}{3} \times 3=$ $\qquad$
7) $5 \times 3 \frac{1}{3}=$ $\qquad$ 12) $\frac{1}{5} \times 12=$ $\qquad$

Dividing Unit Fractions Answers must be in simplest form.

1) $2 \div \frac{1}{4}=$ $\qquad$
2) $9 \div \frac{1}{7}=$ $\qquad$
3) $\frac{1}{7} \div 3=$ $\qquad$ 7) $15 \div \frac{1}{2}=$ $\qquad$
4) $3 \div \frac{1}{2}=$ $\qquad$
5) $\frac{1}{4} \div 6=$ $\qquad$
6) $\frac{1}{6} \div 10=$ $\qquad$
7) $6 \div \frac{1}{4}=$ $\qquad$
8) $12 \div \frac{1}{2}=$ $\qquad$ 10) $\frac{1}{8} \div 2=$ $\qquad$

Fractions Mixed Review - All Operations Answers must be in simplest form.

1) Louis has $\frac{1}{3}$ pound of cherries. He divides the cherries equally into 2 bags. What fraction of a pound of cherries is in each bag?
2) Henry bought $\frac{1}{4}$ pound of screws and $\frac{2}{5}$ pound of nails to build a skateboard ramp. What is the total weight of the screws and nails?
3) Jill walked $8 \frac{1}{8}$ miles to a park and then $7 \frac{2}{5}$ miles home. How many miles did she walk in all?
4) A glass can hold $3 \frac{1}{3}$ cups of water. A bowl can hold $2 \frac{3}{5}$ times the amount in the glass. How many cups can a bowl hold?
5) At the aquarium, $\frac{3}{4}$ of the animals are fish. Of the fish, $\frac{1}{3}$ are clownfish. What fraction of the animals are clownfish?
6) Noah made $1 \frac{1}{2}$ dozen blueberry muffins and $1 \frac{3}{4}$ dozen chocolate chip muffins. He needs to take 5 dozen muffins to the bake sale. How many dozen more muffins does he need to bake?
7) Tina has 4 sandwiches. She cuts each sandwich into thirds. How many $\frac{1}{3}$ sandwich pieces does she have?
8) Jackie made $7 \frac{1}{2}$ pounds of meatballs for pasta. She decided to serve $1 \frac{1}{4}$ pounds and freeze the rest. How many pounds did she freeze?
9) Kaitlyn mixed two liquids for a science experiment. One container held $\frac{7}{8}$ cup and the other held $\frac{9}{10}$ cup. What is the total amount of the mixture?
10) Mary cuts 6 apple pies into halves. How many halves does she have?

## Evaluating Expressions Using the Order of Operations (PEMDAS)

1) $8-(7 \times 3)=$ $\qquad$
2) $4 \times(28-20 \div 2)=$ $\qquad$
3) $5-2+12 \div 4=$ $\qquad$
4) $[18 \div(2 \times 3)] \times 4=$ $\qquad$
5) $9+4 \times 6-65 \div 13=$ $\qquad$
6) $11 \div(8+9 \div 3)=$ $\qquad$

## Powers of 10

1) $10^{3}=$ $\times$ $\qquad$ $\times$ $\qquad$ $=$ $\qquad$
2) $10^{6}=$ $\qquad$
3) $9 \times 10^{2}=$ $\qquad$
4) $3.04 \times 10^{3}=$ $\qquad$
5) $8.3 \div 10^{1}=$ $\qquad$
6) $52.6 \div 100=$ $\qquad$
7) $0.453 \times 10^{2}=$ $\qquad$
8) $3 \div 3 \times 4+6=$ $\qquad$
9) $5 \times[(11-3)-(13-9)]=$ $\qquad$
10) $\{[(8-3) \times 2]+[(5 \times 6)-5]\} \div 5=$ $\qquad$
11) $8+56-8 \times 4=$ $\qquad$
12) $36-(2+3) \times 4=$ $\qquad$
13) $14+4 \times 4-9=$ $\qquad$
14) $12 \div 10^{2}=$ $\qquad$
15) $12 \times 10^{2}=$ $\qquad$
16) $30.7 \div 10=$ $\qquad$
17) $4,675 \div 1,000=$ $\qquad$
18) $0.53 \times 1,000=$ $\qquad$

## Rounding

1) Round 4.735 to the ones place. $\qquad$
2) Round 15.186 to the tenths place. $\qquad$
3) Round 8.465 to the hundredths place. $\qquad$
4) Round 0.782 to the ones place. $\qquad$
5) Round 43.983 to the tenths place. $\qquad$
6) Round $41,492.8$ to the thousands place. $\qquad$
7) Round $46,973.056$ to the tens place. $\qquad$
8) Round $1,635.235$ to the hundreds place. $\qquad$
9) Round $1,635.235$ to the hundredths place. $\qquad$

# YOU MUST KNOW YOUR MULTIPLICATION FACTS PERFECTLY FOR 6TH GRADE!! 

| $10 \times 10=$ | $3 \times 9=$ | $7 \times 2=$ | $10 \times 7=$ | $11 \times 6=$ | $5 \times 11=$ | $10 \times 5=$ | $12 \times 12=$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 \times 9=$ | $2 \times 5=$ | $8 \times 6=$ | $7 \times 3=$ | $11 \times 6=$ | $12 \times 10=$ | $10 \times 5=$ | $11 \times 8=$ |
| $10 \times 4=$ | $2 \times 9=$ | $6 \times 4=$ | $2 \times 4=$ | $6 \times 9=$ | $4 \times 5=$ | $9 \times 9=$ | $10 \times 11=$ |
| $6 \times 9=$ | $7 \times 10=$ | $4 \times 4=$ | $8 \times 7=$ | $7 \times 7=$ | $6 \times 2=$ | $11 \times 7=$ | $11 \times 7=$ |
| $5 \times 8=$ | $11 \times 11=$ | $8 \times 5=$ | $11 \times 9=$ | $3 \times 5=$ | $3 \times 6=$ | $2 \times 9=$ | $3 \times 4=$ |
| $12 \times 8=$ | $5 \times 11=$ | $12 \times 5=$ | $3 \times 12=$ | $9 \times 5=$ | $9 \times 4=$ | $9 \times 8=$ | $12 \times 11=$ |
| $9 \times 4=$ | $9 \times 7=$ | $9 \times 10=$ | $11 \times 11=$ | $6 \times 7=$ | $5 \times 7=$ | $5 \times 3=$ | $10 \times 9=$ |
| $11 \times 9=$ | $7 \times 6=$ | $3 \times 3=$ | $9 \times 8=$ | $2 \times 8=$ | $5 \times 3=$ | $8 \times 4=$ | $8 \times 6=$ |
| $9 \times 8=$ | $12 \times 9=$ | $4 \times 5=$ | $5 \times 11=$ | $12 \times 4=$ | $4 \times 4=$ | $11 \times 8=$ | $3 \times 4=$ |
| $3 \times 9=$ | $6 \times 11=$ | $12 \times 2=$ | $3 \times 5=$ | $2 \times 6=$ | $6 \times 12=$ | $12 \times 10=$ | $10 \times 4=$ |
| $6 \times 9=$ | $12 \times 8=$ | $12 \times 5=$ | $9 \times 5=$ | $7 \times 6=$ | $8 \times 12=$ | $5 \times 7=$ | $10 \times 3=$ |
| $2 \times 9=$ | $6 \times 5=$ | $12 \times 4=$ | $5 \times 5=$ | $9 \times 6=$ | $2 \times 3=$ | $9 \times 10=$ | $10 \times 10=$ |

More multiplication practice can be found on http://www.multiplication.com/games/all-games

## Resources for help:

https://www.khanacademy.org/math/cc-fifth-grade-math?t=practice (videos for each topic)
http://www.mathgametime.com/grade/5th-grade (games, videos, and worksheets)

Youtube: Math with Mr. J (5th grade math videos with examples)

## Math Websites:

Online Flash Cards: http://www.aplusmath.com/Flashcards/multiplication.html
Operations with Decimals: http://www.onlinemathlearning.com/decimal-games.html
Math Jeopardy Games: http://www.math-play.com/math-jeopardy.html
Area \& Perimeter: http://www.funbrain.com/poly/

Geometry Resources: http://www.homeschoolmath.net/online/geometry.php
Operations with Fractions: http://www.onlinemathlearning.com/fraction-games.html

Online Math Manipulatives: http://nlvm.usu.edu/en/nav/grade_g_2.html
iPad Apps: https://hcpss.instructure.com/courses/108/pages/mobile-apps-itunes-intermediate

## Games:

http://mrnussbaum.com/mathgames/
http://pbskids.org/cyberchase/math-games/
http://www.mathsisfun.com/games/index.html
http://www.gamequarium.org/dir/Gamequarium/Math/
http://www.aplusmathcoach.com/Grade_5/Grade_5_Go_Math_Games.html
http://www.multiplication.com/games/all-games

Feel free to email me over the summer if you have any questions! nalessio@wboe.org

