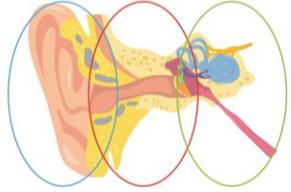




Year 4 Home Learning



W/C 6th July 2020

	Spellings (Use Attachment 1 for activity ideas)	Reading (All mark is based on the book <i>George's Secret Key to the Universe</i> by Lucy Hawking and Stephen Hawking)	Writing	Maths (Lessons have been taken from White Rose Maths. This week we will be looking at Summer Term Week 10)	Topic/Science (Our Topic this term is Space Race)
Monday	Practise this weeks spellings: heard, heart, height, history, imagine.	Read pages 45 - 47 and answer the questions. (See Attachment 2)	Determiners - Look at the PowerPoint on Seesaw. Complete the activity on determiners. (See Attachment 7)	Summer Term Week 10 Lesson 1 - Interpret charts. Click below for: Video Check out the activity on Seesaw.	Science - Look at the PowerPoint about Sound on Seesaw. Complete the sound activity. (See Attachment 11) 
Tuesday	Practise this weeks spellings: heard, heart, height, history, imagine.	Read page 50 and answer the questions. (See Attachment 3) 	Co-ordinating conjunctions - Look at the PowerPoint on Seesaw. Complete the activity on co-ordinating conjunction. (See Attachment 8)	Summer Term Week 10 Lesson 2 - Comparison, sum and difference. Click below for: Video Check out the activity on Seesaw.	Geography - Look at the PowerPoint about the moon on Seesaw. Use the website links on the PowerPoint to help you complete the activity. (See Attachment 12) 

Types of Determiners

Use this mat to help you to identify different types of determiners and to use them in your writing.

Definite and Indefinite Articles	Possessive Determiners	Interrogative Determiners	Demonstrative Determiners	Quantifiers
the a an	her his our my your their	which what whose	this those these that	more less any few lots of some many
The boy sat on a chair.	Their house is in London.	Which street is it on?	Those books over there.	Many people celebrate at Christmas.



Co-ordinating Conjunctions

There are seven co-ordinating conjunctions. They give equal importance to the words or sentences they connect.

for and nor but or yet so
F A N B O Y S





Don't forget to share your fantastic work with me on Seesaw!



	Spellings (Use Attachment 1 for activity ideas)	Reading (All work is based on the book <i>George's Secret Key to the Universe</i> by Lucy Hawking and Stephen Hawking)	Writing	Maths (Lessons have been taken from White Rose Maths. This week we will be looking at Summer Term Week 10)	Topic/Science (Our Topic this term is Space Race)
Wednesday	Practise this weeks spellings: heard, heart, height, history, imagine.	Read pages 52 - 54 and answer the questions. (See Attachment 4) 	Subordinate clauses and conjunctions - Look at the PowerPoint on Seesaw. Complete the activity on subordinate clauses and conjunctions. (See Attachment 9) 	Summer Term Week 10 Lesson 3 - Introducing line graphs. Click below for: Video Check out the activity on Seesaw. 	French - Watch this video to learn the numbers 1 - 20 in French.. Complete the French numbers activity. (See Attachment 13) 
Thursday	Practise this weeks spellings: heard, heart, height, history, imagine.	Read pages 55 - 56 and answer the questions. (See Attachment 5) 	Progressive tense - Look at the PowerPoint on Seesaw. Complete the activity on Progressive tense. (See Attachment 10)	Summer Term Week 10 Lesson 4 - Line graphs. Click below for: Video Check out the activity on Seesaw. 	Art - This week the Children's Art Week theme is 'Connecting across generations'. Make a list of the people who are in your family. Then draw them out onto a family tree. Be as creative as you want to be. 



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	Spellings (Use Attachment 1 for activity ideas)	Reading (All work is based on the book <i>George's Secret Key to the Universe</i> by Lucy Hawking and Stephen Hawking)	Writing	Maths (Lessons have been taken from White Rose Maths. This week we will be looking at Summer Term Week 78)	Topic/Science (Our Topic this term is Space Race)
Friday	Practise this weeks spellings: heard, heart, height, history, imagine.	Read pages 57 - 58 and answer the questions. (See Attachment 6) 	Using brackets - Visit this website to learn about using brackets. Complete the activity on the website. 	Summer Term Week 8 - Challenge. The most suitable questions for Year 4 are 1, 2, 3, 4 & 5. But you can always work with your family on the rest of the problems. Click below for: Activity 	PSHE - Look at the Power-Point on Seesaw about thoughts and feelings. Carry out the activity. (See Attachment 14) 

Attachment 1 - Spelling Activities

<p>ABC Order</p> <p>Write all of your spellings in alphabetical order.</p> 	<p>Word Parts</p> <p>Write your words. Then use a coloured pencil to divide the words into syllables. e.g. <i>jumping</i></p>	<p>Silly Sentences</p> <p>Write a silly sentence for each of your spellings.</p> 	<p>Rainbow Words</p> <p>Write your spellings with coloured pencils. Make each letter a different colour.</p> 	<p>Hidden Words</p> <p>Draw and colour a picture. Hide your spelling words inside your picture.</p>	<p>Backwards Words</p> <p>Write your spelling words forwards and then backwards. e.g. <i>cat tac</i></p>	<p>Vowel Spotlight</p> <p>Write your words using one colour for the vowels and another colour for the consonants. (vowels: a, e, i, o, u)</p>	<p>Pyramid Words</p> <p>'Pyramid write' your spelling words. e.g. home <i>h</i> <i>ho</i> <i>hom</i> <i>home</i></p>
<p>Story Story</p> <p>Write a story using all of your spellings.</p> 	<p>Squiggly Words</p> <p>Write your spellings in squiggly letters.</p>	<p>Bubble letters</p> <p>Write your spelling words in bubble writing.</p> 	<p>Three Times</p> <p>Write each spelling three times. First, in pencil. Second, in crayon. Third, in felt tip.</p>	<p>Acrostic Poem</p> <p>Choose one of your spellings and write an acrostic poem</p> 	<p>Spelling Shapes</p> <p>Draw one shape for each word. Then write your spellings inside each of the shapes.</p> 	<p>Word Search</p> <p>Create your own word search with your spellings.</p> <pre> R F Y D R I Z Z L E R D C V S E M W Y B R C E X W Z D F U U D O I L A W C X F V B H O K N N R N Y D G Y L B G F T G E S U C D S X E R U O P A S E D H H A W R T M N J U K M S B I T J I K O R P M N B D C E W N X Q A Z B O M J Y H G S F R E A L I G H T N I N G T Y H U L F M T X W S L P D X Z E R T L Q D M X T H I T W T R D W V P Z V N J R D Q S G K J O B G F C M I S T P U O F C N E S X Z B G T R F C D R W S X Z A Q W M L P I U G F F W S A H A I L </pre>	<p>Picture and A Story</p> <p>Draw a picture defining each word. Write a sentence about your picture using the spelling.</p>
<p>Riddles</p> <p>Write a riddle for each of your words. e.g. I am grey. I have a trunk and big ears. What am I?</p> 	<p>Writing Race</p> <p>Set a timer for 2 minutes. See how many times you can write each spelling during that time.</p> 	<p>Joker</p> <p>Write jokes containing each of your spellings.</p> 	<p>Scrabble</p> <p>In a game of Scrabble, each letter is worth a certain number of points. Write your words and then add the total of the letters.</p>	<p>Word Classes</p> <p>Sort your spelling words into word classes - e.g. nouns, verbs, adjectives etc.</p>	<p>Antonyms</p> <p>Find an antonym (opposite word) for each of your spellings.</p> 	<p>Technology</p> <p>Type out your spellings on the computer or tablet.</p> 	<p>Train Words</p> <p>Write the entire spelling list end-to-end as one long word. Write each new word in a different colour. e.g. <i>trainbackstop</i></p>

Attachment 2 - Reading - George's Secret Key to the Universe By Lucy Hawking and Stephen Hawking

Monday - Pages 45 - 47

'What is it?' he asked. 'And where is it?'

'It's a huge cloud in outer space, much bigger than the ones in the sky,' replied Eric, '[made up of tiny, tiny particles which are all floating around inside it](#). There are so many of these particles that the cloud is enormous – it's so big that you could put millions and millions of Earths inside it. From this cloud, many stars will be born.'

[Inside the cloud, George could see the particles moving around, some joining together to form huge lumps of matter](#). These great lumps spun round and round, gathering even more particles all the time. But as the particles joined together, the spinning lumps weren't getting bigger – instead, they seemed to be getting smaller, as though something was squeezing them. It looked like someone was making gigantic dough balls in outer space. One of these giant balls was quite close to the window now, and George could see it spinning round, getting smaller and smaller all the time. As it shrank, it became hotter and hotter – so hot that George could feel the heat from where he sat on the sofa. And then it started to glow with a dim but frightening light.

'Why is it glowing?' asked George.

'The more it shrinks,' said Eric, 'the hotter it gets. The hotter it gets, the brighter it shines. Very soon it's going to get *too* hot.' He grabbed a couple of pairs of strange sunglasses from a pile of junk on the floor.

'Wear these,' he told George, putting on a pair himself. 'It will soon be too bright for you to look at without glasses.'

Just as George put on the very dark glasses, the ball exploded from the inside, throwing off its outer layers of burning hot gas in all directions. After the explosion, the ball was shining like the Sun.

'Wow!' said George. 'Is that the Sun?'

'It could be,' Eric replied. 'That's how stars are born and the Sun is a star. When a huge amount of gas and dust combines and shrinks to become dense and hot, as you've just seen, the particles in the middle of the ball are so pressed together they start to fuse or join up, releasing an enormous amount of energy. This is called a *nuclear fusion reaction*. It is so powerful that when it starts, it throws off the outer layers of the ball, and the rest is transformed into a star. That's what you just saw.'

1. *Why is the cloud so big?*
2. *How does George describe what is happening in the cloud?*
3. *Why do stars shine?*
4. *Why did George have to put the glasses on?*
5. *In your own words, explain how a star is born.*

Attachment 3 - Reading - George's Secret Key to the Universe By Lucy Hawking and Stephen Hawking

Tuesday - Page 50

The star was now shining steadily in the distance. It was a beautiful sight. Without the special sunglasses they wouldn't have been able to see much as the star was so bright.

George gazed at it, amazed by its power. Every now and then he could see huge jets of brightly shining gases sent hundreds of thousands of miles from the surface at extraordinary speeds.

'And the star will keep on shining like this for ever?' he asked.

'Nothing is for ever, George,' said Eric. 'If stars shone for ever, we wouldn't be here. Inside their bellies, stars transform small particles into larger ones. That is what a nuclear fusion reaction does: it fuses small particles together, and builds big atoms out of small ones. The energy released by this fusion is enormous and that's what makes stars shine. Almost all the elements that you and I are made of were built inside stars that existed long before the Earth. So you could say that we are all the children of stars! When they exploded, a long time ago, these stars sent into outer space all these large atoms they created. The same will happen to the star you are looking at now, behind the window. It will explode at the end of its life, when there are no more small particles available to fuse into bigger ones. The explosion will send into outer space all the large atoms the star created in its belly.'

On the other side of the window, the star was looking angry. Its bright yellow colour was turning reddish as it grew and grew, until it was so big that it was almost impossible to see anything else through the window. It seemed to George that the star might explode at any moment. Eric pressed his remote control again and the window immediately moved away from the star, which carried on getting redder and bigger all the time.

'Isn't it amazing!' exclaimed Eric. 'At first the ball shrinks and gives birth to a star, and then the star gets bigger and bigger! And now it is about to explode! Whatever you do, don't take your glasses off.'

George watched the star in fascination. Suddenly, long after it had reached a size no one could have imagined, the most powerful explosion George had ever seen happened just in front of him. The whole star blew up, sending into outer space enormous quantities of light and red-hot gas, including all the new atoms it had created. After the explosion, George saw that all that was left of the star was a beautiful new cloud, full of extraordinary colours and new materials.

1. *Why wouldn't George see the star if he took the glasses off?*
2. *Why don't the stars last forever?*
3. *Why did George think the star looked angry?*
4. *Predict what you think happens after the star has exploded.*

Attachment 4 - Reading - George's Secret Key to the Universe By Lucy Hawking and Stephen Hawking

Wednesday - Pages 52 - 54

'Ooooh-ahhhh!' he said. It was like watching the most incredible firework display.

'You see,' said Eric, 'with time, the colourful cloud you now see will mix with other clouds, ones from far distant stars that have also exploded. As they cool down, all the gases from these clouds will mix together into an even bigger cloud where stars will be born again. Near where these new stars appear, the leftover elements will gather together to become objects of various sizes but not ones big enough to become stars themselves. Some of these objects will become balls and with time, these balls will turn into planets. In real life, it takes a very long time for all this to happen – tens of millions of years!'

'Wow!' George was fascinated.

'But we haven't got that much time to wait, and you need to get home for your supper,' said Eric, going over to Cosmos and pressing a few more keys. 'So let me speed it up a bit. Here we go!'

In the blink of an eye, the tens of millions of years Eric was talking about had passed. The gas from the explosion of dozens of stars had gathered into an immense cloud. Within this cloud, new stars were appearing everywhere, until one formed just in front of the window. That star's brightness made all the other stars very difficult to spot. Some distance away from this new star, the gas left over from the cloud was becoming very cold and had started to gather into small icy rocks. George saw that one of these rocks was heading straight for the window. He opened his mouth to warn Eric, but the rock was travelling far too quickly. Before George could say anything, it smashed into the glass with a shattering, splintering roar, seeming to shake the whole house.

George jumped in fright and fell off the sofa. 'What was *that*?' he shouted to Eric.

'Oops!' said Eric, who was typing away on Cosmos. 'Sorry about that. I wasn't expecting to take a direct hit.'

'You should be more careful,' said Cosmos crossly. 'This isn't the first time we've had an accident.'

'What was it?' asked George, who found he was clutching a small teddy bear that Annie must have left on the sofa. He was feeling rather dizzy.

'We were hit by a tiny comet,' admitted Eric, who was looking a little sheepish. 'Sorry, everyone. I didn't mean that to happen.'

'A tiny what?' asked George, feeling the room spin around him.

Eric typed a few more commands into Cosmos. 'I think that's enough for today,' he said. 'Are you all right, George?' He took off his glasses and peered into George's face. 'You look a little green.' He sounded worried. 'Oh dear, I thought this was going to be fun. Annie!' he called into the kitchen. 'Can you bring George a glass of water? Oh dear, oh dear.'

1. Was your prediction about what happens to stars after they have exploded correct?
2. What will happen to some of the balls?
3. Why did the house shake?
4. Why do you think George was holding a teddy?
5. How do you think George is feeling after what he has just seen? Explain your answer.

Attachment 5 - Reading - George's Secret Key to the Universe By Lucy Hawking and Stephen Hawking

Thursday - Pages 55 - 56

Annie came in, walking on tip toes. She was carefully holding a very full teacup of water, some of which was sloshing over the side. Freddy the pig was glued to her side, casting adoring glances up at her with his piggy eyes. She held the cup out to George.

'Don't worry,' she said kindly. 'I felt really sick too, my first time. Dad' – it was a command – 'it's time to let George go home now. He's had enough of the Universe.'

'Yes, yes, I think you're right,' said Eric, still looking concerned.

'But it was so interesting!' protested George. 'Can't I see some more?'

'No, really, I think that's enough,' said Eric hurriedly, putting on a coat. 'I'm going to walk you back to your house now. Cosmos, you're in charge of Annie for a couple of minutes. Come on, George, bring your pig.'

'Can I come back?' said George eagerly.

Eric stopped fussing around with coats and keys and outdoor shoes and smiled. 'I should think so,' he said.

'But you must promise not to tell anyone about Cosmos,' Annie added.

'Is it a secret?' asked George, agog.

'Yes,' said Annie. 'It's a huge great big ginormous amazing secret which is a trillion gazillion times bigger than any secret you've ever heard before.'

'Now, Annie,' said Eric sternly, 'I've told you that gazillion is not a real number. Say goodbye to George and his pig.'

Annie waved and gave George a smile.

'Goodbye, George,' said Cosmos's voice. 'Thank you for making use of my exceedingly powerful capacities.'

'Thank you, Cosmos,' said George politely.

With that, Eric ushered him and Freddy into the hallway and out of the front door and back to their real lives on planet Earth.

1. *You have just finished reading Chapter 5, write the next chapter of the story.*

Attachment 6 - Reading - George's Secret Key to the Universe By Lucy Hawking and Stephen Hawking

Friday - Pages 57 - 58



The next day at school, George couldn't stop thinking about the wonders he had seen at Eric's house. Enormous clouds and outer space and flying rocks! Cosmos, the world's most powerful computer! And they all lived next door to him, George, the boy whose parents wouldn't even let him have an ordinary computer in the house. The excitement was almost too much to bear, especially now that George was sitting once more at his very boring desk in the classroom.

He doodled on the schoolbook in front of him with his coloured pencils, trying to sketch Eric's amazing computer – the one that could make a window from thin air. and through that window show you the whole of the birth and death of a star.

But even though George could see it perfectly in his mind, his hand found it difficult to draw a picture that looked anything like what he had seen. It was very annoying. He had to keep crossing bits out and drawing them again, until the whole page looked like one giant squiggle.

'Ow!' he exclaimed suddenly as a missile made of a screwed-up ball of paper hit him on the back of the head.

'Ah, George,' said Dr Reeper, his teacher. 'So you are with us this afternoon after all. How nice.'

George looked up with a start. Dr Reeper was standing right over him, staring down through his rather smeared glasses. There was a large blue ink blot on his jacket, which reminded George of the shape of an exploding star.

'Do you have anything to say to the class?' said Dr Reeper, peering down at George's notebook, which George hastily tried to cover. 'Other than "Ow!", the only word I've heard you say today?'

'No, not really,' said George in a strangled, high-pitched voice.

'You wouldn't like to say: "Dear Doctor Reeper, here is the homework I spent all weekend slaving over"?''

1. *Why do you think George is bored at school?*
2. *Why was George annoyed?*
3. *What did the ink remind George of?*
4. *What sort of character do you think Dr Reeper is? Explain your answer.*
5. *How do you think George is feeling at the end of the page? Explain your answer.*

Attachment 7 - Identifying Determiners

Circle the determiners and classify the type of determiner it is.

1. Stop kicking the table: that is the third time you've done it! _____
2. Do we have enough chocolate for his party tomorrow? _____
3. Which café would you like to go for your birthday tea? _____
4. Half the class are going on a trip tomorrow. _____
5. That football should not be on the playground because it is dangerous! _____
6. Neither book tells us about the war, so we are going to visit our school library and look for some better books. _____

Write a sentence for each type of determiner. Circle the determiner in each sentence.

Attachment 8 - Co-ordinating Conjunctions

Which co-ordinating conjunction will you choose to link the independent clauses below to form multi-clause sentences?

1. Johnny could not go outside _____ there was a torrential storm.
2. Matilda likes to go shopping _____ she likes reading adventure books.
3. Mr. Jones had not given the class any homework for two weeks _____ does he plan on doing so this week.
4. Sally hates chocolate _____ her best friend loves eating anything sweet.
5. The cat likes sitting by the fire and warming its fur _____ lying on the sofa next to a soft cushion.
6. James hates brushing his teeth _____ he does it twice a day because he knows it's important.
7. Veronica broke her mum's television _____ she banned her from playing football inside the house.

Attachment 9 - Subordinate Clauses and Subordinating Conjunctions

Underline the subordinate clause in red and circle the subordinating conjunction in blue.

1. The bath flew up in the air because water gushed out of the window.
2. Although the town was flooding rapidly, the rabbit sat and read his paper calmly.
3. When the pianist began to play, the shoppers ran towards the fountain to listen
4. The town will have to close if the water keeps gushing from all directions.

Pick a subordinating conjunction to complete the multi-clause sentences below.

1. _____ the pianist had finished playing, his piano was swept away in the gushing water.
2. The waitress dropped the glasses of orange juice _____ she was serving the giraffe.
3. _____ the flooding continues, the bakery will have to close for the day.
4. Waters Down Town remained busy _____ it was filling with water quickly.
5. The alligator looked scared _____ he was being chased by rushing water.

Write four of your own sentences with a subordinate clause.

Attachment 10 - Progressive Tense

1. Complete these sentences using the past progressive form of the verb.

a) The children _____ in their journals. (write)

b) The children _____ at the disco. (dance)

2. Rewrite these sentences so they are in progressive tense.

a) Holly walked to the shop to buy her dinner.

b) The dogs barked all night long.

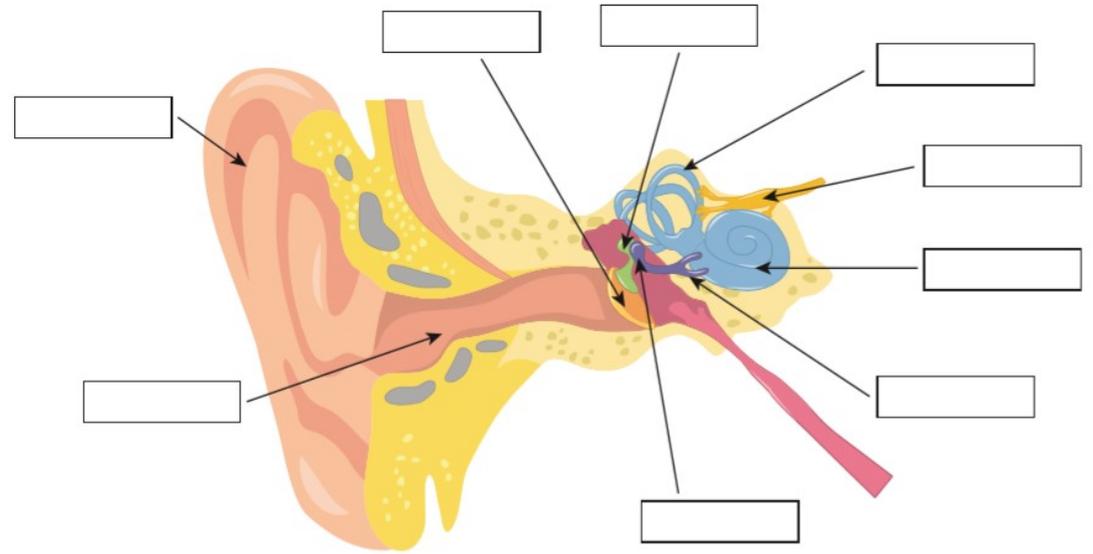
c) The guinea pigs squeak a lot.

d) In the bedroom, the children read their books.

Attachment II - Science - Sound

1. Label the parts of the ear, with the following labels:

semi-circular canals	anvil
cochlea	ear canal
auditory nerve	stirrup
ear drum	pinna
hammer	

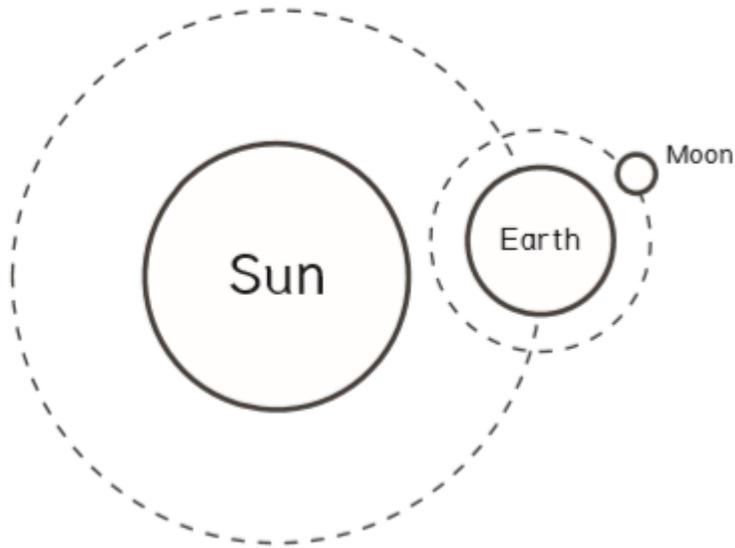


2. Describe each part of the ear.

Ear Part	Description
Pinnae	
Ear Canal	
Ear Drum	
Hammer	
Anvil	
Stirrup	
Cochlea	
Semi-Circular Canals	
Auditory Nerve	

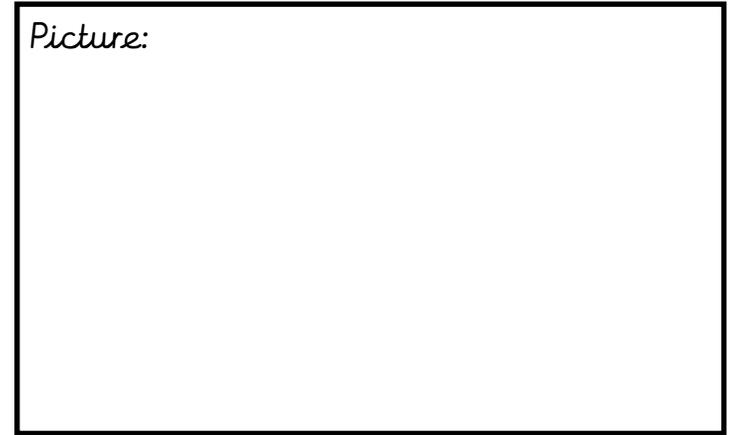
Attachment 12 - Geography - The Moon

Explain what is happening in this diagram:



Complete this fact file about the moon:

Picture:



Name: _____

What planet does it orbit? _____

Distance from the Sun: _____

Distance from Earth: _____

Size: _____

Surface temperature: _____

How long does it take to orbit the Planet?

Has anyone ever visited the Moon?

Did you know? _____

Attachment 13 - French - Numbers

Match the digit to the corresponding French word.

vingt
 cinq
 sept
 onze
 six
 seize
 dix-sept
 dix-neuf
 deux
 douze
 huit
 neuf
 trois
 quinze
 treize
 zéro
 dix
 dix-huit
 quatorze
 un
 quatre

0
 1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20

Attachment 14 - PSHE - Thoughts and Feelings

Imagine having your very own tiny thought superhero in your head! This little super hero will defend you against unhelpful thoughts and talk back to them with positive words and phrases making you feel better. What will your thought superhero look like? What powers will they have and what will they do and say? Draw your thought superhero below and add some super positive, helpful thoughts in the thought bubbles.

