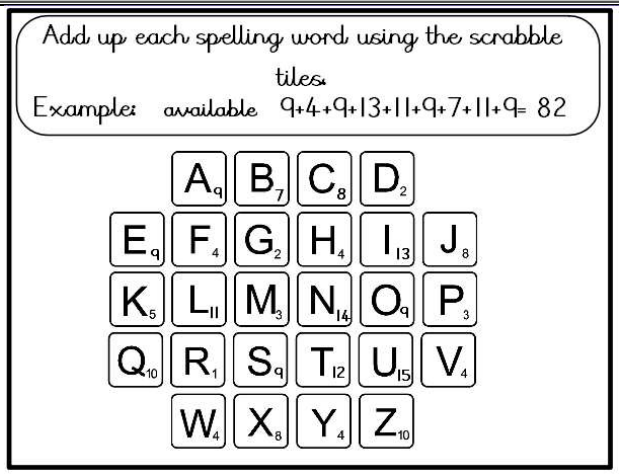
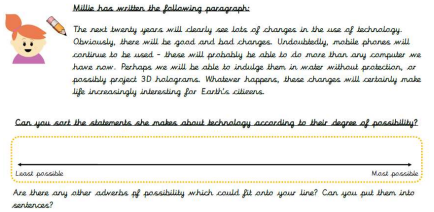
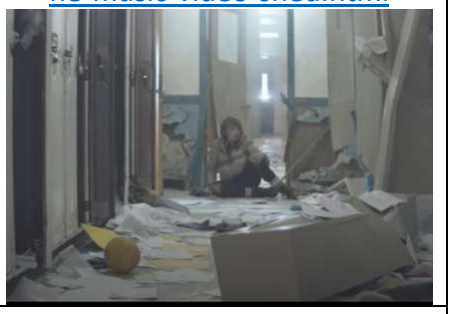
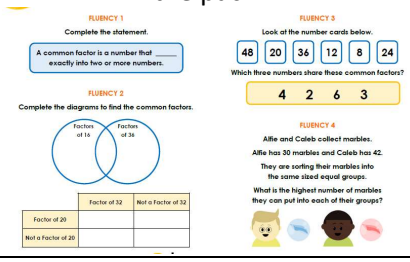
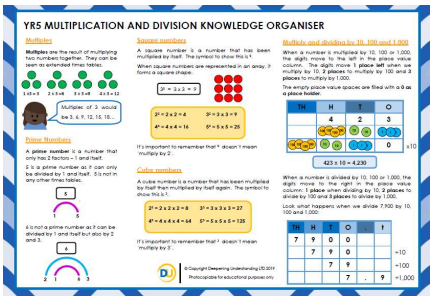
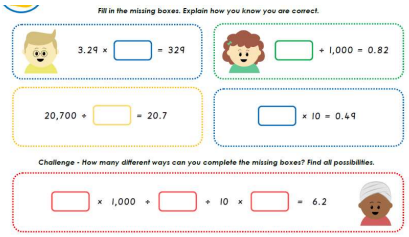
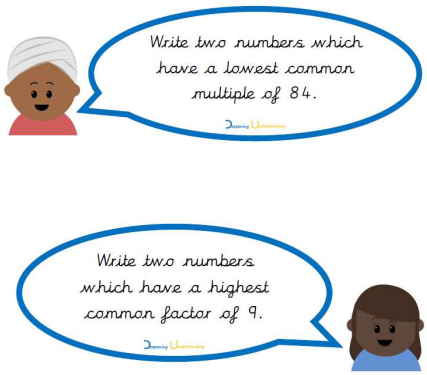
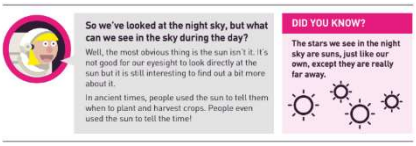
Rowlands Gill Primary School Home Learning Pack (due to school closure) Class: Year 5/6 **Week: 11**

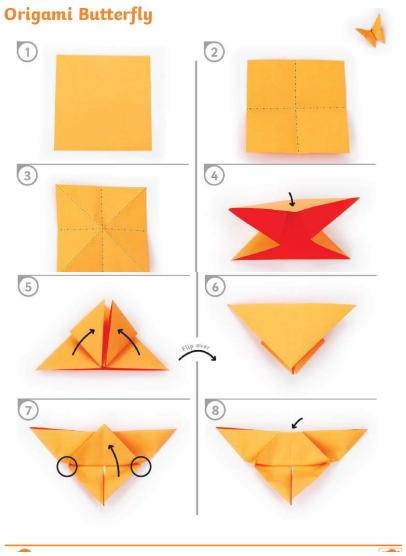
Subject:	Description of Task:	Resources:
English Spelling Activity 1		Work out the value of each spelling using the scrabble tiles. Spelling patterns di, dis or de disabled, despicable difficult detective dignity determine dimension definitely description
English Comprehension Activity 2	Read the text – The Contraption Answer the questions about the text.	
English Punctuation & Grammar Activity 3	Adverbs of possibility Remember… Adverbs provide extra information about a verb. Adverbs of possibility show how likely an action will happen. Examples: certainly, definitely, probably etc.	
English Writing Activity 4	https://www.literacyshed.com/the-music-video-shed.html Read the story in the pack – Powers Write the next chapter of the story.	https://www.literacyshed.com/the-music-video-shed.html 
English Reading	Read a book from *Oxford Owl* or read a book that you have at home. Try to read for at least ten minutes per day.	https://home.oxfordowl.co.uk/

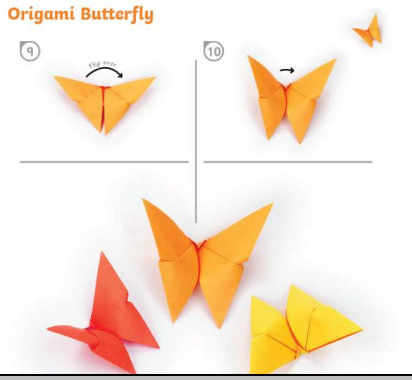
Maths Key Fact	Daily 10 - Mental Maths Challenge - Topmarks www.topmarks.co.uk/maths-games/daily10 How quickly you can recall your times tables? 1. Follow the link 2. Select level 6 3. Select Multiplication 4. Select Up to 12x 5. Select 3, 5, 7 or 10 second intervals	iPad or laptop www.topmarks.co.uk/maths-games/daily10
Maths Revision 1 Lesson 1	Take a look at the maths help sheets included in the pack. 	
Maths Revision 2 Lesson 2	Fill in the missing boxes. Explain how you know you are correct. **× AND ÷ BY 10 / 100 / 1000**	
Maths Written Method Lesson 3	Prove each statement.	
Other Subjects	See activity grid for choices	

Activity Grid for Foundation Subjects / Wider Curriculum Class: Y5/6 **Week: 11**

Select which activities you prefer to do or those that you have the available resources to do. You should complete at least 6.

<table>
<tr><th>Science</th><th>History</th><th>Geography</th></tr>
<tr>
<td>HOW CAN THE SUN TELL THE TIME?
 
</td>
<td>https://www.bbc.co.uk/bitesize/topics/z87tn39/articles/z36j7ty

This year, the Olympic Games were meant to be held in Tokyo. Find out about the ancient origins of the Olympic games and compare them with today. What is the same? What is different?</td>
<td>https://www.bbc.co.uk/bitesize/topics/zx72pv4/articles/z7jdnrd
 
</td>
</tr>
<tr><th>Art / Design & Technology</th><th>PSHE</th><th>PE</th></tr>
<tr>
<td> 

 
</td>
<td>Try the online safety activity on the following link:

https://www.thinkuknow.co.uk/8_10/watch/</td>
<td>Have you tried our virtual sports day from the school website?
Take part in #WRITEUNITE!
Sports Day Poem
Sports Day is a special and important time of the year for everyone and although we can't take part in quite the same way this year. I would like you to write a poem to celebrate your memories.
What do you enjoy most about sports day?
What are the important values that sports day teaches us?
Your poem can be in any style, any length and doesn't always have to rhyme!
Read some examples in the sheet below.
I would like you to share your sports day poems by emailing them to the school office by Wednesday 8th July 2020!
There may be prizes! Good Luck!</td>
</tr>
<tr><th>Quiz Master</th><th>What if?</th><th>In the World…</th></tr>
<tr>
<td>https://www.bbc.co.uk/bitesize/topics/zx72pv4/articles/z7jdnrd
Test your knowledge of economic activity. (Linked to Geography Activity)</td>
<td>What if you could create your own sport for the Olympic games? What would the rules be? What would you call it? How would you compete?</td>
<td>https://www.bbc.co.uk/newsround/news/watchnewsround

Watch Newsround and complete 3 of the quizzes.</td>
</tr>
</table>

English Reading Comprehension – Activity 2

Magic and Mystery Text focus: Narrative

The Contraption

"You're doing it wrong again!"

Hanna sighed. Pippa was her best friend, but she was so uptight about everything. "I'm sorry!" Hanna called back. She heard a muffled grunt in the mechanism above her. Enormous metal cogs bit into each other, and steam hissed out of well-worn seals in the copper piping that covered the walls like a maze.

The contraption had been Pippa's idea. She was the brains behind the whole thing. Hanna tried to consider herself the brawn, but one look at her scrawny arms and sparrow legs told her that wasn't true either. They'd been working on it together for the last few months, and it was finally getting close to testing time.

Something whistled in the bowels of the machine. Hanna heard her friend whoop and holler and bang her wrench on the metalwork. "It's working," Pippa called down. "Get her wound up, and we'll be ready to test it."

The winding rod was slick with sweat, so Hanna wrapped an oily rag around it and started to wind it slowly. There was a lot of resistance. She knew that the other end of the rod was attached, via a system of cogs and pulleys, to a screw that wound down into the river below. By winding the wheel, she'd start to draw up water into the enormous sump up above. From there, it would be turned into steam that would power the contraption.

A strong wind picked up outside. Hanna heard the creak of the wooden masts twisting as the sails caught the breeze. The contraption rocked but steadied quickly. Sweat dripped into Hanna's eyes, but it would all be worth it. That was the beauty of her friend's new creation. Pippa wasn't content with just being amazing at harnessing the steam, she was, above all else, an alchemist.

Hanna still remembered the day when Pippa came bursting out her lab with a small vial of vivid green liquid. "This is Infinitum!" she'd shouted. Hanna knew she must have looked perplexed

because Pippa had grabbed her by the hand and dragged her into the lab. There, a wheel no bigger than a coin was mounted on an axis. As they both watched, it spun, and spun, and spun. And it didn't stop.

"Infinitum actually generates energy when it it gets hot!" Pippa exclaimed. "The wheel spinning on the bearing generates a small amount of heat through friction. This new liquid turns that heat back into more energy. It will never stop spinning!"

Fast-forward a few months and Pippa had built the contraption. She didn't have enough Infinitum to power the machine; instead, she was planning to use it to heat the steam-engine. Providing they drew enough water into the super-hot centre of the machine, it would never slow down and never stop.

Hanna gritted her teeth and wrenched the wheel harder. She heard her friend call down from the hatch up above, "It's full...you can stop. Come and see this! It's working!"

Answer these questions about the text...

1. How do you know that Hanna thinks Pippa is the more intelligent of the two?

2. What do we know about Pippa's character? Explain how.

3. How did Hanna feel when Pippa first showed her Infinitum?

4. What was Pippa's biggest passion?

5. How hard was Hanna working? How do you know?

6. Which word or phrase tells you that Pippa is good at using steam to help her?

7. What was the point of the wheel Hanna was turning?

8. What was the name of Pippa's new creation?
9. Why do you think the new creation is called Infinitum?

10. Draw a labelled diagram of what you think the contraption might look like, using evidence from the text.

English Grammar – Activity 3

Millie has written the following paragraph:

The next twenty years will clearly see lots of changes in the use of technology. Obviously, there will be good and bad changes. Undoubtedly, mobile phones will continue to be used - these will probably be able to do more than any computer we have now. Perhaps we will be able to indulge them in water without protection, or possibly project 3D holograms. Whatever happens, these changes will certainly make life increasingly interesting for Earth's citizens.

Can you sort the statements she makes about technology according to their degree of possibility?

Are there any other adverbs of possibility which could fit onto your line? Can you put them into sentences?

English Writing – Activity 4

Powers

It was a cold February morning, and nerves gnawed at my stomach as I walked to school that day: it was the day of the science test I had been dreading. Snow fell from the grey sky, tingling my nose and cheeks as I pulled my hat over my ears and wrapped my coat around me. The walk was quieter than usual, almost eerie, and even the birds hadn't seemed to have woken up yet. The ominous silence served only to intensify my growing anxiety about the tests. Onwards I trudged, kicking the fresh powder up with my old hiking boots and wishing that Mum had the money to order me the new ones when I'd asked her last week; these had holes in the soles and my socks were starting to soak.

Since it was so quiet, I decided to take the short cut through Bertram's Woods. Tree trunks were heavy with snow, their limbs almost bowing under the weight, and the light gradually disappeared the further in I ventured. Then suddenly, I stopped in my tracks. Up ahead, slightly off to the right, there was a sound. I knew the noise I had heard was not snow falling from branches and there wouldn't be a car for miles. There it was again… a bang, followed by a bright flash of light. As my eyes struggled to adjust to the intense brightness, a piercing, high-pitched noise that made my ears ring surged at me like a weapon, and within moments, it forced me to collapse to the ground in a cold, wet heap. I looked up, blinking and dazed, and could just about make out a shape, something like the silhouette of a figure, as it leapt upwards high into the trees and out of sight.

Sweat poured from my brow and my heart beat faster than it ever had before. Then it began. I felt a tingling sensation in the palms of my hands, itchy at first but then more like a fizzing under my skin, and it felt as though my skin was too tight. Dizziness and nausea took over. I tried to scream but no sound came out: I was crippled by fear. Without warning, I felt a surge like an electric shock shooting through my body. A flash of light suddenly shot from my hands and cut through a nearby oak tree, severing it in half and sending it tumbling towards me. I summoned up all of my strength and staggered to my feet. I leaned forwards to run, but my legs felt as though volts had been passed through them and I lurched into an oddly rapid pace. Usually it would take twenty minutes to complete that track back through the forest to the road, but I had just done it in less than one. How? What

had happened to me? How had I run that fast yet couldn't remember a single step of my path? What on earth had I seen in the woods? I knew, whatever it was, it wasn't human and I knew it had done something to me.

Write the next chapter… What happens next?

YR5 MULTIPLICATION AND DIVISION KNOWLEDGE ORGANISER

Key Concepts

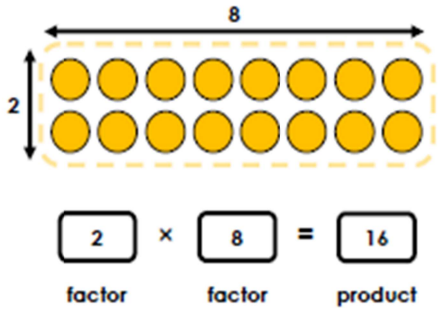
- identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
- establish whether a number up to 100 is prime and recall prime numbers up to 19
- multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
- recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)

Key Vocabulary

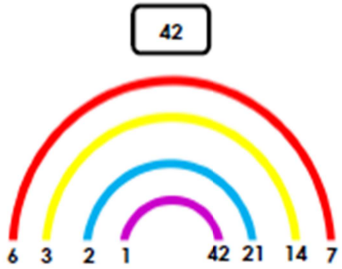
- factor
- multiple
- common
- prime number
- square number
- squared
- cube number
- cubed

Factors

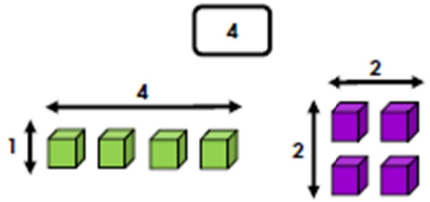
Factors are the numbers that multiply together to make a product.



To find all factors of a given number, it is best to work systematically. Start at one and ask yourself what factor it is paired with to make the product you are requiring. Then, you can try the next logical number for example 2. There are some numbers that will and some numbers that will not be a factor of your product.



When a number is a square number, two of its factors are the same. In the example below, 2 would pair with another 2 to make the product 4. Therefore, the number has an odd number of factors.



The factors of **4** are **1**, **2** and **4**.

Common Factors

When we have found all of the factors of at least two different products, we can see if they share some of the same factors. These are called common factors. Here are the factors of two different products. The ticks indicate the ones that 8 and 28 have in common.

Factors of 8	Factors of 28
1 ✓	1 ✓
2 ✓	2 ✓
4 ✓	4 ✓
8	7
	14
	28

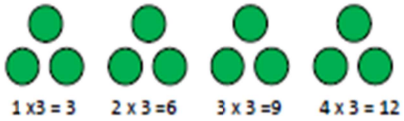
The common factors of **8** and **28** are **1**, **2** and **4**.

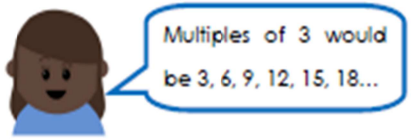
Maths Help Sheet 1

YR5 MULTIPLICATION AND DIVISION KNOWLEDGE ORGANISER

Multiples

Multiples are the result of multiplying two numbers together. They can be seen as extended times tables.

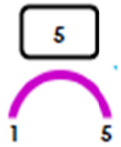




Prime Numbers

A **prime number** is a number that only has 2 factors – 1 and itself.

5 is a prime number as it can only be divided by 1 and itself. 5 is not in any other times tables.



6 is not a prime number as it can be divided by 1 and itself but also by 2 and 3.

Square numbers

A square number is a number that has been multiplied by itself. The symbol to show this is ^{2}.

When square numbers are represented in an array, it forms a square shape.

$3^2 = 3 \times 3 = 9$

$2^2 = 2 \times 2 = 4$ $\quad$ $3^2 = 3 \times 3 = 9$

$4^2 = 4 \times 4 = 16$ $\quad$ $5^2 = 5 \times 5 = 25$

It's important to remember that ^{2} doesn't mean 'multiply by 2'.

Cube numbers

A cube number is a number that has been multiplied by itself then multiplied by itself again. The symbol to show this is ^{3}.

$2^3 = 2 \times 2 \times 2 = 8$ $\quad$ $3^3 = 3 \times 3 \times 3 = 27$

$4^3 = 4 \times 4 \times 4 = 64$ $\quad$ $5^3 = 5 \times 5 \times 5 = 125$

It's important to remember that ^{3} doesn't mean 'multiply by 3'.

Multiply and dividing by 10, 100 and 1,000

When a number is multiplied by 10, 100 or 1,000, the digits move to the left in the place value column. The digits move **1 place left** when we multiply by 10, **2 places** to multiply by 100 and **3 places** to multiply by 1,000.

The empty place value spaces are filled with a **0 as a place holder.**

TH	H	T	O
	4	2	3
	100 100 100	10 10	1 1 1
100 100 100	10 10	1 1 1	0

x10

423 x 10 = 4,230

When a number is divided by 10, 100 or 1,000, the digits move to the right in the place value column: **1 place** when dividing by 10, **2 places** to divide by 100 and **3 places** to divide by 1,000.

Look what happens when we divide 7,900 by 10, 100 and 1,000:

TH	H	T	O	.	t	
7	9	0	0			
	7	9	0			÷10
		7	9			÷100
			7	.	9	÷1,000

Maths Help Sheet 2

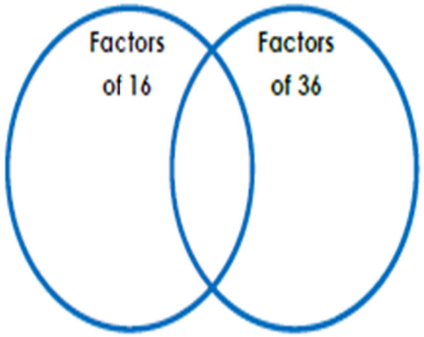
FLUENCY 1

Complete the statement.

A common factor is a number that _____ exactly into two or more numbers.

FLUENCY 2

Complete the diagrams to find the common factors.



	Factor of 32	Not a Factor of 32
Factor of 20		
Not a Factor of 20		

FLUENCY 3

Look at the number cards below.

48	20	36	12	8	24

Which three numbers share these common factors?

4 2 6 3

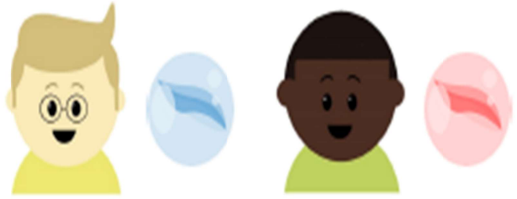
FLUENCY 4

Alfie and Caleb collect marbles.

Alfie has 30 marbles and Caleb has 42.

They are sorting their marbles into the same sized equal groups.

What is the highest number of marbles they can put into each of their groups?



Maths Lesson 1

Fill in the missing boxes. Explain how you know you are correct.

3.29 × ☐ = 329

☐ ÷ 1,000 = 0.82

20,700 ÷ ☐ = 20.7

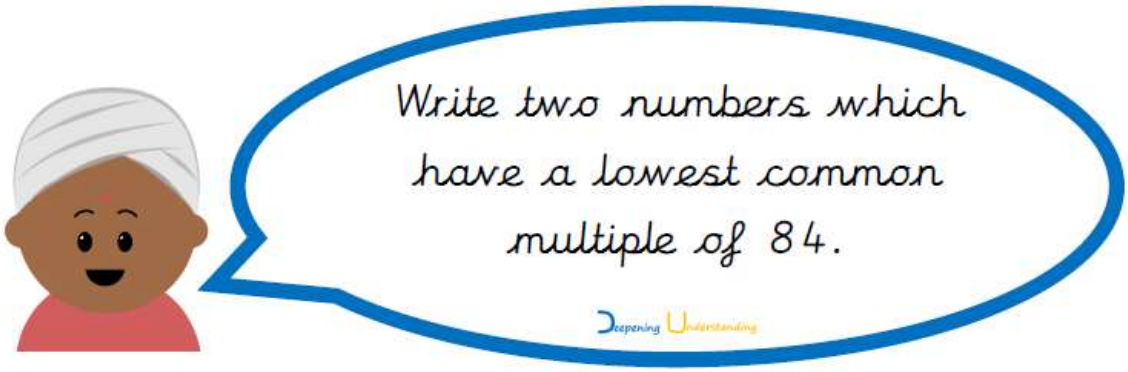
☐ × 10 = 0.49

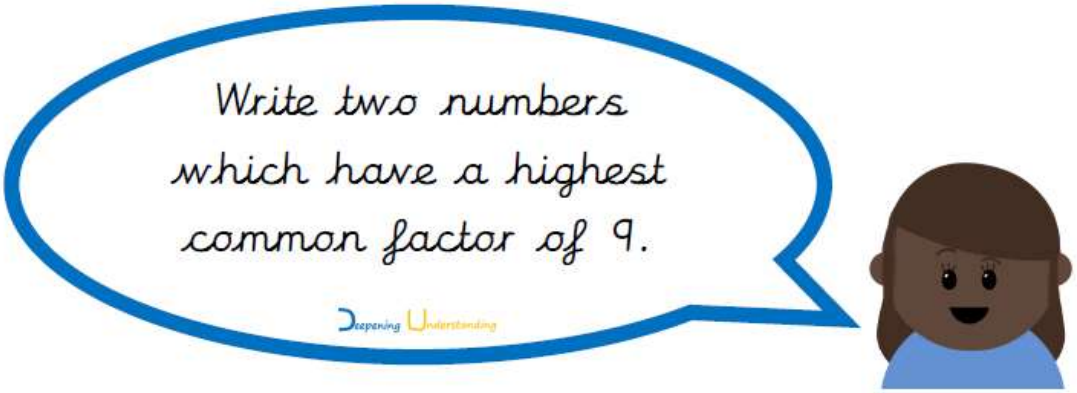
Challenge - How many different ways can you complete the missing boxes? Find all possibilities.

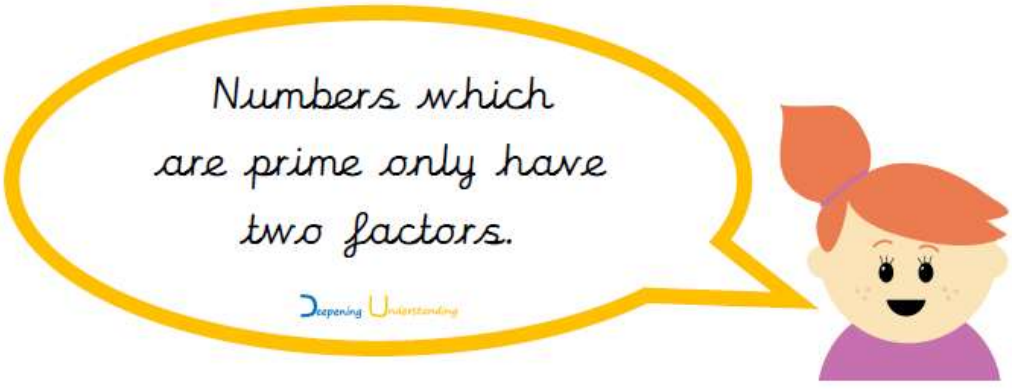
☐ × 1,000 ÷ ☐ ÷ 10 × ☐ = 6.2

Maths Lesson 2

Maths Lesson 3



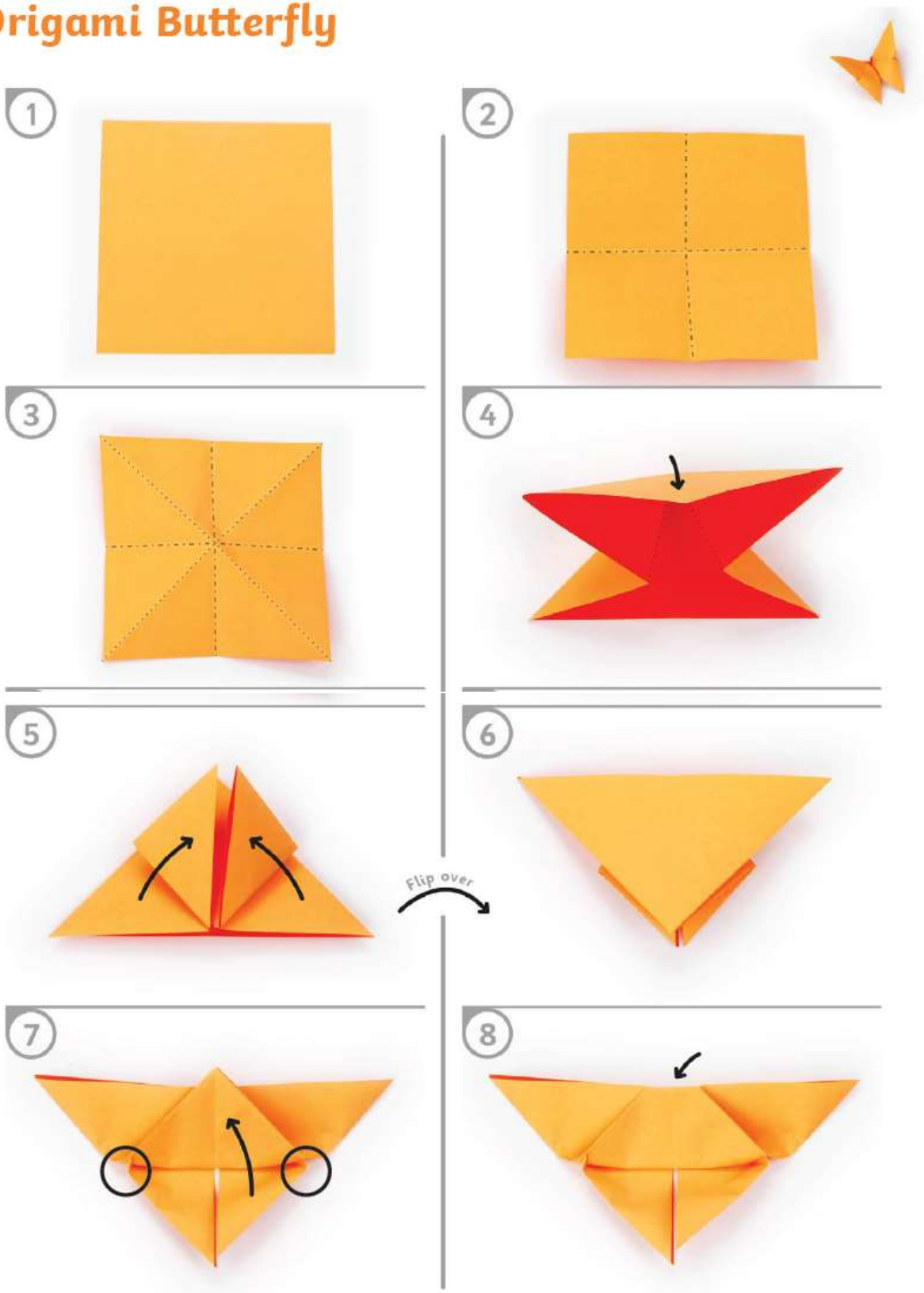




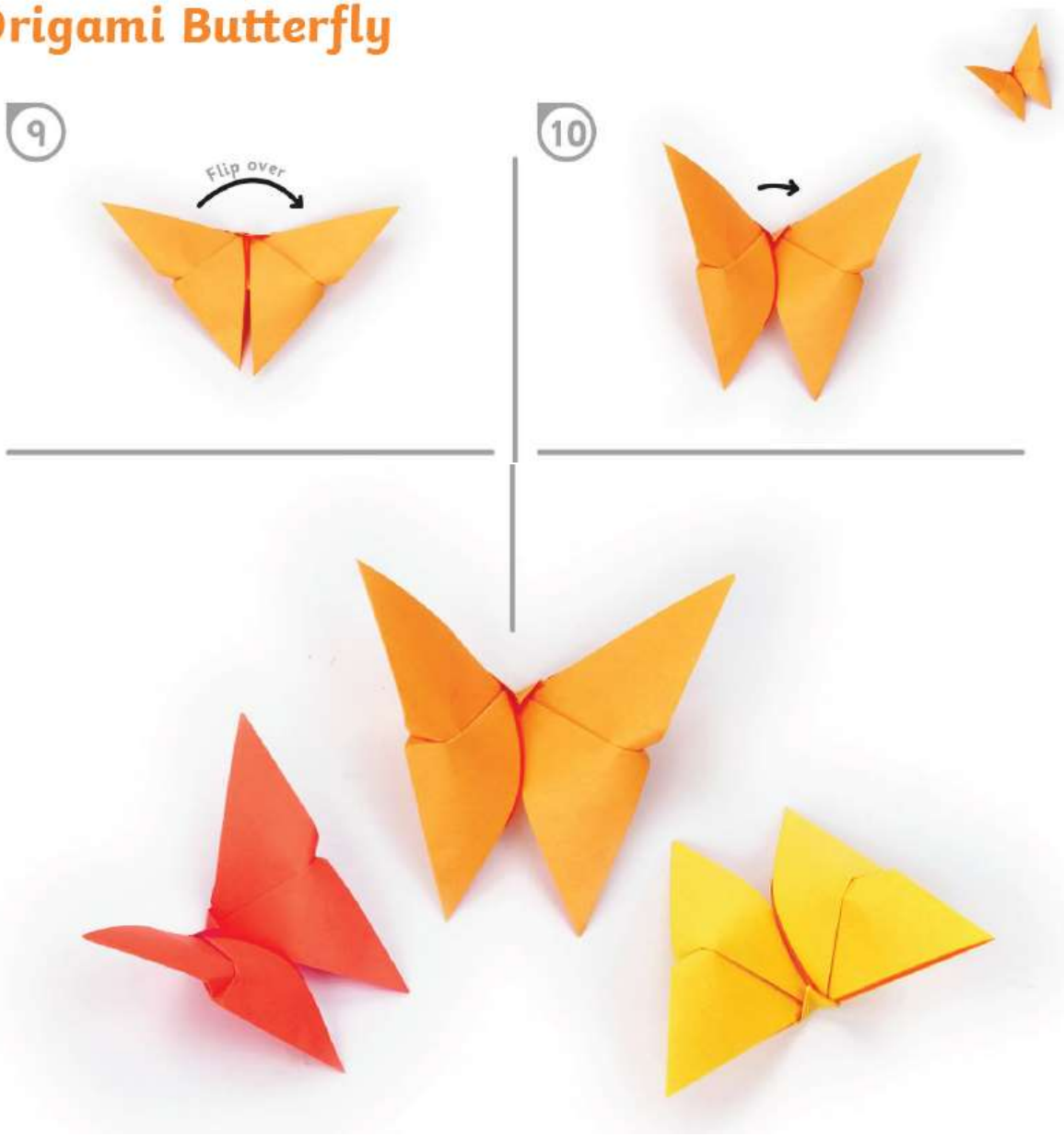
Always, Sometimes or Never?

Art/DT Activity

Origami Butterfly



Origami Butterfly



PE Activity - Sports Day Poetry Examples

The sound collectors came to visit
Our school sports day.
They took all our favourite sounds away.
The laughing of the children,
The thudding of the Dad's Race,
The plop of the welly,
The thud of a child falling.
The shouting of the children,
The cheering of the parents,
The ringing of the bell,
The tweeting of the singing of the birds.
The sound collectors came today,
Now they've taken all the sounds away,
Now the field is quiet.
By Anya

Supporting your team
Participating in all sports
Organising down to the last second
Running, leaping, jumping, hopping
Time running short
Sunny weather

Daring to push our limits
Always supporting, never criticising
Yielding the victory cup!

by Willow in P6/8

Fasten your laces,
Toes behind the line,
The sun is shining,
It's Sports Day time!

It's time to have races,
It's time to have fun,
On your marks, get set...

Jump!
Skip!
Run!

It's time for a cold drink,
It's time for a rest.
Well done everyone,
You've all done your best!

A sunny day, a clear blue sky
The pupils came out,
Their heads held high!
Four different colours,
Excitement to come,
All supported
By their dads and mums!
Pupils are strong, determined and fast
Here comes the parents' race,
Hope mine isn't last!
But who are the winners
Red, blue, yellow or green?
Hurrah it's a victory
For Callendar's team!

Examples of Sports Day Poetry

Science Activity

HOW CAN THE SUN TELL THE TIME?

So we've looked at the night sky, but what can we see in the sky during the day?

Well, the most obvious thing is the sun isn't it. It's not good for our eyesight to look directly at the sun but it is still interesting to find out a bit more about it.

In ancient times, people used the sun to tell them when to plant and harvest crops. People even used the sun to tell the time!

DID YOU KNOW?

The stars we see in the night sky are suns, just like our own, except they are really far away.

YOUR CHALLENGE

DON'T FORGET TO TAKE PICTURES!

1 RESEARCH

Find out how people told the time before we had clocks.

2 BUILD

Create your own sun dial to tell the time using only the sun's shadow.

3 EXPLORE

Use your sun dial to tell the time!

EMILY'S TOP TIPS

In your research, you could look at some of the ancient landmarks built by people to track the sun and seasons.

Don't have a protractor? You can find one here: www.ginifab.com/feeds/angle_measurement/.