

More Math Means More Spark

Religion and politics are widely acknowledged as two topics which everyone seems to have a strong opinion. If there was a topic in education that evokes a similar response, it would have to be math. The content of what students are expected to know has increased, the manner of instruction has evolved, and the emphasis on computation and process skills are now only a part of what students focus on in class. For those who have not taken a math class in a few years, our children's math may look a little different, because it is. Not only are the grade level expectations different, but instruction is as well, where mathematic skills and procedures were primarily emphasized in many classrooms a few decades ago, current programs are adding emphasis on mathematical reasoning, ability to articulate thought process as well as results and developing deeper understanding behind the concepts versus simple memorization of the routine. Providing instruction in a variety of different way has been the impetus behind Algebra in 8th grade, Challenge By Choice in the 7th grade, Math facts volunteers, Math Counts, Math Lab and Morning Math Boxes. This year we are adding a program in the middle school we are calling "Spark Math". Spark Math is an elective offered during Middle School Study Hall on Mondays. Students work collaboratively to solve complex math puzzles and word problems which focus on developing students' problem solving strategies, mathematical reasoning as well as their computational skills. Spark math, as a concept, grew out of a desire to provide our students with additional opportunities to work on complex challenging problems which deepen their level of understanding without having to step into a new concept to experience the "spark" which often comes with being challenged by new concepts.



Spark Math Challenge Problem

Lettuce Challenge! On Monday, the produce manager stocked his store's display case with 80 heads of lettuce. By the end of the day some heads of lettuce had been sold. On Tuesday, the manager counted the number of heads of lettuce that were left and decided to add an equal number of heads of lettuce, thereby doubling the left overs. By the end of the day he had sold the same number of heads of lettuce as on Monday.

On Wednesday, the manager decided to triple the number of heads of lettuce that had been left in the case. He sold the same number of heads of lettuce that day too. At the end of the day though there were no heads of lettuce left.

How Many were sold each day? Describe the strategies you used to solve this problem. Don't forget, the same number of heads are sold each day.

Figured it out? Let Mrs. Skelly know what you came up with....

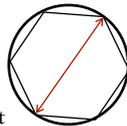
MATHCOUNTS Returns Again for 2011/2012

While we are talking about math I am pleased to note that Ben Barrowes has offered to coach the MathCounts team again this year. Math counts is a regional Math competition which teams from different schools compete. This program emphasizes computational accuracy and speed in a competitive environment. Last year Lyme Sent two members of the team to the competition which took

place at Dartmouth College. If you love math, competition and speed, you are in luck because Math Counts meets weekly on Tuesdays at 3:00 and snack are provided.

MATHCOUNTS Problem of the Week

At the end of the summer, the Lawsons completely cover their circular swimming pool to keep out leaves and other debris. The circumference of the cover is equal to the circumference of the pool it covers. This year they increased the size of their pool. A new cover is needed that will cover exactly $\frac{9}{16}$ more area than the original cover. By what percent did the Lawsons increase the radius of the pool?

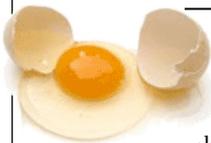


The Lawsons' new circular pool has a radius of 35 feet and can be filled to a maximum height of 4 ft. What is the maximum volume of water possible in the Lawsons' new pool? Express your answer in terms of π .

The Lawsons' neighbors, the Dawsons, installed a new regular hexagonal pool that requires a cover. Hexagonal covers are not standard, so rather than purchase a custom cover for their pool, they've decided to use the Lawsons' old pool cover. As the figure shows, the distance from any vertex of the Dawson's pool to the opposite vertex is equivalent to the diameter of the Lawsons' old pool cover. If the perimeter of the Dawson's pool is 168 feet, what is the positive difference between the area of the hexagonal pool and the area covered by the Lawsons' old pool cover, in square feet? Express your answer to the nearest whole number.

<https://mathcounts.org/Page.aspx?pid=1573>
for more problems and the correct solution

MIDDLE SCHOOL Math Lab Challenge Problem



The Broken Eggs!

The Situation - A farmer is taking her eggs to market in her cart, but she hits a pothole, which knocks over all the containers of eggs. Though she herself is unhurt, every egg is broken. So she goes to her insurance agent, who asks her how many eggs she had. She says she doesn't know, but she remembers some things from various ways she tried packing the eggs. She knows that when she put the eggs in groups of two, there was one egg left over. when she put them in groups of three, there was also one egg left over. The same thing happened when she put them in groups of four, groups of five, or groups of six. But when she put them in groups of seven, she ended up with complete groups of seven with no eggs left over.

Your task is to answer the insurance agent's question. In other words, What can the farmer figure out from this information about how many eggs she had? Is there more than one possibility?

- Write-up
1. Problem Statement
 2. Process
 3. Solution
 4. Evaluation





Parent Information Nights

5th & 6th Math information Night
Tonight @ 6:15 Mrs Merrill s Room

Middle School Parents Information Night
September 20 6:00

8th grade Parent Class Trip Meeting
September 20th during MS Information night



¡No se olvide! (Don't forget!)

The 16th of September (Friday) is Mexican Independence Day. Celebrate this special day by wearing green, red, and white clothing. (the colors of the Mexican flag.) ¡Viva México!

Middle School Dance - September 23
Rainbow theme New hours 7pm to 9 pm



SCHOOL PICTURE DAY

September 26th More info next week



Lunch

Week of
9/19 to 9/23



Monday	Local Beef	Sloppy Joes w/ Buns Baked Beans Broccoli/Cauliflower Garden Salad Fresh Fruit
Tuesday	Local	Barbeque Chicken Dinner Rice Stir Fry Vegetable Garden Salad Fresh Fruit
Wednesday	Produce	Cereal Day! Oatmeal and Cold Cereal Sausage, Home Fries Garden Salad Fresh Fruit
Thursday	Local Produce	Grilled Cheese Sandwich on white or whole wheat Broccoli Garden Salad Fresh Fruit Ice Cream Sandwich
Friday	Local	Pasta w/ or w/out Sauce and Meatballs Peas Garden Salad Fresh Fruit

Beef



Al a carte Fruit and Milk
are available everyday



Contact me at: JValence@LymeSchool.org
Phone: 795-2125 or just stop by.
You may print color copies of the Newsletters
at: www.LymeSchool.org



The Utility Club of Lyme & Long River Studios

The Utility Club of Lyme & Long River Studios will hold their annual Fine Art and Fine Food Silent Auction on Saturday, September 24 at 6 p.m. (free preview 2-4 p.m., silent bids taken at that time) at 125 Breck Hill Rd.

The facility is wheelchair accessible. Tickets: \$35 per person available at the door. For more information please call Pat at 795-4295 or Ellen at 795-5015.

The Utility Club, a non-profit organization begun in 1914, has sponsored this event for many years. They award college scholarship money to qualified Lyme students and since 2005 have given \$63,000 in scholarship money. They also support non-profit organizations in the Upper Valley. Please come and enjoy an evening of fun and help support local needs.



CONVERSE FREE LIBRARY

Doodling with Margaret Sheehan
Thursday, September 22 at 2-3:30PM
For Grades 4 and up
Limited to 24;
Flyer in this week's envelopes
Pre-registration required;
call 795-4622