Year 5 / Pine Class - Home Learning Week 1: Inventors

	Day 1	Day 2	Day 3	Day 4	Day 5
English	 Look at this image. What do you think this story will be about? What clues can you see? Write a prediction using key vocabulary linked to this image.	Watch the story 'The Girl and The Robot' https://www.literacyshed.com/girlandrobot.html Watch the start of the film up to the part where the girl is knocked unconscious. Using the question hand think of some interesting questions to ask the girl. Where are your parents? Why are you building a robot? Make sure your questions are clear and interesting and they do not produce 'yes / no' answers. Ensure you have remembered to punctuate your questions.	Watch the rest of the story 'The Girl and the Robot.' Create a word bank linked to robots and inventions. You might want to include some vocabulary you have heard from our Class Story 'TIN.' You might include words like: bolts, rivets etc. Design and label your own robot using technical vocabulary. Write a descriptive paragraph about your mechanical.	Re watch the film The Girl and the Robot. Write a short narrative using a wide range of conjunctions. Remember to include a range of sentence types: questions, exclamatory, statements. Use your technical vocabulary from your word bank from earlier in the week.	How do you think the girl felt at different parts of the story? Pretend you are the inventor in the film and record a page in your journal detailing about this day in your laboratory. Use lots of emotion words to retell the events. Use the past tense and write in the first person. Use this opening if you are stuck: Never before have I had such a disastrous day!
Reading / Phonics	Making links https://www.literacyshed.com/shirtmachine.html The Shirt Machine  Text to Self: What do you already know that might help	Discuss the use of Onomatopoeia (sound words) to describe the sound the machine makes as it works. Can you describe the sounds of other machines? (zip, pop etc) Create a word bank.	Hot seating - Can you ask the uncle questions? Create 3 questions to the uncle using the question hand. What would his answers be? Ask an adult at home to ask you your questions and record yourself pretending to be the uncle.	Vocabulary Write synonyms for the following words: Trendy Information Inventor Special	Make Predictions. Which shirt do you think the uncle will make next? Who do you think will buy this shirt and why? Pretend you are the uncle and complete a page in his ledger (notebook) with a drawing and explanation of the shirt.

	you make sense of what this story is about? Text to Text: What stories do you know that have the theme of inventions / inventors? Text to World: Do you know of any inventors in real life?				
Handwriting	 Practise these letters carefully and slowly. Can you do several lines of each letter string?	 Practise these letters carefully and slowly. Can you do several lines of each letter string?	 Practise these letters carefully and slowly. Can you do several lines of each letter string?	 Practise these letters carefully and slowly. Can you do several lines of each letter string?	 Practise these letters carefully and slowly. Can you do several lines of each letter string?
Spelling	Practise spelling : **accommodate accompany according** Do three rows of each and/or put them into a sentence with a capital letter and a full stop.	Practise spelling : **achieve aggressive amateur** Do three rows of each and/or put them into a sentence with a capital letter and a full stop.	Practise spelling : **ancient apparent appreciate** Do three rows of each and/or put them into a sentence with a capital letter and a full stop.	Practise spelling : **attached available average** Do three rows of each and/or put them into a sentence with a capital letter and a full stop.	Practise spelling : **awkward bargain bruise** Do three rows of each and/or put them into a sentence with a capital letter and a full stop.
Maths	**Using and explaining addition strategies** In this lesson, we will be learning how to use different addition strategies (e.g. partitioning, commutativity and rounding and adjusting) in order to solve Magic Squares Watch this lesson on: https://classroom.thenational.academy/lessons/using-and-explaining-addition-strategies-60t6ce	**Using and explaining addition and subtraction strategies** In this lesson, we will be learning how to use the most efficient addition and subtraction strategies. We will apply this knowledge to solving addition pyramids Watch this lesson on: https://classroom.thenational.academy/lessons/using-and-explaining-addition-and-subtraction-strategies-6hk38c	**Adding and subtracting using multiples of 10, 100, 1000, 10 000 and 100 000** In this lesson, we will learn how to use the 'derived facts' and 'make 10' strategies to solve equations involving multiples of 10, 100, 1000, 10 000 and 100 000. https://classroom.thenational.academy/lessons/adding-and-subtracting-using-multiples-of-10-100-1000-10-000-and-100-000-60upcc	**Adding and subtracting using the 'round and adjust' strategy** In this lesson, we will learn how to use the 'round and adjust' strategy to solve addition and subtraction equations. https://classroom.thenational.academy/lessons/adding-and-subtracting-using-the-round-and-adjust-strategy-chk64e	**Adding and subtracting using partitioning** In this lesson, we will use partitioning to add and subtract large integers, both where regrouping is required and where it is not needed. https://classroom.thenational.academy/lessons/adding-and-subtracting-using-partitioning-61h3cd
Topic	**Design a car for the future** Think about how transport has changed over the last hundred years. The way we get around is so different from those times when people moved around using horses, trams, or trains. Cars are quite a recent mode of transport and are now used all the time in our everyday life. This activity is about designing a car for the future. You could draw and	**Invent a game to keep you fit** It is always important to get up and get moving to keep ourselves fit and healthy and this activity is all about inventing a game to help us do just that! Getting started: • Decide whether your game is one that is going to be played outside or inside. You may wish to get permission to play	**Research – To investigate the invention of the telephone.** **Read this link to the invention of the telephone by Alexander Graham Bell.** **https://www.bbc.co.uk/bitesize/topics/zxwxvcw/articles/z4vp7nb** **Answer the following questions:** How did the invention of the telephone	**Research how one form of transport has changed over time.** In class we have looked at how the invention of the aeroplane has changed over time. The different ways that we get around and the transport that we use to do it has changed over many years. This activity is about finding out how one form of transport has changed over	**To investigate the invention of the mackintosh.** Read the biography of Charles Mackintosh. (see resources) Mackintosh invented the waterproof coat. Your challenge is to create a small paper boat (origami). You are only allowed to use paper and folding techniques.

	label your car or write a booklet about it. You could even have a go at making a version of it in 3D! Think about: • When in the future your car will exist. If you are designing a car for existence in the next twenty years, it may look quite different from a car that we might use in fifty years • What the roads might look like in the future. Our roads have changed a huge amount in the last twenty years due to extra traffic and the need for people to commute further than their local area, so your car may be travelling on quite different road systems • The different things that people might do in the future and how transport will need to adapt to meet the needs of people • Researching car prototype websites which will show you the first version of something before it is made Features that your car may have: • Interesting wheels or possibly a different way to move around • The lights - where they are situated on the car and what they do e.g. some lights now move around as the car goes around a corner • Engines - how they are powered and where they are situated on the car • The speed that the car can go • The outside finish of the car • How people and their objects sit in the car or are transported • Inside the car e.g. the radio, seats, gear stick etc. • The roof of the car and what that can do • How the doors operate **Completing the activity: You can complete your activity in different ways, and these could be**: • Drawing and labelling your car. You could use different colours to make your picture more interesting. You could also write a small description by each part of the car, showing the features and how they work • Making a booklet about your car. This could take the form of a non-chronological report	your game in an area of the home or garden • Think about whether your game is for one person or can be played with others in a team • Consider what you have already that could help you make the game. Recycled objects could be useful • Consider whether to give your game a theme. It could be based around a football team that you support or something else that you enjoy **Designing the game – think about:** • The materials that you have available. You could use balls, bats, cones (or something similar) if you are going outside • Chalk may be useful to mark out areas, but get permission before you mark anything outside in your garden • Plastic bottles could be used to create markers • If your game is to be played inside, then you might not need extra materials. You could try creating a game using timers to compete against yourself e.g. complete several jumps against the clock • Consider making a scorecard for your game. This would work whether you are competing against others or yourself •	change the way people lived? • Can you think of ways the telephone has changed to meet people's needs? How do you think the telephone will change in the future?	time. There are many ways that you could record your findings. Getting started: • First decide on the type of transport that you want to study. The different modes of transport are air, water, and land. Types of transport could be ships, cars, trains, trams, aeroplanes, or helicopters but there are many more that you could find out about • Then research how the transport has changed over time. You could use the internet or books to help you do this. Make sure that you take notes as you go **Recording your activity:** Now decide how you are going to record your findings. You could do this by: • Completing a non-chronological report (a report that is not in time order) with headings and subheadings. You could split this into the different historical periods • Making a timeline with pictures and information • Making a storyboard with pictures for each part of history • Writing a postcard about the mode of transport as if you were a person in that historical period. This would mean you would have to describe the features of the type of transport	Next you are going to try and find materials which you are going to test to see if they are waterproof. You are going to attempt to waterproof a piece of paper before folding and turning it into a boat. You must ensure you are able to fold your waterproofed paper and that it can float. Was your design successful? How could you improve your design? Take a picture of your waterproof boat if you can?

	(a non-fiction report that is not written in time order). This could have a section for each part of the car with different drawings to illustrate this and where they are on the car.				