Math Challenge #3

| First Name: _____ | Last Name: _____ | Grade: _____ |
| Teacher: _____ | Parent's email:_____ | |

There are no tricks here but plenty of Halloween math problems. Problems in this challenge include those about treats and candies, costumes, and fun stuff you encounter during Halloween. Try to solve more problems than required. Good luck!

Kinder & First Grade: solve at least 3 problems.
Second & Third Grade: solve at least 6 problems.
Fourth Grade and above: solve at least 12 problems.

Problems	Answer
1. Mia made 20 Halloween treat bags for her classmates. She accidentally left one at home. She then dropped 2 of the treat bags on the way walking to school. How many treat bags does she have for her class now?	
2. Julie and her five friends are having a Halloween party. Julie plans to serve each person (including herself) two cupcakes. How many cupcakes does she need for the party?	
3. Patrick has more than 12 candies but less than 21 candies in his Halloween bag. When he counts the candies in groups of two, he has one left over. When he counts them in groups of five, he has two left over. How many candies could Patrick have?	
4. Ron went to a candy shop with $10 to spend. There are giant gum balls for $2, chocolate eggs for $3, fancy chocolate bars for $5, and large lollypops for $7. What could he buy with exactly $10? List at least 3 possible ways to spend exactly $10.	
5. Laura bought an orange balloon at the Halloween bazaar using only quarters and nickels. She paid with six coins. What could be the cost of a balloon if it is less than $1 but more than 80 cents?	
6. Jeffery got a full bag of candies. When he puts an equal amount in 9 piles, he has none leftover. When he puts an equal amount in 6 piles, he has none leftover. When he puts an equal amount in 5 piles, he has 2 leftover. What is the least amount of candies Jeffrey could have?	
7. Ella collected 54 pieces of candies. That was 9 times as many candies as Tia collected. How many candies did Tia collected?	
8. Rina expects to have 70 kids come by her house for trick or treat. She bought 3 packages of candies. Each package has 24 candies. If each kid gets 1 candy, will she have enough candies?	
9. Fernando is using safety battery powered candles for his Jack-o-Lantern. One candle stays lit for 200 hours. Fernando has 3 such candles. For how many days will Fernando's Jack-o-Lantern stay lit, if he changes the candles instantly when needed?	

10.	Mia, Tia, and Angelica share a bar of chocolate, and each has a fraction of the chocolate bar. Mia has six times as much as Tia. Angelica has twice as much as Tia. What fraction of the chocolate does Angelica have?	

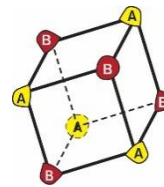| 11.	Larry, Moe and Curly are looking at costumes for Halloween. Larry is going to be a vampire and bought a costume for $22.80. Moe found a mummy costume for $21.95. Curly is going to be very scary in his $28.79 Frankenstein costume. Their mother paid with a one-hundred-dollar bill. How much change did she receive back from the cashier?	

12.	At Spooky Academy, 9 times as many children dressed up as spooky creatures as non-spooky creatures to celebrate Halloween. If the total children at Spooky Academy is 140, how many children dress up as spooky creatures?	

13.	Ghostly Town has a neon sign that repeats the message over and over. During pumpkin season, the message reads: PUMPKINS*FOR*SALE*PUMPKINS*FOR*SALE* continuously. The phrase PUMPKINS*FOR*SALE* is repeated over and over all day long. What letter or symbol will be the 100th character on this sign?	

14.	The number of chocolate pieces in the Halloween bucket is 2/9 of the number of hard candies. There are 91 more hard candies than chocolate pieces. How many treats are there in the Halloween bucket?	

15.	Half of Helen's candies is 8 less than one-fifth of Rita's candies. They have a total of 173 candies. How many candies does Rita have?	

16.	Alyssa wants to build a candy house. She builds a frame for the house in the shape of a cube, as shown, using 8 gumdrops for the vertices and 12 toothpicks for edges. She creates the frame so that the gumdrops at the ends of each toothpick are different colors. What is the fewest number of different colors of gumdrops Alyssa could have used?	

17.	Alyssa then takes 15 graham crackers, each measuring 5 inches by 8 inches, divides them into smaller pieces, and then joins the pieces together with icing to cover all six faces of her cube-shaped candy house. If she uses all 15 graham crackers, with no pieces left over, how many cubic inches are in the volume of the candy house that Alyssa constructs?	

18.	After going for trick or treat around the neighborhood, Larry and Kate counted their candies. Together, their total number of candies was 90. The sum of 25% of the Larry's candies and 75% of Kate's candies is 30. Find how many candies each one had.	