Lowell Public Schools
Curriculum, Instruction, and Assessment
Henry J. Mroz Administration Office
155 Merrimack Street
Lowell, Massachusetts 01852

Get Ready for School!
Summer Mathematics Activities 2020
Entering Grade 8

Dear Guardian and Student,

Just like reading, regular practice over the summer with math will help your child prepare for entering the next grade. Please use the math activity list to have fun talking and doing mathematics together! Remember to always ask your child, "How did you figure it out?"

To use the math activity list:

- This summer try to complete the number of activities recommended for your grade level.
- When you do one, cross it off. Write down on the log on the back of this sheet which activity you did.
- Bring the log back to your new teacher in September for a school reward and a chance to be selected to attend a fall televised school committee meeting for a "Spotlight on Excellence!"
- When you see this symbol, choose 1 or more activities from page 2.
- Some helpful materials to have around:
  - Math notebook/Journal from the school year for reference
  - A folder for these activities
  - Blank paper
  - Pencils
  - A deck of playing cards
  - Board Games

Have a great summer vacation!

Sincerely,

Rob Desmond

Chief Academic Officer
Lowell Public Schools

Summer Math Activity Log for_____

Activity log for student entering grade _____. Record the dates and descriptions of the math activities you complete. Bring this log back to your new teacher in August.

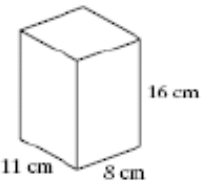
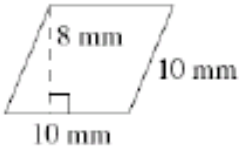
Activity #	Date Completed	Description of Activity
Example	**7/2/20**	The problem about surface area of a rectangular prism. *OR* choice activity, like Prodigy Game…
#1		
#2		
#3		
#4		
#5		
#6		
#7		
#8		
#9		
#10		
#11		
#12		
#13		
#14		
#15		
#16		
#17		
#18		
#19		
#20		

Student's Name: _____

Parent Signature: _____

LPS Entering Grade 8 Summer Math

Complete at least 15 Math activities this summer. Each time, choose an activity from the boxes below – or from the back. Cross off a box when you do it and record the activity on your math log.

Choose from the back!	Find the volume: 	**Make a list of all the prime numbers between 50 and 75.**	**LCM (5, 10) =** **LCM (8, 12) =**	$1\frac{3}{5} - 9 =$
$\lvert -5 \rvert =$ $-\lvert -5 \rvert =$ $-\lvert 5 \rvert =$	Choose from the back!	What is the value of n? $\frac{3}{5} < \frac{n}{7} < \frac{4}{5}$	$2\frac{4}{5} \div 3\frac{1}{3} =$	**If John walks $\frac{1}{2}$ mile every $\frac{1}{4}$ hour, how far will he walk in three hours?**
Find the area: 	How many hours would it take you to count to one million? How many days would it take you to count to one million?	Choose from the back!	**Complete the pattern: {3, 7, 11, 15,__, __, __}**	**Do the following points represent a point on the graph of y=x-4? (0, -4) (5,-1)**
Sammy has fifty coins in his pocket that add up to one dollar. How many coins of each denomination are in Sammy's pocket?	**Find the area of a circle if the diameter is 20 feet.**	Calculate: $(-3\frac{5}{6}) - 4\frac{1}{2} =$	**If 1,000 gumballs cost $20, how much would ten gumballs cost?**	Choose from the back!
Solve: **3w + 8 = 20**	**In which quadrant(s) could the following points be found?** **A (5, 3) B (5, -3) C (-5,3)**	Choose from the back!	**Dan's weekly salary is $70 less than Jerry's, whose weekly salary is $50 more than Sally's. If Sally earns $280 per week, how much does Dan earn per week?**	What is the value of n? $\frac{n}{3} = \frac{10}{5}$
Mike pours $\frac{4}{9}$ quart of milk equally into four mugs. How much milk is in each mug?	Multiply: $\frac{1}{2} \times 2\frac{1}{4} \times \frac{1}{6} =$	**Order the following from least to greatest:** $\frac{3}{7}$, 43%, 0.4, 0.04	Choose from the back!	**Add:** **2 + (-3) =** **(-2) + (-3)=** **(-2) + 3 =**
Choose from the back!	**If a person rolls two number cubes, what is the probability of getting five as a sum?**	**Calculate:** **7 x 8=** **(-7) x 8=** **(-7) x (-8)=**	**Which is the better price?** **a. 4 for $0.89** **b. 6 for $1.39**	**Bob works $1\frac{1}{2}$ hours per day and is paid $7 per hour. He works five days a week. How much money does he earn in 7 weeks?**

Get Ready for Grade 8

Choice Activities

1. **Read a Cool Mathematics Book:**

The Phantom Tollbooth by Norton Juster ***Math Curse*** by Jon Scieszka ***Chasing Vermeer*** by Blue Balliett ***All of the Above*** by Shelley Pearsall ***The Man Who Counted: A Collection of Mathematical Adventures*** by Malba Tahan	***The Number Devil*** by Hans Magnus Enzensberger ***Sir Cumference and the Dragon of Pi*** by Cindy Neuschwander ***Sir Cumference and the Sword in the Cone*** by Cindy Neuschwander
Find Mathematics Books to Read Online at Epic!: https://www.getepic.com/ Parents can sign up for free!	

2. **Use a cool mathematics website!**

http://illuminations.nctm.org http://www.shodor.org/interactivate/activities www.aaamath.com http://nlvm.usu.edu/en/nav/vlibrary.html https://www.youcubed.org/students/	www.mathplayground.com www.funbrain.com https://www.khanacademy.org/ http://www.visualfractions.com/ https://www.prodigygame.com/
Play ST Math Games Online: https://www.stmath.com/ If your school already uses ST Math, you can login through your Clever account. If not, parents can sign their children up for free using the link above.	

3. **Exercise your brain with a strategy game. A great way to have fun with friends and family! Some good games are listed below. Maybe you've got some favorites of your own!**

- **Sequence**
- **Chess**
- **Dominoes**
- **Blokus**
- **Quirkle**
- **Set**
- **Settlers of Catan**
- **Ticket to Ride**
- **Mastermind**
- **Go**

4. **Take a free online course designed for learners of all levels of mathematics provided by Stanford University Professor of Mathematics Education Dr. Jo Boaler. Just follow the link below:**

https://lagunita.stanford.edu/courses/Education/EDUC115-S/Spring2014/about