



Home Learning



Year 6 Term 6 Week 7

(week beginning 13th July 2020)

Hello South America Class. We have come to our final week in school and your final week in Primary School. I know Year 6 hasn't turned out quite how we expected but you have all done amazingly well this year. Make sure you take some time this week to think about your journey at The Manor and how far you have all come.

Have a fantastic summer break and good luck for secondary school – make sure you keep in touch and let us know how it is going.

English

Take a look at 'The Alchemist's Letter' from the Literacy Shed and complete some of the activities contained in the activity pack on <https://www.literacyshedplus.com/en-gb/resource/the-alchemist-s-letter-ks2-activity-pack>

Maths

In Maths, we will be looking at a few investigative problems this week. Have a go at solving these:

Satisfying Four Statements

Ash, Si, Sami and Mani are playing a game.
Each of them writes down a statement that describes a set of numbers.

Ash writes "Multiples of five".
Si writes "Triangular numbers".
Sami writes "Even, but not multiples of four".
Mani writes "Multiples of three but not multiples of nine".

Can you find some two-digit numbers that belong in two of the sets?
Can you find some two-digit numbers that belong in three sets?
What is the smallest number that belongs in all four sets?

How could you describe the pattern of the numbers that satisfy both Ash's and Sami's statements?
How about the numbers that satisfy both Ash's and Mani's statements?

Can you describe patterns for other pairs of statements?

Brush Loads

We have 5 cubes and we're going to put them together, following a few simple rules:

- the cubes must be together face-to-face;
- they must not be toppling over.

We're going to paint the faces that can be seen. One Brush Load (a kind of unit that we'll use) will paint one square face.

Challenge

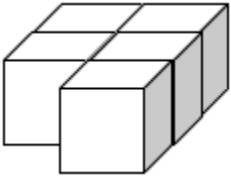
Can you find ways of arranging 5 cubes so that:

- you need as few BLs as possible?

- you need as many BLs as possible?

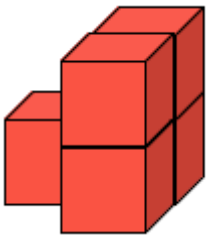
Need more information about counting BLs before you start the challenge?

Here are 5 cubes:



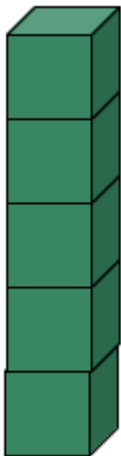
Counting the faces to be painted comes to 15, so 15 Brush Loads are needed. (Remember we're only counting visible faces, so not those that are touching the surface where the cubes are placed.)

But of course we could have placed the 5 cubes differently, for example:



Counting the faces to be painted now, we have 17, so 17 Brush Loads.

And, how about:



Now we'll need 21 Brush Loads (BLs).

Going further

Can you find arrangements that need all the numbers between the largest and the smallest numbers of BLs?

Take more cubes.....

What happens if you use more cubes, for example 6, 7, 8 ...?

Can you find out the smallest number of BLs and the largest number of BLs possible in each case?

Can you predict the arrangements which need as few BLs as possible and as many BLs as possible?

In addition, you can continue to explore Corbett Maths and consolidate and practise your knowledge of areas of Mathematics you find more challenging.

<https://corbettmathsprimary.com/content/>

SRE

Consider what independence means to you? Do you think you are independent? When? Do your parents agree? When do you think you should have more independence? Consider how this will change as you get older.

In class, we will also be discussing the different types of relationships that exist between people and how these relationships affect us and make us feel.

You can email me any of your work at SouthAmericaClass@gmail.org.uk. I would love to see what you are learning at home.