



Subject	Year	Term
STEM	8	1
Topic		
Sustainable Housing Project		
Content (Intent)		
Prior Learning (Topic) Self-Driving Cars 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) Canal Project		
What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)	
Students will participate in a challenge where they demonstrate how skills could be used in real life by relief workers and construction workers to develop sustainable housing in the developing world. Students will understand the link between the 4 STEM subjects and apply them to creative enterprise. They will develop a viable sustainable model using scientific data, technology, creativity, and engineering knowledge together with mathematics based on costing and statistics around housing.	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. Models will be assessed for viability.	
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 Sustainability topics on YouTube 3D Printer and Sustainable Housing links on You Tube Books on climate change and the challenges faced by modern construction around the globe	Vocabulary Lists Accurate Sustainability Quantity Surveying Tsunamis	Flood Plains Profit and Loss Refugee Crisis Scientific