

## 2018-19 Puzzle Contests

# Puzzle Contest #2



### *Grades K-5 Puzzles:*

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1. A secret passcode is needed to enter the Great Hall of Mysteries this Halloween. It is known that the correct passcode would make true the sentence below:

**THERE ARE ..... LETTERS IN THIS PASSCODE**

**(35 pts.)**

2. The young witches Bessie, Cassandra and Evanora were making frog oil potion. Each made a potion according to each of their grandmother's recipes. They differed in the number of frogs needed for the potion. Evanora's recipe called for the lowest number of frogs. Cassandra's recipe required more frogs than Bessie's and Evanora's. How many frogs did Bessie and Cassandra put in their potions, if Evanora put 4 frogs, and none of the recipes called for more than 5 frogs?  
**(25 pts.)**



**Solutions deadline is November 25**

**Please submit your solutions to [anna.charny@metrowestschool.com](mailto:anna.charny@metrowestschool.com)  
or bring them to the office**

3. At the Ghost Halloween parade all participants were assigned numbers from 1 to 995. The Chief Warlock observing the parade was very bored, and so he started multiplying ghost numbers ending in 5. When he was done, he was still bored, so he added all the digits of the product. And when he got that, the parade was still on, and he was still bored. So he added the digits of the new result again. And then again, and so on he kept adding the digits of the result till he got one-digit number. What was that one-digit number?



**(40 pts.)**

Solutions deadline is November 25

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