



Subject	Year	Term
STEM	8	2
Topic		
Canal Project		
Content (Intent)		
Prior Learning (Topic) Sustainable Housing Project		
- Year 7 STEM experience In KS2 students have learned: - about the wider world in general. - to interpret and present data using bar charts and tables. - to interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. - to develop creative skills through modelling. - basic scientific formulas and facts.		
Future Learning (Topic) Blokart Racing		
What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)	
Students will investigate many aspects of canals which bring together the 4 STEM subjects. They will look at gears, water pressure, eutrophication, water pollution and job roles when constructing and maintaining canals. Students will spend time preparing for and delivering a debate on whether canals are good ideas. They will research and prepare professional sounding arguments. Students will study the Suez Canal and the challenges it experiences and how these issues link to the 4 STEM subjects.	Graph work completed in class will be assessed through a mixture of self-assessment against success criteria, peer-assessment and teacher feedback. There are many built-in opportunities for graph work to be assessed throughout the STEM curriculum. Students will ultimately present their findings, and the teacher will give valuable feedback to students to prepare them for this. Students will present their opinions and arguments in the debate and will be given support in advance.	
How can parents help at home?		
Students will be given homework tasks to produce based on specific STEM subjects and whole topic. Provide students with resources to allow them to research STEM careers and opportunities. Provide resources for modelling at home.		
Helpful further reading/discussion (including Reading and Vocabulary Lists)		
Read Canal learning resources on canalrivertrust.org.uk Videos on eutrophication and water pollution on YouTube Articles about the 2021 Suez Canal obstruction from news websites	Vocabulary Lists Eutrophication Gears Pollution Dissolved Oxygen Miter Gates	Pressure Biotic Index Fertiliser