

# Year 6 Home Learning 3

English	Maths	Physical	Science	Creative
Write a character description of a character from your favourite book.	Please see below for additional activities. You could choose a different one each day.	Choose 5 exercises and put them into a circuit. Complete the circuit 3 times. Record your time.	Find a fun children's experiment online. Can you replicate it?	Draw a detailed self- portrait and colour it in.
Research the author Roald Dahl. Write a biography about him.	You also have MyMaths and TT Rockstars work as well as work in your text books or SATs papers.	If you can, go outdoors in the fresh air and go for a walk.	Research the effects of global warming on the permafrost in Russia.	Create and design a new country. <i>Think about:</i> - <i>Flag</i> - <i>Language</i> - <i>Currency</i> - <i>Food specialities</i> - <i>Animals</i> - <i>Landscape</i> - <i>Climate</i> - <i>National Anthem</i>
Write a Newspaper Report about an event of your choice. You could base it on a nursery rhyme or book.		Find household objects and come up with ways that you can use them to keep fit. <i>E.g. tin of beans to</i> <i>bicep curl.</i>	Write a biography about a scientist of your choice.	Make a model of your country using materials in the house. Ask your family for permission beforehand!
Write a book review of our class book, 'Letters from the Lighthouse'.		Practise your ball skills. Can you learn to juggle with 3 balls?	Find out some interesting and unusual science facts.	Sketch a still life image of a plant, flower or tree.
Choose 10 Year 6 spelling words and write a paragraph which includes them all.		With a family member, or you can use a wall, how many times can you throw and catch in 1 minute.	<ul> <li>Write a report on Mount Everest.</li> <li>You could include:</li> <li>Who lives there?</li> <li>What adaptations do animals have to survive there?</li> <li>What are the uses of the mountain?</li> <li>Who was the first person to reach the peak?</li> </ul>	Write a song. You could use Garageband on the iPad to record your track.

You also have SPAG.com and spelling shed work which is updated weekly.

This link takes you to a free workbook that covers the objectives for Year 6

https://mailchi.mp/headstartprimary.com/free-activity-booklets

### **Recommended websites:**

Art	Famous Places	History		
Georgia O'Keeffe Museum -	Eiffel Tower –	British Museum London -		
https://collections.okeeffemuseum.org/	https://www.toureiffel.paris/en/explore	https://blog.britishmuseum.org/how-		
		to-explore-the-british-museum-from-		
		<u>home/</u>		

# Maths Activities

#### Time Cards

Cut out (or copy out) and put these in order. This should generate some great discussion.

A minute	The time needed to soft boil an egg	A million seconds		
A year	Number of years since the Victorians were around	The number of years since the Romans came to Britain		
Time for an oak tree to get to 30m high	Time for the earth to go round the sun	The time the shutter is open on a camera when you take a photo in daylight.		
Time for light to come from the moon	A hundred months	Length of time since the last ice age.		
Number of months since you were born	An hour	A thousand days		
A month	A fortnight	Number of years since my granny was born		
A day	Time from sowing tomato seed to eating the first tomato.			
The time for a game of football without any extra time	Time needed for you to read Time for the moon to go all the Harry Potter books round the earth			
Time to tidy your bedroom	The time for the TV signal to come from the TV mast to your TV set	The total amount of time in a year spent in my maths lessons.		

## Four Integers

Using four different integers and the x symbol make the highest possible result.
 All the integers have to be used.
 For example: 3, 7, 5, 1 gives 157 x 3 = 471 or 37 x 51 =1887.

2. Now chose four other integers and make the largest result using only multiplication.

3. What conclusions can you make?

4. What predictions can you make about 5, 6, ... digits?

## <u>1, 2, 3, 4</u>

Using the digits 1, 2, 3 and 4 and +, -, x and  $\div$  symbols make the numbers from 1 to 30. Each of the numbers has to be used every time, for example 1 + 2 + 3 + 4 = 10.

#### **Creepy Crawlies**

Ross collects lizards, beetles and worms. He has more worms than lizards and beetles together. Altogether in the collection there are twelve heads and twenty-six legs. How many lizards does Ross have?

### Zios and Zepts

On the planet Vuv there are two sorts of creatures. The Zios have 3 legs and the Zepts have 7 legs. The great planetary explorer Nico, who first discovered the planet, saw a crowd of Zios and Zepts. He managed to see that there was more than one of each kind of creature before they saw him. Suddenly they all rolled over onto their backs and put their legs in the air.

He counted 52 legs. How many Zios and how many Zepts were there?

#### **Chicken and Sheep**

A farmer looks across a field of chicken and sheep. He counts 26 heads and 74 legs. How many chicken and sheep does he have?

Try to represent this problem in different ways: pictures, models, cubes, graph, algebra, using 26 children, etc...

## **Repeating Patterns**



This pattern has been made from squares of two colours.

What colour will the 17th cube in the sequence be?

What about the 20th? 100th cube?

Can you convince someone else you are right?

Can you find a way of predicting the colour of any square?

What about these patterns?





Make up some repeating patterns of your own using two colours.

See if you can find a way of predicting what colour any square will be.

#### **Path Pattern**

Heather is laying a new path. She is using a mixture of grey and pink slabs. Here is her pattern.

How many pink slabs would she need if her path had a total of:

- 24 slabs?
- 40 slabs?
- 100 slabs?

How do you know your answers are correct?

#### **Consecutive Numbers**

Which numbers from 1 - 30 can be written as the sum of 2 consecutive numbers? What do you notice about these numbers?

What two consecutive whole numbers add together to make 101, 4323 or 54 307? How do you know?

Extend to the sums of 3, 4, 5... consecutive numbers

### **Jumping Frogs**

#### A classic!

I like this interactive version on NRich, as you can alter the number of frogs on each side and it separates 'slides' and 'jumps', so the patterns can be developed and extended:

#### Palindromes

Think of as three-digit number. Reverse the digits to generate a second number. Subtract the smaller from the larger. Reverse the digits again. Add the two new numbers.

e.g.	341
	143
	198
	891
	1089

Do you always get 1089? If so, why?

Try with 2, 4, 5 digit palindromes.

### Always, Sometimes, Never

All prime numbers are odd.

If the digits of any number add up to a multiple of 3, then the number is divisible by 3. Multiplying by any number always makes the result larger. Adding something to a number always makes it larger. Subtracting something from a number always makes it smaller. Dividing a number by something always makes it smaller.

Some other good examples for number and shape are here: