

# Math Challenge #2








**First Name:** \_\_\_\_\_ **Last Name:** \_\_\_\_\_ **Grade:** \_\_\_\_\_  
**Teacher:** \_\_\_\_\_ **Parent's email:** \_\_\_\_\_

## Halloween

Welcome to Math Challenge #2. Enjoy these Halloween math problems. Most problems can be solved using drawing a diagram/model or making an organized list. Get familiarized with the different strategies of problem solving [www.mathinaction.org](http://www.mathinaction.org). Ask your sibling or an adult for help if you get stuck.

Kinder & First Grade: solve at least 3 problems.  
 Second & Third Grade: solve at least 7 problems.  
 Fourth Grade and above: solve at least 12 problems.

	<b>Problems</b>	<b>Answer</b>												
1.	Holly, Jemma, and Romy each made two scarecrows. Holly and Jemma placed a hat on each of their scarecrows. Romy did not. How many of the scarecrows had hats?													
2.	 There were 11 pumpkins in the patch. Some kids came by and picked their pumpkins. Now there are only 3 pumpkins left in the patch. How many pumpkins were picked?													
3.	Ender went trick-or-treating and got 9 lollipops! He decided to eat 2 each day, starting on a Sunday. By which day of the week would Ender have eaten all of his lollipops? 													
4.	If each cat costume has 4 paws, how many paws would there be on 3 cat costumes?													
5.	Five scarecrows had a candy corn eating contest.  <ul style="list-style-type: none"> <li>• Scarecrow Jimmy ate the most candy corns.</li> <li>• Scarecrow Jade ate more than Scarecrow Lime.</li> <li>• Scarecrow Zoe ate less than Scarecrow Lime.</li> <li>• Scarecrow Jade ate less than Scarecrow Krow.</li> </ul> Write the scarecrows' names in order to show how much candy corn they ate. <table border="1" style="width: 100%; margin-top: 10px;"> <tr> <td style="width: 15%;"><b>Scarecrow name:</b></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> </tr> <tr> <td></td> <td style="text-align: center;"><i>Most</i></td> <td></td> <td></td> <td></td> <td style="text-align: center;"><i>Least</i></td> </tr> </table> Which scarecrow ate the least amount of candy corns?	<b>Scarecrow name:</b>							<i>Most</i>				<i>Least</i>	
<b>Scarecrow name:</b>														
	<i>Most</i>				<i>Least</i>									
6.	Last year, 'Candy Corn' costumes were very popular. If a store sold 16 Candy Corn costumes on Thursday before Halloween, and sold three times as many on Friday before Halloween, how many candy corn costumes did the store sell in both days? 													
7.	Jessica is going to earn some money during harvest time by helping pick apples for her neighbors, Mr. Greenthumb and Mrs. Smith. She plans to charge \$7 per apple tree. Mr. Greenthumb has 8 apple trees in his orchard, and Mrs. Smith has 13 apples trees in her orchard. How much money will Jessica earn altogether?													
8.	Angela and Anna set up 12 tables for the Halloween party. Each table can accommodate 4 chairs around it. When Angela, Anna and all their guests sat down, there were still 7 empty seats. How many <b>guests</b> came to the party? 													

9.



Flora went trick-or-treating and got a total of 95 candies. She had 21 more hard candies than chocolates and twice as many gummy bear candies than hard candies. How many hard candies did she get?

10. Allie was picking pumpkins for her school. She picked one pumpkin on the first day. She picked two pumpkins on each of the next two days. She picked three pumpkins for the following three days. Then she picked four pumpkins a day for four days and so on. How many pumpkins will she have picked altogether for her school when she completes the 16th day? Hint: Make a chart or a table.

11. A large pumpkin and 4 mini pumpkins cost \$15 altogether. The large pumpkin costs \$5 more than the cost of a mini pumpkin. Find the cost of one large pumpkin. Hint: Draw a diagram.



12. You just put on your new Halloween costume and you and your friends are going trick or treating. At the first house you get 5 pieces of candy, at the second house, you get 10, and at the third house, you get 15. The pattern continues and there are 8 houses on your street. If you eat 2 pieces of candy between each house, how many pieces of candy would you have left after visiting all 8 houses? Hint: Make a chart or a table



13. Your small town is growing. Each year, there are twice as many houses you can visit for trick or treating. This year, there are only 8 houses. In how many years will there be over 1000 houses?

14. Mia and Tisha entered the 'Heaviest Pumpkin Contest'. Mia's pumpkin is 18 pounds heavier than Tisha's. The weight of Tisha's pumpkin is  $\frac{3}{5}$  of the weight of Mia's pumpkin. Find the total weight (in pounds) of the two pumpkins. Hint: Draw a diagram.

15. To prepare for the Halloween party, Mrs. Lucky baked 9 trays of cookies. There were 20 cookies on each tray. She saved  $\frac{1}{5}$  of the cookies for her grandchildren and gave  $\frac{4}{9}$  of the remainder to her neighbors. She then put the rest of the cookies equally onto 4 plates. How many cookies were there on each plate?



16. Mrs. Dorn and Mr. Kelsey went shopping for Halloween decorations. They have a total of \$280 to spend. After Mrs. Dorn spent  $\frac{2}{5}$  of her money and Mr. Kelsey spent  $\frac{2}{3}$  of his money, they each had an equal amount of money left. How much did they spend altogether?

17. Ann, Bill, and Ria collected a total of 98 candy bars. Ann and Ria have a total of 67 candy bars while Bill and Ria have a total of 74 candy bars. How many more candy bars does Ria have than Ann?

18. Phineas and Ferb went trick or treating and stopped by Mr. Duffenshmirtz's house. At his door, there were two chest boxes at his door. One of them contained candies while the other was empty. Each box had a sign attached to it. Both signs were either truth or both were lies. Which box should Phineas and Ferb have opened to get the candies?



At least one of the boxes contains candies



The other box is empty