Medium Term Plan Year: 5 Term: 1 **Enquiry question:** How can science help the homeless? *Aspire • Believe • Succeed*

	Week 1 4.09.23	Week 2 11.09.23	Week 3 18.09.23	Week 4 25.09.23	Week 5 2.10.22	Week 6 9.10.23	Week 7 16.10.23
Mon							Diversity Week
PSHE Monday AM	Feelings & Emotions – Worry & Anger						
Reading text	The Night Bus Hero – Onjali Q. Rauf						
Reading objectives	Comprehension & Predictions	Inference	Retrieval	Summarising	Adding information to inference answers	Asking questions	Explaining
Text genre	The Lost Words	Instructions			Narrative (Story)		
Authors imitate, innovate, invent?	Description ~ Different description from each child	Imitate – Learn instruction WAGOLL Innovate – Change the concept of the instructions Invent – Create a set of instructions for completing a task			Imitate – Learn "Way Home" Innovate – Change the journey Invent – Stories about finding a way home.		
Language features		Time adverbials Imperative verbs Modal verbs for possibility *If … then …* (sentences)			Similes Emotional language Superlatives Power of Three		
Structure -		Features of an instruction text – title, opening hook, lists, method Bullet points			A beginning, middle and end in chronological order Opening paragraph to hook and orientate the reader Simile/metaphor Paragraphs – knowing when to start a new paragraph.		
What will your grammar focus be?		Consistent tense Modal verbs for possibility Sentence structure – vary of length Formal language			Consistent tense Paragraphs Sentence signposts to add information - furthermore, also, moreover, additionally		

Spellings	Group A – Stage 5 Group B – Stage 4 Group C – SNIP spellings/phonic spellings						
Mathematicians	**Place Value** - Roman numerals - Numbers 1-1,000,000 - Rounding numbers - Ordering and comparing numbers - Power of 10				**Addition & Subtraction** - Add & subtract more than 4 numbers - Rounding to check - Using the inverse - Missing numbers - Multi-step problems		
Enquiry	How can science help the homeless?						
Scientists	Watch Ted Talk – to show that small inventions and changes can make huge differences to people's lives.	Learners sort a variety of materials based on properties to establish how the properties link to the materials. Create a Carroll diagram to show difference and similarities in materials. Learners consider which products are good for wet/dry/cold/hot conditions and test for different scientific properties. Homeless people may have become displaced really quickly and not have access to clean water. OR Provide filtering equipment without explaining what they are for and ask learners to devise an experiment for how to separate materials – filtering, sieving and evaporating. Learners explain ideas to a partner and then carry out experiments. and chlorine tablets?	Explore what is meant by solubility – what happens when we go out in the rain? Do we dissolve? What does? Solids to test for solubility: biscuits, flour, coffee, salt, oil, cocoa, cereals, sugar. Notice the clues to chemical changes: bubbles, gases, fizzing, rising – if nothing extra is produced it is usually reversible. Learners explore how some changes, like some baking and cooking, are irreversible, not because of the heat, but the chemical change, i.e. you cannot uncook an egg. You can dissolve sugar and evaporate the water out to get sugar again, but when it is added to eggs and flour it cannot be extracted.	Learners carry out fair tests on specific materials for insulation and explore which materials would be best for the homeless during winter. Learners become engineers by evaluating different products – create an evaluation checklist for their chosen charity. Irreversible and reversible changes: using cooking learners explore the changes by using bicarbonate of soda/yeast etc. Is cooking reversible? Learners bake biscuits (with and without bicarbonate of soda to establish effect) or bread (with and without yeast). The application of heat – via cooking will be illustrated by this. Learners practise a variety of explanation skills including using diagrams.	Learners research materials brand new-to-the-world: plastic, teflon, velcro. Why have they been invented? What problems have they solved? Learners look into the work of Charles Macintosh, Ruth Benerito, Water filtration solutions, Ecovative. Learners select three of the scientific processes that they have learnt about and present to the class why they think these three are the most important	Challenge week: Create a science fair of newly designed items which will help homelessness. Children to draw a design/diagram, write a description and explain their process.	Use their knowledge to bake cakes and biscuits to sell.

		Learners write up clear instructions including diagrams of how to separate materials. Learners use their engineering skills to consider everyday products and establish a ranking based on the suitability of each material for different locations (wet/dry/day/night).					
Engineers- Computing	Unit 5.1 - Coding						
Athletes Tuesday and Thursday	Tuesday – RealPE – Endball Thursday – Sports - Dodgeball						
Spanish Friday	Describing me and my friends. Using and asking about the date.						
Philosophers- RE Monday	What Christians belief about death What is reincarnation?						