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May 11-15

Pascal's Triangle
Extension Activity

Look for a pattern in the numbers.

Use the pattern to fill in the boxes and complete the triangle.

					1					
				1		1				
			1		2		1			
		1		3		3		1		
	1		4		6		4		1	
1		5		10		10		5		1

Answer the questions based on your completed triangle.

1. What pattern did you notice that helped you complete the triangle?

2. Find the sum of each row (horizontal). Is there a pattern?

3. Shade all the odd numbers on the triangle. Is there a pattern?

4. What other patterns do you notice on the triangle? Describe them.

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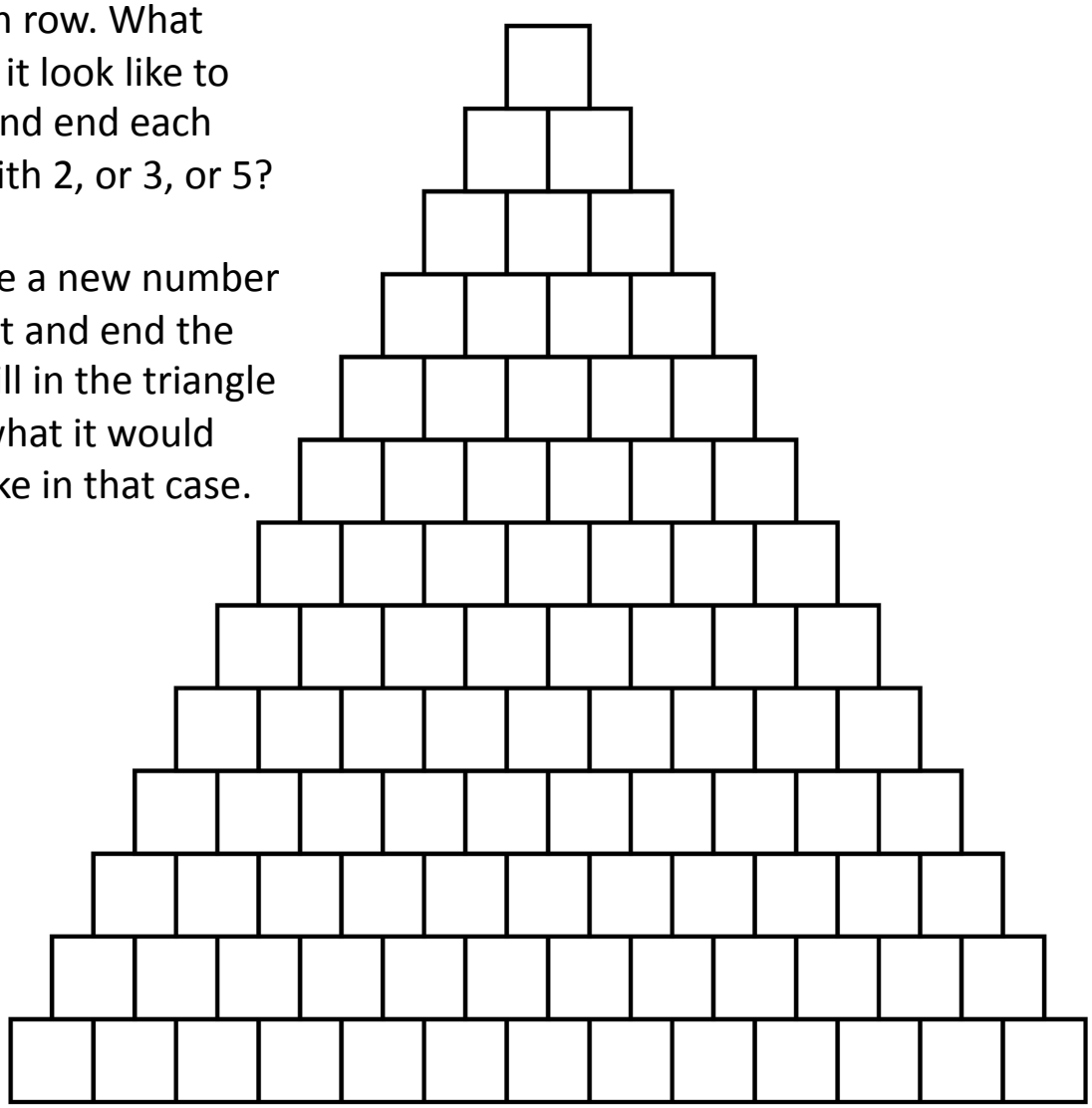
Messing with Pascal

Empty Triangle Handout

The original triangle starts and ends with 1 in each row. What would it look like to start and end each row with 2, or 3, or 5?

Choose a new number to start and end the row. Fill in the triangle with what it would look like in that case.



Answer the questions based on your new completed triangle.

1. What new patterns do you notice when starting from a different number?

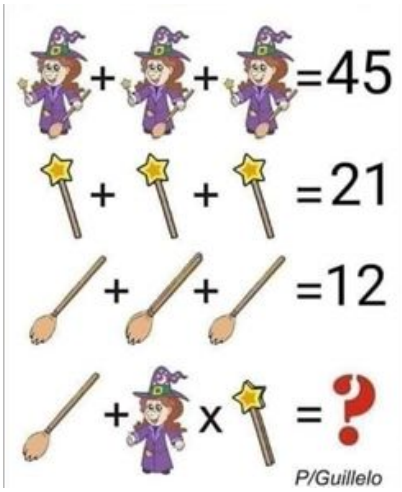
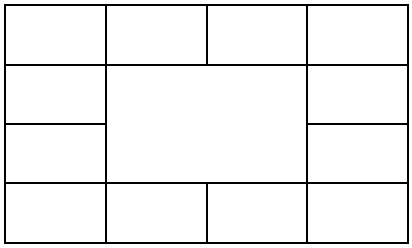
2. Find the sum of each row (horizontal). Is there a pattern?

3. Shade all the odd numbers on the triangle. Is there a pattern?

4. If you were to start again with a different new number, how do you predict your triangle would change?

Math Choice Board- May 18-21

Choose at least 4 activities to do.

Invent a new math card game. Write down instructions for how to play. Be sure to explain the math behind your game!	Find a recipe that uses fractions. Scale up the recipe to be 3 batches and write the new list of ingredients. Scale down the recipe to be a half batch and write the new list of ingredients.	Write a math problem that involves something you have been spending your time doing. Be sure to include all the necessary information and to ask a question that requires solving. Show how someone would solve the problem.
Make a one-pager that shows different aspects of your personality- what you like to do, who you consider yourself to be. At the end, add "...And I'm a mathematician"	Find a graph from the news. Study it and write down observations you can make about it.	Write and solve a probability problem using fractions, percents, and terms (likely, unlikely, impossible, equally likely) about finding popular items at the grocery store. (toilet paper, cleaning supplies, water, etc.)
	Put the numbers 1-12 in the twelve boxes below so that each side adds up to 26 (No repeating numbers) 	Plan a party to celebrate the end of COVID19. Calculate costs for food, beverages, decorations, and location. After determining the final cost write an algebraic equation to find out how much each person would have to pay-if you had 10 guests: 25 guests: 75 guests: