## School Week 11 beginning 6<sup>th</sup> July 2020



## Pyramid Calculations (General information)

This week's tasks practise addition and missing numbers again and include an investigation. The strategies you practised before in weeks 3 and 4 still apply to complete the pyramids with accuracy. On Day 5 there are some multiplication pyramids to try too.

Rocket	colours
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Yellow Yr 1 Autumn	Blue Yr 1 Spring	Orange Yr 1 Summer	Turquoise Yr 2 Autumn	Gold Yr 2 Spring	Silver Yr 2 Summer ARE	Brown Yr 2 Summer GD
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Week 11	Learning Objectives and Tasks	Timing	
<b>Day 1</b> Learning Objective	We are learning to solve addition calculations and spot rules.		
Task 1	Input Task 1 - Introduce the pyramid problem. "Imagine that in the pyramid, treasure is hidden -		
	in order to unlock the door and enter - you need to find all the numbers that sit on each block." (You	Approx.	
	could have ready a sticker or something similar as a reward for future completed pyramids.)	30 mins	
	<b>Input Task 2</b> - Show the child a completed pyramid and ask if they can work out how it works i.e. how were the numbers made/chosen? (Some children may spot it straight away, others may need more guidance, so encourage them to look at the position of the blocks and the numbers at the bottom first). If they still can't see show them that when you add adjacent blocks the total is written in the block that lies above both.		
	<b>Activity 1</b> Have a go at filling in some addition pyramids. You need to start at the bottom and work up. There are different sized pyramids – 3 block based, 4 block based and a 5 block based pyramid.		
	You can create your own empty number lines or draw tens and ones to help you with larger calculations.		
Day 2 Learning Objective	We are learning to carry out an investigation using trial and error and logic.		
Task 2	<b>Task 2 Investigation</b> - you are given 3 numbers placed at the bottom of the pyramid in different positions (there are 6 different ways). What do you notice about the top number? Is it the same each time? Try again with 3 different numbers, place them in different positions at the bottom to create all 6 ways. What do you notice about the numbers at the top? Can you come up with a rule of how to position the bottom numbers so that the number at the top is the greatest?	Approx. 30 - 40 mins	
	Once you have a theory - try it out again and then for extra challenge test your idea on a 4 based		
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<b>Day 3</b> Learning Objective	We are learning to find missing numbers in calculations.	Approx	
Task 3	<b>Task 3</b> Today you have some pyramids, but there are some numbers missing. You will need to use the clues (numbers already on the pyramid) to help you. For example you may have the total and one of the numbers in the calculation, so you just have to use counting on or subtraction skills to help you. E.g. $8 + ? = 17$ . Because $17 - 8 = 9$ , this must be the missing number or I know $8 + 8 = 16$ so I need one more, so it must be 9.	30 - 40 mins	
	You can create your own empty number lines or draw tens and ones to help you with larger numbers.		

<b>Day 4</b> Learning Objective	We are learning to partition numbers.	Approx. 30 mins
Task 4	<b>Task 4</b> Today you just have a number at the top of the pyramid and have to work back down the pyramid filling in the boxes, so you get to decide what goes where, but make sure the calculation works. The extra rule to this task is that you cannot use 0 or 1 anywhere on the pyramid! Question - Which numbers can never sit in the middle rows?	
<b>Day 5</b> Learning Objective	We are learning to use our multiplication facts.	Approx.
Task 5	<b>Task 5</b> Today instead of adding the adjacent blocks you multiply them instead. There aren't too many to solve because the numbers get too large, but there is an opportunity to try some other times tables. Counting up in 3s is an expectation for Yr 2. To count in 4s you could draw a number line and place the numbers along it, simply by counting on 4 ones on your fingers (you may notice that the 4x table is double the 2x table).	20 -30 mins

## Mental Maths (ongoing)

Play a selection of your favourite games that you've been trying over the last few weeks. It's always good to brush up on anything you've found more tricky.