You do not need to print off any of the challenges. You can complete them on a piece of paper and take a picture of your work to upload it to Twitter or Facebook.

Week 6

Inventors

Please remember you can email us if you require any support with your child's home learning.

haigh.a@ch arlestown.m anchester.sc h.uk

talbot.o@ch arlestown.m anchester.sc h.uk

Reading



Task 1: Read the non - fiction text 'The Alps'

(or you can listen to Mrs Haigh reading it).

This text has a variety of question types to answer so think carefully about which skills you will need to use. Complete either Set A questions or Set B. We have allocated two sets so that you can choose which one is best for your reading ability. Only complete 1 set of questions.

Task 2: Log into Active Learn and read one of the books assigned to you and answer the questions.

Writing

Complete a biography /fact file about one of the inventors we have studied over the past 2 weeks. Alan Turing or Frederick McKinely Jones. Or even a different inventor that you may have researched yourself. Think about the layout of your biography/ fact file and features that it will need.

PLEASE use the attached resources to guide you on how a fact file should look and what should be included.

Spelling

Creating adjectives using the suffix -ful

Task 1: Learn these adjectives and their meaning

- 1. boastful
- 2. faithful
- 3. doubtful
- fearful
- thankful
- beautiful
- 7. pitiful
- plentiful
- fanciful

merciful

Task 2: complete the word search



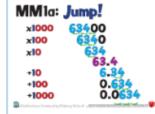
SPAG

Using adverbs to identify the probability of something: certainly, possibly, perhaps, clearly ...

Complete the sentences attached.

Maths

Multiplying and dividing by 10, 100 and 1,000



Task 1: Watch the video and multiply and divide the numbers by 10, 100 or 1,000.

https://www.khanacademy.o rg/math/arithmetic/arith-re view-

Task 2: Use your knowledge to solve the problems.

Task 3: Login to TTRS and practice your times tables.



Task 1: Choose one of the inventors challenges to complete.

Think about what you would make your invention out of.



Task 2: Evaluate and improve the attached invention.

Wellbeing

Watch the video about the giving tree and answer the questions below.

https://youtu.be/XFQZfeHq9wo



Questions to explore:

- Did the boy always remember to show his thanks to the tree?
- Could he have shown his appreciation in a different way? How?
- What could he be grateful to the tree for?
- Do you think the boy's appreciation changed as the story went on?
- At the end what do you think the boy was most grateful for?
- How was the tree grateful to the boy?
 How did he show it?

Remember we can be thankful in lots of different ways, for example we might be grateful that we can help someone else.



Reading extract and questions: Year 5-6 The Alps



One of the most dominant geographical features of Western Europe is the vast mountain range known as the Alps. The Alps extend from the Mediterranean coast of South-Western France across to Germany, Austria and Slovenia in the east. Other countries, such as Switzerland, Italy and tiny Liechtenstein also include sections of this rugged landscape. With peaks as high as 4,800m (Mont Blanc), the Alps are high enough to affect the climate of the whole continent.



Formation

The Alps are part of a series of mountain chains, running from the Atlas Mountains in northern Africa right across to the Himalayas north of India, that were formed by the same basic process. The Earth's crust is made up of a number of massive sections called tectonic plates. These are continuingly moving, slowly but incredibly powerfully. When the African plate to the south started inching northwards, it collided into another plate which covers much of northern Europe. The extraordinary pressures generated by this process caused the land to be pushed up, much like a tablecloth will form ridges if you push it across a table.

The process of raising and shaping the Alps has not finished, however. The area is still prone to powerful earthquakes. Meanwhile, the weather plays a large part in wearing down the rocks. This includes the action of glaciers. These slow-moving rivers of ice help to carve out huge valleys, some of which have been lined with a thick layer of sand and gravel, dumped by the melting glaciers.

Features

The sheer height of these mountains means that moist air gets snagged on the peaks, resulting in heavy snowfalls. Large parts of the Alps remain snow-capped all the year round, although it melts away from the lower slopes during the warmer months. This leads to many of the valleys being flooded to create deep lakes. It also helps to irrigate the surrounding land and contributes to some of the largest rivers in Europe, including the Rhône, the Rhine and the Danube.

<u>Life</u>

The Alps provide a number of different habitats. At lower levels, there are meadows, bogs and woodland. Above the treeline, the conditions are harsher and animals as well as plants have had to adapt to survive.

Possibly the most famous plant is a little flower called the edelweiss. The most common name of this tough little relative of the daisy comes from German words meaning *noble white*. However, it is also known by other names, depending on which country you are in. For example, the French call it *Etoile des Alpes*, which means the star of the Alps.

As for the animals, the ibex is probably the most impressive. This member of the goat family lives on the rocky mountainsides above the forests. An expert climber, it shelters from the snows in caves and enjoys the safety of slopes as steep as 45 degrees.

Humans

Despite the harsh conditions, the Alps have a long relationship with humans. Its caves provided ready-made homes for people as long as 10,000 years ago. More recently, it has become a popular destination for holidaymakers, especially the more adventurous ones. They come for the skiing, hiking and mountaineering as well as to enjoy the spectacular scenery provided by the mountains and lakes.

Did you know?

Over 2,000 years ago, the great general Hannibal crossed the Alps in order to catch the Romans off guard. Imagine their surprise when they saw that he had not only marched a huge army over the dangerous mountain passes but that he had brought elephants with him too!





Questions for 'The Alps' Set A

Vocabulary:

1.	One of the most	dominant geog	graphical fed	atures V	What does	dominant	mean in t	this sentence?

2. ... The extraordinary pressures generated by this process ... What does generated mean? Circle one.

created powered suffered related

3. Look at the section headed *Humans*. Find and copy one word meaning *stunning*.

ch sea do the Alps extend?			
e the Himalayas?			
s <i>edelweiss</i> mean?			
are high enough to affect the climate of the whole continent. This s	uggests that Tick one		
All of Europe is cold.			
The weather across Europe would be different if the Alps were no	ot there.		
All of Europe's weather comes from the Alps.			
Rainclouds are formed on mountain tops.			
e Alps help farmers in the surrounding areas?			
he Alps have that helped early humans to survive?			
		_	
	the Himalayas? See edelweiss mean? The high enough to affect the climate of the whole continent. This is all of Europe is cold. The weather across Europe would be different if the Alps were not All of Europe's weather comes from the Alps. Rainclouds are formed on mountain tops. E Alps help farmers in the surrounding areas?	the Himalayas? See deliweiss mean? All of Europe is cold. The weather across Europe would be different if the Alps were not there. All of Europe's weather comes from the Alps. Rainclouds are formed on mountain tops. E Alps help farmers in the surrounding areas?	the Himalayas? see deliweiss mean? are high enough to affect the climate of the whole continent. This suggests that Tick one. All of Europe is cold. The weather across Europe would be different if the Alps were not there. All of Europe's weather comes from the Alps. Rainclouds are formed on mountain tops. e Alps help farmers in the surrounding areas?

\neg	The Alps continue to grow and change.		
_	The Alps are part of one long mountain range.		
Ħ	The Alps are a dangerous place to live.		
	The Alps have bad weather.		
mpare:			
-	ding to the text, give one reason why		
a. pe	eople might want to spend time in the Alps today.		
a. pe	eople might want to spend time in the Alps today.		
a. pe	eople might want to spend time in the Alps today.		
a. pe	eople might want to spend time in the Alps today.		
	eople might want to spend time in the Alps today.		
b. pe	eople might want to stay away from the Alps. intent:		
b. pe	eople might want to stay away from the Alps.		
b. pe	eople might want to stay away from the Alps. intent:		



Questions for 'The Alps' Set B



Vocabulary:

1. Look at the f	irst paragraph. I	Find and copy a word t	that means <i>stretch.</i>						
2 started inching northwards What does inching mean in this sentence?									
3 moist air g		Which word is closest		ed in this sentence? Circle or					
1	troubled	confused	caught	ripped					
Retrieval:									
4. Name any tv	wo countries tha	at include part of the A	Alps.						
a			b						
5. What is a gla	acier?								

6. Using information from the text, tick one box per row to show whether the statement is **true** or **false**.

	True	False
The Alps stretch all the way to India.		
All the snow melts away from the Alps in summer.		
A sort of goat lives high up in the Alps.		
Hannibal's army brought elephants with them.		

Inference:

7. Why can't you see the Alps growing taller each day?	
--	--

8. Why do you not find the same animals at all altitudes (heights) in the Alps?

9. What do you think the Romans would have thought when they saw Hannibal's army? Tick one thought.

The Alps have spectacular scenery.

I thought Hannibal was on our side.

How did they get elephants over the mountains?

Why didn't they come by boat? It would have been much easier.

Formation	Some of the things you would notice if you visited the Alps.	
Features	How the Alps were made.	
Life	How people have benefitted from the Alps.	
Humans	How plants and animals have adapted in order to survive in the Alps.	
Predict		
	back and measure the Alps in a few million years, what would you not	ice?
11. If you were able to come Authorial intent:	back and measure the Alps in a few million years, what would you not role of the way that some some some some some some some some	_

Writing

Example fact file about Kenya

Here you can see the layout of the information and main features of this particular fact file.

- 4 Title
- Subheadings in bold / different colour font
- Short and to the point information
- picture /image
- longer paragraph to explain anything else in more detail

Kenya

Population: 47.5 million (2019)

Capital City: Nairobi

Language: Over 60 languages are spoken. Most people speak more than

one language.

Official Language: Swahili; English

Continent: Africa

Currency: Kenyan shilling

Government: Republic

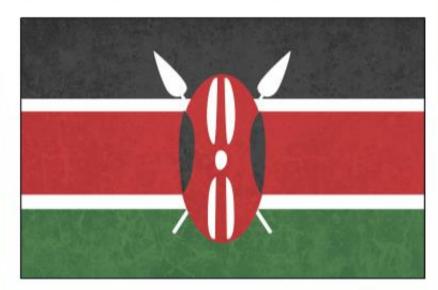
National Day: 12th December

Religion: More than 80% of Kenyans

are Christian.

Famous Kenyans: Kip Keino, legendary Kenyan athlete; Lupita Nyong'o, actress; Deep Roy, actor; David Rudisha, athlete; Wangari Maathai,

Nobel Prize winner.



Climate: The climate varies greatly across the country. Inland, the weather is usually dry and hot. Along the coast, the climate is tropical, with rainfall and temperatures higher during the year. In the mountains, it can be cold enough for snow. There are only two seasons (wet and dry) because Nairobi is so near the equator. The sunniest months are from December to March. The coolest months are June and July.



Or if you wish to go into more detail you could write biography about one of the inventors. Here is an example biography.

Usain Bolt

Biography

So, how do you become the best sprinter of all time?

Usain St. Leo Bolt once said, 'When I was young, I didn't really think about anything other than sports.' Whilst at secondary school, Usain focused on sprinting, which led him to win his first High School Championships medal. Since then he has set new world records, overcome injuries, won many medals, become a hero in his home country of Jamaica and he hasn't even finished yet!



Usain was born on 21st August 1986, in Jamaica. As a child, he really enjoyed playing football and cricket.

Bolt took part in his first race whilst at primary school, however, at that time he preferred playing cricket. In an interview, he once said that if he hadn't become a sprinter, he would have loved to be a fast bowler like his cricketing hero, Wagar Younis.

At high school, Usain focused on sprinting and won his first silver medal in the 2001 High School Championships. His talent caught the eye of former Jamaican Olympic sprinter Pablo McNeil, who went on to become his coach. Pablo would sometimes get frustrated with Bolt as he didn't always take his training seriously and liked playing practical jokes.

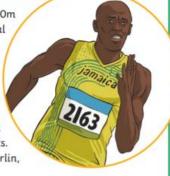
The 2001 World Youth Championships was Usain's first appearance on the world stage. He didn't win any medals but he did set a new personal best in the 200m race. The World Junior Championships came next and it was here that Bolt became the youngest World Junior gold medallist.

Olympic Games	Event	Medals
2008 Beijing	100m, 200m, relay	Gold
2012 London	100m, 200m, relay	Gold
2016 Rio De Janeiro	100m, 200m, relay	Gold

Photo courtesy of drcliffordchoi (@flickr.com) - granted under creative commons licence - attribution

In 2004, Usain became the first junior sprinter to run 200m in under 20 seconds. It was then that he turned professional and was given a place on the Jamaican Olympic team. He went to the Olympic Games in Athens in 2004 but a leg injury stopped him from winning any medals.

As the years passed by, Usain took his sport more seriously and began to train harder to win events. At the 2008 Beijing Olympic Games, he broke more world records and won gold in the 100m, 200m and relay events. This was followed by the World Championships in Berlin, where he improved his times even more.



Bolt competed in the 100m, 200m and relay at the London 2012 Olympic Games and won gold in all three events again. After the races, a fellow runner said, 'There's no doubt he's the greatest sprinter of all time.'

During the 2016 Rio Olympics, Bolt yet again won gold in all three races (100m, 200m and relay) and was also awarded the 'triple-triple' meaning he had won gold in 3events in 3 Olympic Games. However this amazing achievement didn't last long as in 2017, Bolt and his team mates were stripped of the gold medals from the 100m relay in the Beijing Games due to one of his teammates being disqualified for taking a banned substance.

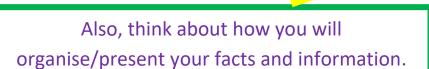
In 2017, at the World Athletics Championships, Bolt's success didn't continue. He won a bronze medal in one event and in another, he collapsed on the track with a hamstring injury and had to be helped across the finish line by his teammates. This was Bolt's final ever race.



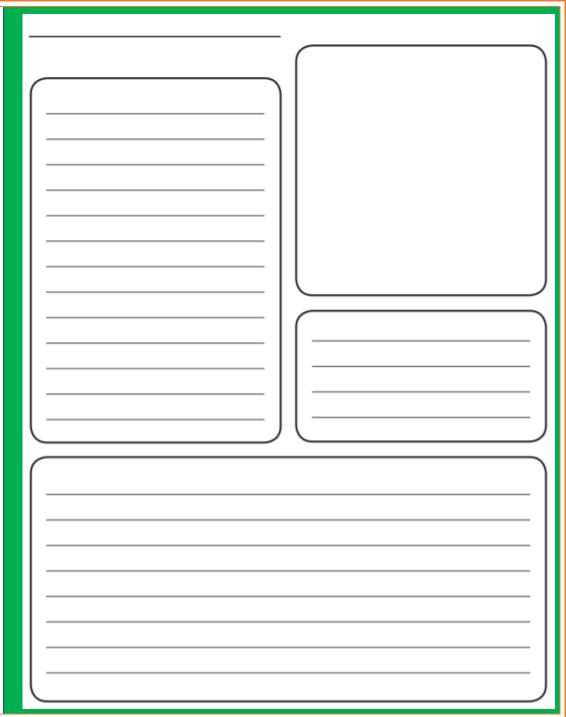
Think about what information you will include about one of the inventors.

Possible subheadings might be:

- **4** Who is _____?
- ♣ Where did he/she grow up?
- What did he/she invent?
- How has this affected people today?



You could use one of the templates provided.
Or you could create your own layout!



_____ Fact File

Full Name:	Who were they?
Date of Birth:	
Place of Birth:	Their life:
Famous for:	

Features of Biography Checklist

Have I	\checkmark
used a question or interesting opening statement to hook the reader?	
summarised the main events of the person's life in the first paragraph?	
written in the past tense?	
used third person pronouns?	
written about key events in the person's life?	
written about key influences in the person's life?	
used the passive voice?	
linked sentences and paragraphs using:	
• ellipsis?	
· repetition?	
· adverbials?	
summarised the person's life by mentioning:	
their main achievements?	
• personality?	
how he or she will be remembered?	

I would focus on the sentence openers from the columns 'Information texts' and 'Biographies'

Non-Fiction Sentence Openers

Auto/ Non-Information Persuasive biographies/ Instructions Chronological Letters Recounts Writing Texts Diaries Reports Even First / ly... As a child... Why not ...? This article I am writing Last week... though... will... to tell you... Secondly... Now you First... During... Despite the There are... I wish to... can... fact that... After... I feel... Next... Although... Thank you You will... After that... Although... I think... Then... for... I believe For example... Even Then... I believe... After... though... I hope that... that... I believe... Next... After that... I'm... I would be Despite... When... The I must tell When... following information... grateful if... Sometimes... Finally... you about... Suddenly... I look Often... In addition... The best forward to... Soon... thing In conclusion Then... about... Finally... Meanwhile... The worst thing Later on... about... Eventually...

Don't forget to try and include some of our writing secrets!!

Here are some to remind you:

- ♣Fronted adverbials
- ♣Subordinate and relative clauses
- The more, the more
- +If , then

Or anymore that you can think of too ©

Features of a Biography

Purpose:

to give an account of someone's life.



Tense:

- written in the past tense
- Closing statements may use present/ future tense

Structure:

Opens with an attention grabbing introduction that summarises the main events of the person's life and makes the audience want to read on.

Key events are written in chronological order.

Early life, family, home and influences help the audience to understand the person.

Use relevant images and captions for interest.

Concludes with what they are doing now, or how they are/will be remembered.

Include:

- information about their personality
- specific facts about achievements, influences and significant people

Include:

- their feelings about different points and events in their life
- quotes from the person themselves, or other key people

Include:

 third person pronouns, such as: he, she, they, himself, herself, it, their, them

Include:

adverbials, such as:
 accordingly
 consequently
 therefore
 hence

Include:

 ellipses, repetition, and time conjunctions to link sentences and paragraphs, such as: then, after that, this, firstly, whenever

Spelling

Task 1 =

Creating Adjectives using the Suffix -ful

- 1. boastful
- 2. faithful
- 3. doubtful
- 4. fearful
- 5. thankful
- 6. beautiful
- 7. pitiful
- 8. plentiful
- 9. fanciful
- 10.merciful

Creating Adjectives Using the Suffix -ful

```
α
hankf
```

boastful faithful doubtful fearful thankful beautiful pitiful plentiful fanciful merciful

Word Search

Create a word search using your own words list.

Here is a template to make your own word search!

		5 5		

Write your word list here:

SPAG

Using Adverbs to Indicate Possibility

Adverbs of possibility are used to suggest likelihood.

Like any adverb, adverbs of possibility can be used to change the meaning of a verb, an adjective or another adverb.

James will <u>probably</u> (count) them. The adverb of possibility modifies the verb – count.

Genevieve is obviously quick.

The adverb of possibility modifies the adjective — quick.

Jack is <u>clearly</u> very talented.

The adverb of possibility modifies the adverb — very.

Some adverbs of possibility can also be used as 'sentence adverbs' modifying the meaning of the whole sentence.

Clearly, something must be done to sort out this mess.

The adverb clearly sums up the writer's attitude to the whole situation.

Adverbs of possibility can be used to describe a whole range of degrees of certainty.



FINISH TH	L CLNII	

Begin by underlining the adverb of possibility in each sentence - think about which word is giving information about how likely something is. Then choose a suitable way to finish the sentence.

Adverbs of possibility certainly - definitely - maybe - possibly - surely - clearly - obviously - perhaps - probably - undoubtedly

- 1. The sky was dark black and it was obviously going to_____.
- 2. Perhaps in the future, students will arrive at school on ______.
- 3. As he had such a big lead in the race, surely he would _____.
- 4. I haven't eaten it before but I definitely will _____.
- 5. Clearly the ______ is good because people keep buying it.
- 6. Maybe my _____ will be back soon with _____.
- 7. When I come to your house, I might possibly bring _____.
- 8. Nothing is impossible apart from _____
- 9. Undoubtedly, the best football team is ______.
- 10. That costs a fortune I certainly can't ______.

MATHS

MM1a: Jump!

x1000

x100

x10

+10

+100

+1000

63400

63.4

0.0634

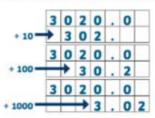


Dividing by 10, 100 or 1,000 Where Answers Are Decimals

When dividing a number by 10, 100 or 1,000 the value of each digit is divided sometimes giving a decimal answer.

Each digit moves the necessary number of place to the right because dividing by 10 decreases the number.

3020	÷	10	=	302
3020	÷	100	=	30.2
3020		1000	_	3 02



Remember:

1. Keep the digits together. Don't let any O's jump in!

34 ÷ 10 = 38.4

2. Round to check:

340 ÷ 100 = 3.4

use 300 ÷ 100 = 3

3. Use the inverse to check:

3.4 x 1000 = 3400

Multiplying Decimals by 10, 100 or 1000

When multiplying a decimal number by 10, 100 or 1000, the value of each digit is multiplied.

3.02 x 10 = 30.2

3.02 x 100 = 302

3.02 x 1000 = 3020

Each digit moves the necessary number of places to the left because multiplying by 10, 100 or 1000 increases the number.

	1		3		0	2	
		3	0		2	+	- x 10
3			3		0	2	
	3	0	2	•	+		x 100
			3		0	2	
3	0	2	0	4			- x 1000

Remember:

1. Keep the digits together.

Don't let any 0s jump in!

3.02 x 100 = 300.2 X

2. Round to check:

3.02 x 1000 = 3020

use 3 x 1000 = 3000



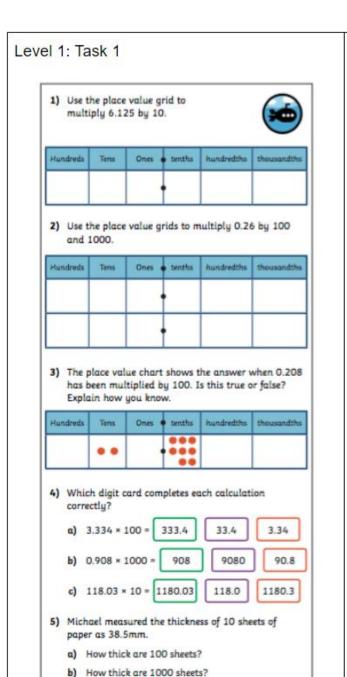
Remember with the next

Maths resources to

choose the level that

suits you as a

mathematician!



Level 1: Task 2

Multiply by 10, 100 and 1,000

M	HTh	Πh	Th	н	T	0
				00	000	0
					ecord art belo	
M	HTh	Πh	Th	н	T	0
	ircle th			nswer	to the	
Ollow	nng co		251 x 1	10 =		
M	HTh	Πh	Th	Н	T	0
		0	000	00	000	
		***	Th	н	т	0
M	HTh	πh				
۵[162,510 omple	0 [1,625,1 calcu	00 lation	162,1	50
۵[162,510	0 [1,625,1 calcu	00 lation	162,1 s.	50
À [162,510 omple	0 [1,625,1 calcu = 6,4	00 lation	162,1 s.	50
À [162,510 omple	0 [1,625,1 calcu = 6,4	00 lation	162,1 s. x 1,000	50
M M	162,510 omple HTh	0 [te the Πh	1,625,1 calcu = 6,4 Th	Idion	162,1 s. t 1,000	50
M M	162,510 omple	0 [πh πh missingle cale	1,625,1 calcu = 6,4 Th	00 lation:	162,1 s. t 1,000	0



T Th	Th	H	T	0
			000	
			0.0	

William says the calculation must have been 1,500 ÷ 100.

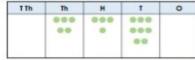
Is he correct? Convince me.



2a. Gary is completing the calculation below.

54,800 ÷ 100 =

He has shown his answer on the place value chart below.



Explain the mistake that Gary has made.



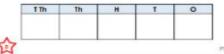
3a. Alan is thinking of a five-digit number.

He divides the number by 1,000.

The answer he gets after dividing by 1,000 is less than 60 but greater than 10.

The digits in the number have a sum of 5.

What number did Alan start with?



Level 2: Task 1

Multiply the following numbers by 10, 100 and 1000 to complete the table.

	x 10	x 100	x 1000
4.02			
0.045			
34.094			
209.817			
0.006			

Divide the following numbers by 10, 100 and 1000 to complete the table.

	÷ 10	÷ 100	÷ 1000
56.9			
209			
4.56			
709.6			
0.072			

Level 2: Task 2

2) Complete the calculations.

3)

Multiplying by 1000 is the same as multiplying by $10 \times 10 \times 10$.



Do you agree with Holly? Explain your answer.

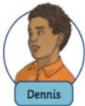
 Year 5 are discussing what happens when 4.103 is multiplied by 100.





The one will move two places from the tenths column to the tens column.

Just add two zeros to the end of the number.



Which child is correct? Explain your answer fully.

2) 200.394 is multiplied by 10 and then by 10 again.

The 9 will now be in the ones column and the 4 will be in the tenths column.



Dominic

Do you agree with Dominic? Explain fully.

Level 3: Task 1

Multiply the following numbers by 10, 100 and 1000 to complete the table.

	× 10	× 1000	× 100
0.003			
1893.852			
600.001			

Divide the following numbers by 10, 100 and 1000 to complete the table.

	÷ 100	÷ 1000	÷ 10
4.08			
215.9			
9.99			
450.04			

Complete the following table.

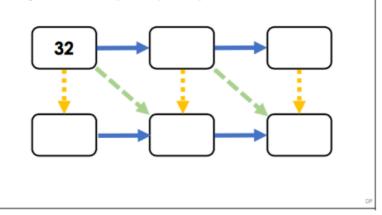
	÷ 1000	x 100	÷ 10
6.45			
0.501			
			93.6
	7.18		

Level 3: Task 2

Multiply by 10, 100 and 1,000

1. Here is a puzzle. The horizontal, vertical and diagonal arrows represent either multiply by 10, 100 or 1,000.

Investigate the different ways to complete the puzzle.



2. Marcel, Freya, Rebekah and Klaus each own food shops. They discuss how much money they made in the year 2018.



Rebekah

I made 100 times less than Klaus.



I made 10 times more than Marcel.

00

I made 1,000 times less than Klaus. Klaus

In 2018, I made £10,00 less than £600,000.

Investigate how much each person earned that year.

Discuss the different ways you can order the amounts.

DP

STEM





Choose one of the three challenges to complete.

Draw and label your invention. (If you like these challenges check out the little inventors website for more:

https://www.littleinventors.org/mini-challenges/ keep-your-distance/#challenge

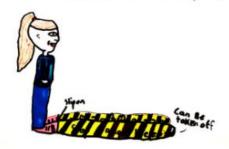


"Keep your distance"

DRAW AN INVENTION TO KEEP PEOPLE TWO METRES APART







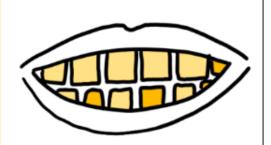




Challenge #12

"Sparkling smile"

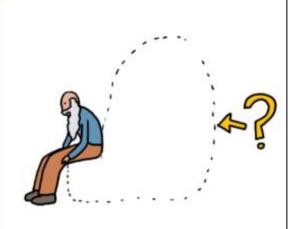
DRAW AN INVENTION TO BRUSH YOUR TEETH WITHOUT A TOOTHBRUSH

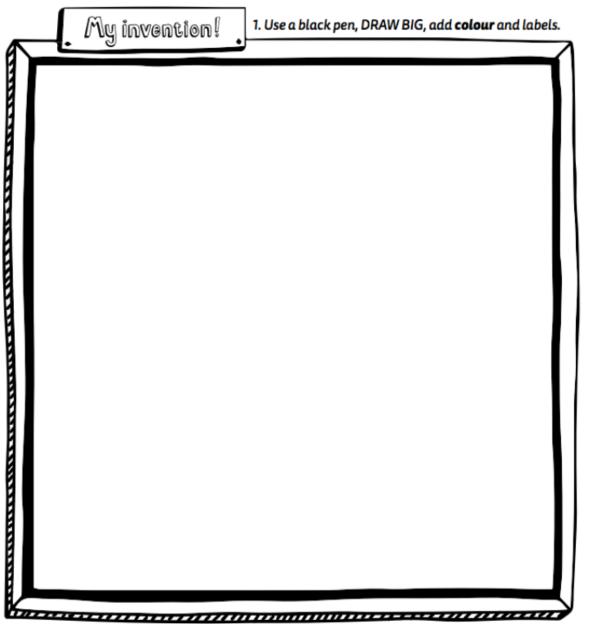


Challenge #7

"Super Seat"

DRAW A 'SUPER CHAIR' TO HELP AN OLDER PERSON FLY, SWIM OR HAVE FUN





Little Inventors

Date	Age
First name	
School	
My invention is called	
2. Explain your invention! What is it? How does it work	c? Who is it for?

Upload your idea at **littleinventors.org** to get feedback and a chance for it to be *made real!*

Task 2: Evaluate the invention and then improve it.

What I like about the invention.

The Dog Umbrella.



How you think the invention could be improved?

Do you think it is a useful invention? Explain your answer.

Draw a new and improved version.

WELL BEING

Watch the video about the giving tree and answer the questions below.

https://youtu.be/XFQZfeHq9wo



Questions to explore:

- Did the boy always remember to show his thanks to the tree?
- Could he have shown his appreciation in a different way? How?
- What could he be grateful to the tree for?
- Do you think the boy's appreciation changed as the story went on?
- At the end what do you think the boy was most grateful for?
- How was the tree grateful to the boy? How did he show it?

Remember we can be thankful in lots of different ways, for example we might be grateful that we can help someone else.