Maths Week 2020

Maths Week at Laurance Haines is different to how we had planned. However, this week we have tried to put together some fun maths activities that you can enjoy from home or school. There are also some extra challenges for KS1 and KS2 on codes and coding. We know you will be great code breakers! Remember to email and tweet your teachers or @MrsMartinLHS using #mathsLHS with photos and show off any work you have done – there are house points to be won! Use the recording sheet attached to collect your points.

Dress up in something with a number on **5 points**	Go on a number hunt – how many different numbers can you take pictures of around your home and neighbourhood? **2 points per number**	Bake some cupcakes and help your grownup to measure the ingredients. **5 points** Can you show how to cut them into halves? **8 points**	Human numbers – how many different numbers can you represent with your body? **10 points** **(double points for teamwork!)**
Choose three toys and lay them out from **longest** to **shortest** **8 points**	How many different things can you do in 1 minute? e.g. how many times can you write your own name? How many star jumps? **3 points per activity**	Go on a shape hunt – how many different 2D and 3D shapes can you find around the house and your neighbourhood? **2 points per shape**	Raid a food cupboard – order three items of food from **lightest** to **heaviest** **6 points**
Start at zero and count to the biggest number you can. **6 points** Start at zero and count in 2s. **8 points** Start at zero and count in 5s. **10 points**	Sort some coins into groups e.g. types, colour, size or numbers. How many different types of coins do you have? Can you find any numbers on them? **10 points**	Guess how many sips it would take to drink a small glass full of water. Then drink the water. How many did it take? How close was your estimate? **10 points**	Keep a record of every time you watch TV for each day for this week. Work out the **total** number of times you watched T.V. **8 points** Can you make a tally chart? **10 points**
Start at your bed and count how many steps it takes you to get to a door. **6 points**	Make a **pattern** Use anything you like (paints/crayons/stones/leaves) to make a pattern and describe it e.g. my pattern goes stick, pebble, stone, stick, pebble, stone... **6 points**	Go on a **pattern** hunt. How many patterns can you find in your home or neighbourhood? **3 points per pattern**	Count all of your shoes **6 points** Can you count the number of pairs? **10 points**

Cracking codes! KS1

Here are some extra challenges for KS1 based on codes and code-breaking – don't forget to show off what you have done by emailing your teachers or tweeting your activities
@MrsMartinLHS #mathsLHS

What is cryptography?

Cryptography is the use of codes and ciphers to keep information secret. There are records showing cryptography has been used for thousands of years!

Challenge 1:
Caesar shift code

Julius Caesar used a simple substitution cipher to send messages to his troops. He used a very simple rule to replace each letter with another letter from the alphabet. He substituted each letter by the letter that was 3 places further along in the alphabet, so that "a" was replaced with "D", "b" with "E" and so on.

Complete the table below to show what each letter is coded for:

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
D	E	F																							

Now try to uncode the following:
  1) ODXUDQFH KDLQHV
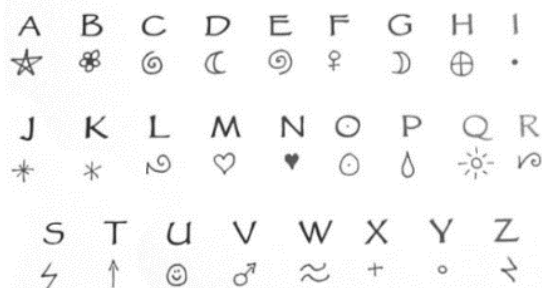
Now try to answer the following questions in code:
  2) Your name
  3) Your favourite food
  4) Your favourite animal
  5) Your favourite colour

Email your teachers with the answers and see if they can uncode them!

Challenge 2:
Design your own code!

For each letter of the alphabet, make up a symbol that could represent it e.g. star/cross/dot etc…

Can you write to a friend using your code?

Score Card

My school house is _____

Activity	Points available for this activity	Do I need to double my points or multiply by the number of things I found?	Have I sent evidence to a teacher?	Final score for this activity
Array hunt	3 for each array	Yes x5	Yes - tweet	3x5=15