Who Knew?, New News!

November/December Newsletter

Books Make Great Gifts!

Check out these books and/or authors….
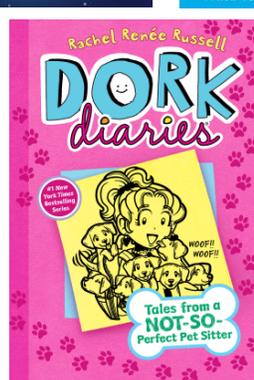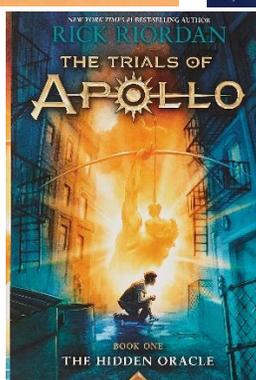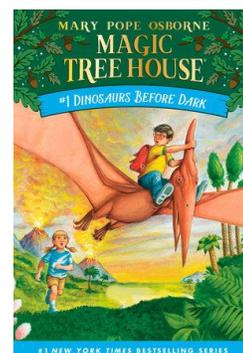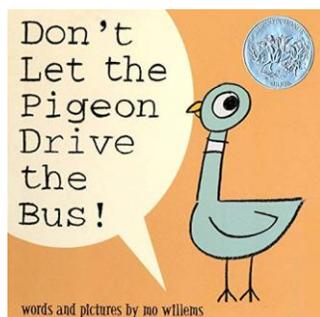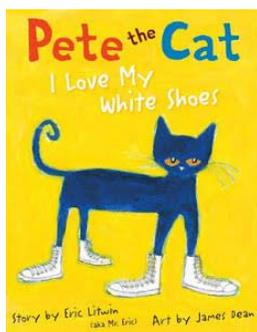
Citizenship Assembly

For the months of November and December the students will be working on gratitude. Kindergarten will be presenting at the assembly this month. The assembly will take place December 14th at 12:00 p.m. Please come out and support the children if you can.

Creative Play with Math
By Rebecca Goldin
Taken from
http://www.pbs.org/parents/education/math/math-tips-for-parents/creative-play-math/

Most math-traumatized adults don't realize how creative and inventive mathematics can be. Creative mathematics doesn't always make it into the classroom—at least not for preschool and early elementary school-aged kids. While elementary school math often includes drilling basic "skills" and "facts" into kids' heads, creative mathematics allows kids to come up with consistent systems of mathematical ideas that explain their world or math problems they identify themselves. Inventive mathematics inspires interest without students having to try too hard. Kids are naturally mathematically curious; lots of mathematical ideas just seem like they are part of a game. The creative and curious problem can stick in a kid's mind long after the lights are turned out for the night.

Below are some math activities to inspire inventive and creative thinking.

Arranging Utensils for Multiple Possibilities

Ask your child if he or she knows how to count. "Of course," they will respond. But the question is, "What are they counting?"

For example, if you give your child a fork, a knife, and a spoon, it's only three objects. How many ways can she arrange them in a row? Here's where it gets interesting:

- Savvy table-setters might quickly say "Six ways": fork, knife, spoon; knife, spoon, fork; spoon, fork, knife; spoon, knife, fork; fork, spoon, knife; and knife, fork, spoon.
- Ah! But what if you allow the possibility of flipping the utensils upside down, so the handles face away from your body? The answer is then 48.
- And if you can also flip the utensils over, so they face either way? With all four possible orientations of each utensil, the answer is 196.
- Should your child be able to figure this entire story out, go ahead and add a salad fork to increase the complexity of the problem. Or, generalize to n different utensils.
- On the other hand, if it's a little too challenging, try to solve the puzzles with only a fork and a spoon, saving the knife for another time
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Counting and Cutting Pasta

Creative play lends itself to inventiveness. Parents play a big role in teaching their kids to view their environment as a big mathematical sandbox. The table is fertile ground for creative and exploratory mathematics, but the trick to coming up with good problems is to make them relevant to what's on hand. And here's where pasta comes in.

- A favorite trick with spaghetti is to stretch a cooked piece across the mouth of a glass, using the edge of the glass to cut it to the length of that distance (or, for longer spaghetti pieces, to stretch them across the diameter of a plate).
- Then ask how many pieces of spaghetti that size will be needed to go around the rim of the glass (or the plate).
- Sure enough, by playing around with the spaghetti (and who doesn't like playing with spaghetti?) you find it's just a little more than three pieces.
- Voilà, an introduction to the number pi (π), which is the ratio of the circumference to the diameter!

Division and multiplication, in edible form, also rear their heads at the dinner table. Continuing with the pasta theme, how about estimating how many pieces of pasta each person will have if the box contains 454 pieces? (You may ask: Why 454 pieces? It's about one gram of pasta per piece, and 454 grams make a pound.)

Cooking and the Commutative Property

To get more abstract, the commutative property is at play in cooking! The commutative property describes how an operation (such as addition or multiplication) is applied to numbers. The commutative property tells us that 5 x 3 = 3 x 5, and 2 + 7 = 7 + 2. In other words, the order in which the numbers appear doesn't change the result of the operation. In contrast, subtraction is not commutative, because 5 – 3 is not the same as 3 – 5. If the concept is taught in school, it's usually introduced in around fourth or fifth grade, but even little kids can understand it in the context of the operations of making pasta.

- Would your pasta sauce be the same if you added oregano and then basil, compared to adding basil and then oregano? (For the most part, sure!)
- Would it be the same to boil the water, then put the pasta in, compared to putting the pasta in and then boiling the water? (Definitely not!)
- But why is every young mathematical thinker so sure that 5 + 3 is the same as 3 + 5? When kids first learn about multiplication, they often find it surprising that 3 x 5 (3 copies of 5) matches 5 x 3 (5 copies of 3). Why is that?
- All it takes is laying out a 3 x 5 grid of pieces of pasta to see it. Try turning the table and see that it's also a 5 x 3 grid!

Most important, have fun with mathematics. Let your child invent crazy ideas that don't make sense, think about questions that don't seem so mathematical, and grapple with "basic" mathematical ideas that might seem obvious to you.

Because if math is fun, then your child may actually want to think about math all the time. And creating "real math" is fundamentally, well, creative.

Labels Information

Every time a class turns in a thousand labels they earn a free recess. At the end of the year, the class that has turned in the most labels will receive a prize. Here are the results as of November 8th:

Kindergarten—1,054

1st Grade—906

2nd Grade—1,531

3rd Grade—635

4th Grade—269

5th Grade—436

6th Grade—659

Reminders to Parents

- All lunch money is due at the beginning of the week.
- If lunches exceed the $10 limit, an alternate lunch will be served.

Upcoming Events

November 21st-23rd—No School, Thanksgiving Break

December 5th-6th—Jr. Beta Convention in Springfield, MO

December 11th—Create-A-Book Night

December 14th—Citizenship Assembly at 12:00 p.m.

December 18th—Elementary Christmas Concert at 6:00 p.m.

December 20th—Dismiss at 12:15 p.m.

December 21st-January 3rd—No School, Christmas Break