

Hello Year 3,

Usually in our last week of school we would be doing lots of different maths activities so we wanted you to try some of these at home too. Some are **practical** while others will definitely test your **thinking skills**.

I	1
II	2
III	3
IV	4
V	5
VI	6
VII	7
VIII	8
IX	9
X	10
XX	20

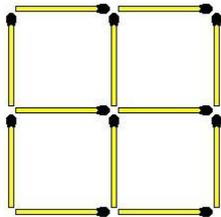
### **Get sticky!**

Can you use sticks outside to make Roman numerals? Could you make a clock face showing all the Roman numerals from I – XII?

### **Material measurements**

Explore outside and collect various natural materials such as sticks, leaves, pebbles, pine cones, etc.

Measure various of your own body parts and compare the findings with the items. For example, how many pebbles does it take to measure your arms? How many leaves does it take to measure your leg?



### **Squares puzzle**

Move two sticks to make 7 squares. The squares don't have to be all of equal size and could fit inside one another. Can you work out what to do? This one might be easier to work out if you create it practically with straws or strips of paper.

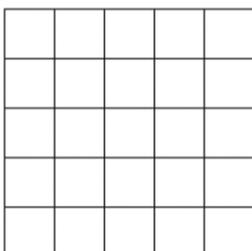
### **River crossing**

A farmer returns from the market, where she bought a goat, a cabbage and a wolf. On the way home she must cross a river. Her boat is small and won't fit more than one of her purchases.

As such, she cannot leave the goat alone with the cabbage (because the goat would eat it) and she can't leave the goat alone with the wolf (because the goat would be eaten). How can the farmer get everything on the other side?



To solve this problem you could create your own river scene with pictures or small figures or you can play interactively here - <https://www.proprofs.com/games/wolf-sheep-and-cabbage/>



### **Grid challenge**

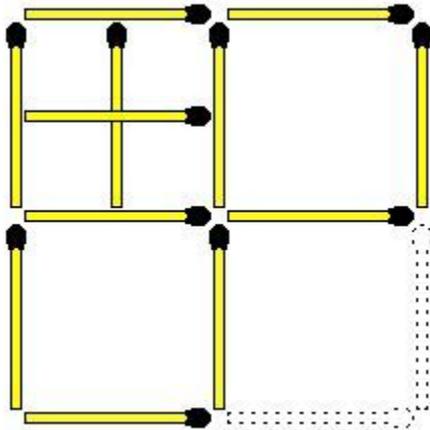
Make a 5 by 5 grid using string, or mark it out using chalk. It doesn't need to be big (although it can be!). Try to place ten items (this could be bean bags, cones, tennis balls) inside the grid so that no more than two objects lie in a line in any direction. You could also do this by drawing the grid and marking each item as an x.

Over the holidays, we would like you to continue to practise your times tables as well as using the formal columnar methods to solve a range of addition, subtraction and multiplication calculations.

We miss you all but we'll meet again soon. Have a super summer! ☀️ Year 3 Team ☺️

Possible Answers

*Squares puzzle solution:*



*River Crossing solution:*

1. Take the goat to the other side.
2. Return, pick up the cabbage and take that to the other side.
3. Now pick up the goat again and take it back to where it started.
4. Unload the goat, and pick up the wolf.
5. Take the wolf to the other side where you unload it and leave it with the cabbage.
6. Go back for the goat. Job done!

*Grid challenge solution:*

X		x		
x			X	
	X		x	
	x			X
		X		x

Now you know how to solve each puzzle... can you test your family members with these brainteasers?