
YummyMath Newsletter

- April -

April is filled with great events to interest and engage your students. Here are some of the regular events that you can plan for your month. Of course we will also cover mathematics in the news as it appears.

March 28 - September 29: Baseball Season has already begun and continues through the month.

- Students can work together to guess and then refine their ideas about [How many baseballs are in this truck?](#)
- Students can examine two scatter plots and one line graph to hypothesize and research the cause of the change in time, historically, for a baseball game to finish. [Are baseball games getting longer?](#)
- In this activity students compare team wins with team salaries in the four major North American sports ... the NBA, NFL, MLB and NHL. Students use data from recent seasons to create scatter plots comparing wins and salaries for each sport. [Do teams that win a lot spend a lot?](#)

March 31 - April 8: March Madness continues

- What are your chances of filling out the Perfect Bracket? This is a great context for some probability and for your students to see how nearly impossible the task is as they fill out their brackets! [The perfect bracket](#)
- In the activity: [Does seeding really matter?](#), students use 30 years of data to help determine for which seeds it makes sense to pick an upset.
- Finally, in the activity [Greatest March Madness Program Ever](#), students use data to consider which college basketball team/ program has been the most successful in NCAA tournament history.

April 1: April Fools Day - We have 4 ideas to bring some puzzles and pranks to your class. [Mess with 'em on April Fools Day](#)

April 15: Tax day, Patriots' Day, and the Boston Marathon

- [Patriots' Day](#) Students learn more about the difficulties of the Revolutionary War and calculate the rates of:
 - Paul Revere's ride
 - The British crossing Boston to Cambridge by boat
 - The British marching through the night to reach Lexington and Concord
- [The Boston marathon](#) - How long do you think the marathon is? Make your best guess; how many people run it? Make your best guess; make an educated guess as to the fastest marathon time. We've gathered a lot of great data and asked some sensible and some surprising rate questions.
- This activity compares the best short and long distance record speeds as students learn the logic and mechanics of using fractional expressions for the number one to convert meters per second to kilometers per hour, etcetera. [How fast can you run?](#)
- On April 15th, 1947 [Jackie Robinson](#) became the first African-American baseball player to play in Major League Baseball since the game was segregated in the 1890s. In this activity we consider how many hits and homeruns Jackie might have had if he had begun his MLB career at the age of 20. We also take a look at the value of his first baseball card and speculate how much the card will be worth in the future.
- On the date when Federal taxes are due consider using [Debt and Deficit](#) to give meaning to what tax dollars pay for. The activity involves reading charts, making comparisons, computing percents and analyzing trends to let students and their families more clearly understand these issues.

April 19: Passover

- [Mom's matzo ball soup](#) - Let students review fractions as they triple my mom's matzo ball soup recipe and try to change the recipe to create one giant matzo ball.
- [Passover Macaroons](#) - Halving and tripling fractional quantities for my recipe plus looking for a general, algebraic rule to accomplish any change of quantity.

April 21: Easter

- [Peeps](#) - Students estimate the number of Peeps sold each Easter season. They consider reasonability by making guesses they think might be too high and too low. Students determine necessary info, problem solve and improve their original estimates. They conduct random samplings of their estimates and compare the mean of their estimates to the actual number of peeps sold each season.

- [Giant Chocolate Bunnies](#) - What can you deduce about the bunnies (pictured in this activity) from the descriptions given ... solid? hollow? cost per pound? cost per height?
- [Holiday candy sales](#)
 - Which holidays are associated with candy?
 - For which of those holidays is the most candy sold?
 - What percent of annual candy sales does each holiday contribute?
- [Dyeing eggs with food coloring](#) - Students use the chart on the back of a food dye package to compare the divergent recipes listed for coloring a cake mix, icing, and dyeing eggs. They look for and create equivalent ratios and practice using the terms "saturation", "shade", and "hue".

April 22: Earth Day

- In this activity students read charts, do a little research, and make observations about the decline and resurgence of Monarchs. [Have you seen more Monarch butterflies lately?](#)
- We've given students a diagram of what the interior of this mechanism contains and asked them to try to decide what its purpose must be. Then we've given them the data that was collected from this place and others globally and asked what they can conclude. [Measuring sea levels](#)
- [Should I replace my toilets?](#) - I have really old-fashioned toilets and I'm trying to figure out if I should invest in saving water.
- Carbon dioxide and methane are our two most prevalent human-contributed greenhouse gases. Cows are huge contributors to methane production. Let students calculate percentages of greenhouse gas production from cars, cows, and people. [Methane Math](#)
- Students compare maps with this famous photo and check to see which characteristics are maintained in each sort of mapping (Mercator, Goode homolosine, Gall-Peters, Winkel tripel) and which characteristics are distorted. [The Blue Marble](#)
- [McDonald's moves toward Antibiotic-free chicken](#) - What will the effects be on costs at the restaurant, costs in the supermarket and the cost and changes required of farm production? Does this seem like a good move?
- [Cost of light bulbs](#) - Students learn more about LED and CFL light bulbs as they analyze and graph their energy use and costs of lights and appliances. Students use decimals operations, order of operations, graphing, systems and piecewise functions in this activity to help them think about ways to conserve the energy that they use.
- [Alarming ice cracks in Antarctica](#) - A fast-growing ice crack is forcing the Halley VI British research station in Antarctica to be moved. Fear of a huge break-off from the ice sheet is alarming not just to the scientists on the station but to all of us. At what rate is this crack growing and how large will this iceberg be when it breaks off?
- [Giant Iceberg breaks off of sheet in Antarctica](#) - Use some of the data that was supplied and your estimation skills to gauge the volume of this iceberg.
- **New post coming!** Brunt Ice Shelf should calve soon creating a new huge Iceberg
- We've used a little solar geometry to analyze and estimate the proper angle for the tilt of my solar panels. Should I tilt the panels on my roof to more accurately aim towards the Sun? If so, at what angle should I use? - [What's my angle?](#)

Are we missing anything?

Let us know if there is some real world math that we should be writing about!

You have plenty of real world math options this month! We also have more than 400 other real world math tasks. You can visit our [Most Popular Activities](#) page or browse through all of our activities at our [Bird's Eye View Page](#).

Remember all of our activities are free and you or your math department can become members and access members-only materials including editable Word docs, activity solutions and tips, Excel sheets and PowerPoint files.

Your support keeps us going and right now membership is on sale for \$20, which is 20% off the normal price. Oh my, **what is the normal price?**

Thanks, Brian and Leslie