

## Pioneers Y5 - Autumn 2 2021/2022 - Plastic Fantastic?

Key Texts	Key Questions	Key Inspiration	Key Artistic or Design Inspiration	Key Sustainable Development Goal
Treasure Island - Robert Louis Stephenson	Why should we be worried about single-use plastic? Why are plastic's qualities both good and bad? How do I write persuasively? How do CAM mechanisms work? How can I multiply and divide efficiently?	Bonnie Monteleone's The Great PLastic Wave	CAM models	Life Below Water

Hearts, Hands, Heads - Loving, Learning, Living						
Loving - Hearts	Learning - Heads	Living - Hands				
Gain a deeper appreciation for and understanding of the world's oceans. Reverence in the creation of oceans and the wonder of all we have yet to discover. Empathise with those who fight for action related to the environment - recognise the scale of the task and understand the importance of taking action. To recognise the impact that single-use plastic use in the UK can have upon the world's environmental health - who does our plastic usage directly affect? To understand the role they play in the preservation of ocean life. To consider the environmental impact developed countries have upon developing countries. To gain an understanding of the interdependence society has upon the ocean and our responsibilities we have towards it. To respond to artwork such as The Wave by Hokusai and modern plastic-based variations - how they make us feel to see plastic represented this way.	To know how ocean currents called gyres create giant floating plastic garbage patches. To know how to educate and persuade others to care about their single-use plastic use To know how to educate and persuade by sharing educational messages within entertaining narratives To know how to use CAM mechanisms to create visually engaging ocean models	Carry out scientific investigations which provide an insight into the greenhouse effect and how long different materials take to biodegrade. Create persuasive writing to encourage others to care about their single-use plastic habits. Create entertaining narratives inspired by Treasure Island and using the conventions of an adventure novel, with a modern-day 'plastic pirate' twist. Create CAM models of waves using recycled materials- symbols of hope for our oceans				

## Time to Shine opportunities

Double page spread - persuade somebody to use less single-use plastic.

	Writing		Reading		Maths		
	Composition. Transcription			Understand texts	Multiply and divide		
Write wit	th purpose. Organise writing appropriately. Use sentences appropriately.				Complexity. Methods.		
Links to prior knowledge	Narrative writing from Dive In! Features of non-fiction texts from LKS2		Links to prior knowledge	Knowledge of facts vs opinions Defining technical vocabulary using context and known words from Dive In! Technical vocabulary	Links to prior knowledge	Times tables knowledge from Y4	
Big questions:	Can I identify the audience for writing? Can I choose the appropriate form of writing using the main features identified in reading? Am I able to note, develop and research ideas? Do I plan, draft, write, edit and improve my writing? Can I guide the reader by using a range of organisational devices, including a range of connectives? Can I write sentences that include parenthesis? Do I use commas to clarify meaning or avoid ambiguity in writing?		Big Questions:	Can you identify and discuss themes and conventions in and across a wide range of writing? Am I able to identify how language, structure and presentation contribute to meaning? Can I retrieve and record information from non-fiction? Can you distinguish between statements of fact and opinion? Can you summarise the main ideas drawn from more than one paragraph, identifying key details that support the main ideas?	Big Questions:	Can I solve problems involving short multiplication and division and a combination of these, including understanding the meaning of the equals sign? Can you multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication? Can you divide numbers up to 4 digits by a one-digit whole number using the formal written method of short division, and interpret remainders as whole number remainders?	
Contexts for learning	Write persuasive texts which encourage others to be more mindful of their single-use plastic usage. Write/construct narratives which parodies the conventions of Treasure Island in order to convey the message of single-use plastic in an entertaining manner (Plastic Island!)	-	Contexts for learning	Analyse existing persuasive texts, consider how language, structure and presentation establish a persuasive argument? Distinguish between my own opinion and facts	Contexts for learning	Varied multiplication and division fluency and problem solving activities.	
Key Vocabulary	Rhetorical questions, generaliser, persuasive phrases, point, evidence, explain, conditionals, theme, convention, narrative, parody		Key Vocabulary	Fact, opinion, structure, features	Key Vocabulary	Multiply, divide, exchange, place value, factor, multiple	

Geography			Science				
	Investigate places. Investigate patterns.		Biology.				
	invesugate places. Invesugate patterns.		Work scientifically. Investigate living things.				
Links to prior knowledge	Knowledge of ocean currents from Dive In!	Links to prior knowledge	Animal adaptations from Dive In!				
	Can you describe how locations around the world are changing and explain some of the reasons for change? Are you able to describe how countries and geographical regions are interconnected and interdependent? Do you understand human geography, including: the distribution of natural resources?	Big Questions:	Can you plan scientific enquiries, including recognising and controlling variables where necessary? Can you use appropriate techniques, apparatus, and materials during fieldwork and laboratory work? Are you able to take measurements, using a range of scientific equipment, with increasing accuracy and precision? How do you record data and results using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models? Can you report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions? Can you present findings in written form, displays and other presentations? Can you describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird? Can you describe the life process of reproduction in some plants and animals? Are you able to describe how living the characteristics? Can you give reasons for classifying plants and animals based on specific characteristics? Can you give reasons, based on evidence from comparative and fair tests, for the particular uses and qualities of everyday materials, including metals, wood and plastic? Can you explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible?				
Contexts for learning	Relate our knowledge of ocean currents to the existence of The Great Pacific Garbage Patch	Contexts for learning	Field trip to Druridge Bay - rock pooling using appropriate apparatus to gather information about life in a marine habitat? Making classification keys for marine life discovered. Describing the differences between life cycles of the marine life discovered. Scientific enquiries to establish which materials are biodegradable and qualities of plastic.				
Key Vocabulary	Grye, thermohaline circulation, Global Conveyor Belt, debris, vortex, accumulation	Key Vocabulary	Independent variable, dependent variable, control variable, aim, method, hypothesis, equipment, conclusion, biodegradable non-biodegradable, bacteria, decomposition				

	French					
Read fluently. Speak confidently.						
Links to prior Knowledge	Present tense. Classroom instructions. Greetings.					
Big Questions:	Can you read and understand the main points and opinions in written texts from various contexts, e.g. future events in short texts? Do you show confidence in reading aloud, and using reference materials? Do you understand the main points/opinions in spoken passages? Can you take part in conversations to seek/give info, referring to future plans?					
Contexts for learning	Learning to articulate future plans, jobs, careers in French					
Key Vocabulary	Vocabulary specific to French unit					

PE					
Develop pra	Develop practical skills in order to participate, compete and lead a healthy lifestyle				
	Games				
Links to prior Knowledge	Cricket sessions from Autumn 1 Previous football sessions in prior year groups.				
Big Questions:	Can you choose and combine techniques in game situations? Can you field, defend and attack tactically by anticipating the direction of play? Do you always choose the most appropriate tactics for a game? Are you able to uphold the spirit of fair play and respect in all competitive situations? Do you lead others when called upon and act as a good role model within a team?				
Contexts for learning	Weekly football coaching sessions				
Key Vocabulary	Attack, defense, direction of play, tactic, feint, possession				

Music				
To perform				
Links to prior Knowledge	Previous Christmas performances - Aladdin Pantomime Autumn 1 Ukelele			
Big Questions:	Can you sing or play from memory with confidence? Are you able to perform solos or as part of an ensemble? Can you sing or play expressively and in tune? Can you sing a harmony part confidently and accurately? Are you able to sustain a drone or a melodic ostinato to accompany singing? Can you perform with controlled breathing (voice) and skillful playing (instrument)?			
Contexts for learning	Ukelele session weekly. The Snow Queen Christmas performance			
Key Vocabulary	Solo, ensemble, expressive, drone, act, scene, part			

	DT		Computing		]			
Maa			Code		]			
IVIdS	ter practical skills. Design, make, design and improve.			Control. Sensing			Understanding Christianity: People of God	
Links to prior knowledge	Knowledge of design, make and evaluate cycle from LKS2		Links to prior knowledge of conditionals in English - If, then sentences from Giant's Necklace stories			Links to prior knowledge	Knowledge of the Big Story of the Bible and the Old Testament concept of 'People of God' from last half term	
Big Questions:	Can you cut materials with precision and refine the finish with appropriate tools? Do you show an understanding of the qualities of materials to choose appropriate tools? Can you convert rotary motion to linear using cams? Can you make products through stages of prototypes, making continual refinements? Do you ensure products have a high quality finish, using art skills where appropriate?		Big Questions:	Can you use IF THEN ELSE conditions to control events or objects? Can you use a range of sensing tools (including proximity, user inputs, loudness and mouse position) to control events or actions?		Big Questions:	Who was Moses and why was he an important figure in the 'People of God' section of the Big Story of the Bible? What can Christians and Jewish people learn from the story of Moses about freedom? What links might Christians draw between Moses and Jesus? For Christians, how can following God bring freedom and justice?	
Contexts for learning:	Design, make and evaluate a CAM wave model using recycled materials		Contexts for learning:	Use Microbits to code, flash, test and de-bug code. Create an energy saving light switch that detects when darkness falls and switches a light on automatically.		Contexts for learning	Learn about key events in the story of Moses' life, explore how God's rescue of the Hebrews from slavery might look forward to Jesus' rescue of people from a different type of slavery. Finding out about ways in which Christians work to bring freedom to others today.	
Key Vocabulary	Linear, rotary, axle, CAM follower, shaft, mechanism, guide		Key Vocabulary	Programme, conditional, if, then, function, hex file, flash, de-bug		Key Vocabulary	Moses, freedom, salvation, People of God, Exodus, covenant, foreshadowing	

	PSHE/RSE					
	Caring Friendships					
What do I know already?	LKS2 friendships: knowing about the different ways that people can care for each other, the features of positive healthy friendships such as mutual respect, trust and sharing interests and strategies to build positive friendships					
	Do I know what makes a healthy friendship and how they make people feel included? Can I name strategies to help someone feel included? Can I describe peer influence and how it can make people feel/ behave? Do I understand the impact of the need for peer approval in situations, including online? Can I use strategies to manage peer influence and the need for peer approval? Do I recognise that it is common for friendships to experience challenges? Can I describe some strategies to positively resolve disputes and reconcile differences? Do I understand friendships can change over time and the benefits of having new and different types of friends? Can I compare the features of a healthy and unhealthy friendship? Do I understand about the shared responsibility if someone is put under pressure to do something and it goes wrong? Can I describe what consent means and how to seek and give/not give permission in different situations?					
Contexts for learning	PSHE sessions - drama/role play activities, class discussions, exploring social stories					
Key Vocabulary	Friendship, positive relationship, peer pressure, peer group, included, excluded, isolated, belonging, influence, approval, disapproval, disapproval, disagreement, reconciliation, respectful discourse,					