Medium Term Plan Year 5 Term Spring 2023 Topic Title: The Explorers

Topic Hook							
	Suggested Activities	**Enrichment Activities**	**Writing Opportunities**	**Numeracy- Application of skills**	**ICT- Application of skills**	**Global Links**	**Assessment**
Science	**Sound** Identify how sounds are made, associating some of them with something vibrating recognise that vibrations from sounds travel through a medium to the ear find patterns between the pitch of a sound and features of the object that produced it find patterns between the volume of a sound and the strength of the	Creating a scientific diagram of how we hear Above activity plus practical demos: drum, cup phones, House of Sound challenge activity plus experiment - how does distance affect the volume of a sound	. Labelling diagram Explanation of the model we have created Diagram	Reasoning Measuring decibels, distance and application of a fair test	Research, presentation House of Sound video Recording of results in an appropriate way - possibility of excel or software to input results.	No one person is accredited with discovering how sound travels, locate the areas that some people who were working on sound came from. e.g Da Vinci - Italy, Robert Hooke - England, Marin Mersenne – France etc – so it was a global discovery.	Ongoing formative assessment and assessment by outcome Regular use of class marking to give group and specific feedback. Retrieval practice to monitor knowledge, skills and understanding. Does diagram reflect a clear understanding?

	vibrations that produced it recognise that sounds get fainter as the distance from the sound source increases **Living things and their habitats** Describe the differences in the life cycles of a mammal, an amphibian an insect and a bird Describe the life process of reproduction in some plants and animals	https://www.stem.org.uk/resources/elibrary/resource/315610/what-factors-affect-pitch-and-volume-sound Experiment covers this LO https://godinton.kent.sch.uk/media/2577/year-5-animal-life-cycles.pdf https://www.kestonprimary.org.uk/wp-content/uploads/2020/03/ED1-Life-Processes-Information-TExt.pdf https://www.stem.org.uk/resources/community/collection/12775/year-5-li	Investigation prediction and explanation of how this will take place Creating diagrams, labelling and explanations, Descriptive writing Exploring reproductive parts of a flower - Explore work of naturalists / River walk in local area as part of topic	Measuring and recording the growth of plants (growing in different areas / conditions)	Creating models Presentations and research into naturalists Recording of results	Impact of Global Warming from various sources and how they could impact the habitats of animals and plants studied.	Conclusions and explanations formative assessment

		ving-things-and-their-habitats Range of STEM activities					
STEM	This resource, aimed at primary learners, contains three lessons on skeleton and muscles, digestion, and circulation. An interactive simulation, 'Inside the Human Body', explores each of the systems demonstrating their structure and function. It also provides interactive games which support the activities. Y5G - continue with Vex Go - add designs to robots to enhance ability and looks.	https://www.stem.org.uk/resources/community/collection/12365/year-4-animals-including-humans Siemens the human body game Determine code which needs to be debugged and ensure measurements are accurate. (Angles of turn, timings and distances) Continued visits from	Summarising explanations using appropriate scientific language to demonstrate understanding.	Angles of turn, measurements in mm,	Coding using Scratch based block coding. Saving work to folders. Organising files in a folder.	Links with other schools during the competition.	

		Michael Nelson. 2 teams will attend Nissan for Vex Go celebration in June.			Naming files sensibly and appropriately. Debugging several lines of code.		
History	History of current and past explorers in various geographic locations – avoid polar regions Finding out about the past (enquiry)Describe and give reasons for the beliefs held by societies in the past Finding out about the past (chronology) Describe features of past events and make links between them Significant Historical People options: Christopher Columbus Amelia Earhart Ibn Battuta Vasco de Gamma Modern Day: Sarah McNair-Landry Levison Wood Steve Backshall	Use of media to explore experiences of explorers Links to PSHCE in terms of ambition, drive and resilience Links to colonialism/ ownership (prior learning in Victorians) Explore their experiences and lives linking closely to more specific geographical outcomes:	A wide variety of opportunities to explore writing in role (diary, letter, report etc) Biographical and autobiographical Exploring different styles from past and present and language choices.	Timelines for dates	Make a presentation of a famous explorer using PowerPoint	Explore trade links from history and link to trade routes in the present. Explore how the significant historical explorers changed the world.	Ongoing assessment (formative)throughout the unit. Use of Exit questions. Use of retrieval questions on a weekly basis.

	A non-European society that provides contrasts with British society: Mayan civilisation AD900:						
Geography	Geographical enquiry Select appropriate sources of primary and secondary information to support investigations – google Earth, maps, and statistics Select an appropriate way in which to present statistical information and findings – graphs, presentations, letters. Skills and fieldwork Use a range of equipment and maps to conduct independent fieldwork. Knowledge of locations Talk about and compare a wide range of locations, countries, and continents around the world,	Map work Orienteering in the local environment orienteering or climbing Local environment exploration Linked to specific people we will explore both historic and the present day.	Surveys and explanations of these results. Reports. Non-chronological report	Grid Lines on maps Compass points	Use of Google earth to explore and contrast physical features	Links to trade routes and food miles.	

	Identify and describe the links and relationships that connect localities both within the UK and beyond. Human and physical Sustainability Talk about and describe the ways in which groups try to manage an environment's sustainability Describe how decisions that are made about places and environments can impact on the lives of the people who live there.	Link this to STEM activities with food, resources and food miles (sustainability) Explore a local piece of unused / derelict land and make suggestions for its use.	Research supermarkets and what they are doing with regards to sustainability, food miles, health and quality - report		Multimedia reports that can be presented to different groups		
Art	Landscapes Environmental art Painting https://www.invaluable.com/blog/famous-landscape-artists/ Produce a painting in the style of John Constable.	Explore horizon line and vanishing points. Draw landscape in local environment - River Don Make images appear further	Compare and contrast styles of writing. Annotating work and commenting on distinctive features.		Produce a picture in the style of LS Lowry using PowerPoint - size the buildings and people to the correct scale.		

	Kapow Unit - Painting & mixed media: Portraits	away by making them smaller and making parallel lines appear to converge as they get further away from the viewer. eg. LS Lowry - Perspective					
Music	World Music and music from different cultures Appreciation Learn and perform – music for drama Charanga Learning Unit 3 – How Does Music Improve Our World? New musical skills/concepts and revisiting them over time and with increasing depth.	Compose music to match an explorer. e.g. Christopher Columbus - sounds of the sea. Amelia Earheart - sounds of an aeroplane.			Musiclab on iPads		

	Music from Edvard Grieg - In the Hall of the Mountain King from 'Peer Gynt'	Play footsteps using 2 notes. Use next door notes to recreate the sense of the movement.					

D/T	Recipe for calcium rich food Talk about and give reasons for the need to work safely and hygienically. Talk about the impact of changing proportions within a recipe and use knowledge of food and cooking to generate own recipes. Models of joints in the human body Select a range of appropriate tools to cut, shape and join materials and components effectively. Make a range of complex paper models, mock-ups and templates. Produce a well finished product that fulfils the functional and aesthetic design criteria	See Science and STEM tasks for further explanation					
RE	Salvation: Understanding Christianity			How do Sikhs show commitment and belonging?			

	Complete: Why is the Last Supper so important to Christians? Global links – the wider Christian faith and links to Jewish beliefs			Global links – where Sikhism began and where it has spread to.			
ICT	Vector drawings Create pictures using lines and shapes. Programming B – Selection in quizzes Year 5G Vex Go	Y5G - Vex Go		Measurements such as the heights of mountains size of oceans.	Saving work in correct folder		
MFL	Extended write: French Monster Pet		Shopping in France		French Speaking Words		
PSHE	Kidsafe sessions						
Career links	Stem – designers and programmers – link to Vex Go Chefs and cooks – food preparation and food transport Working with animals in their habitats – e.g. water industry – ensuring clean rivers etc. Clothing industry – what modern day explorers need Modes of transport used to explore – design and build transport Merchant navy						