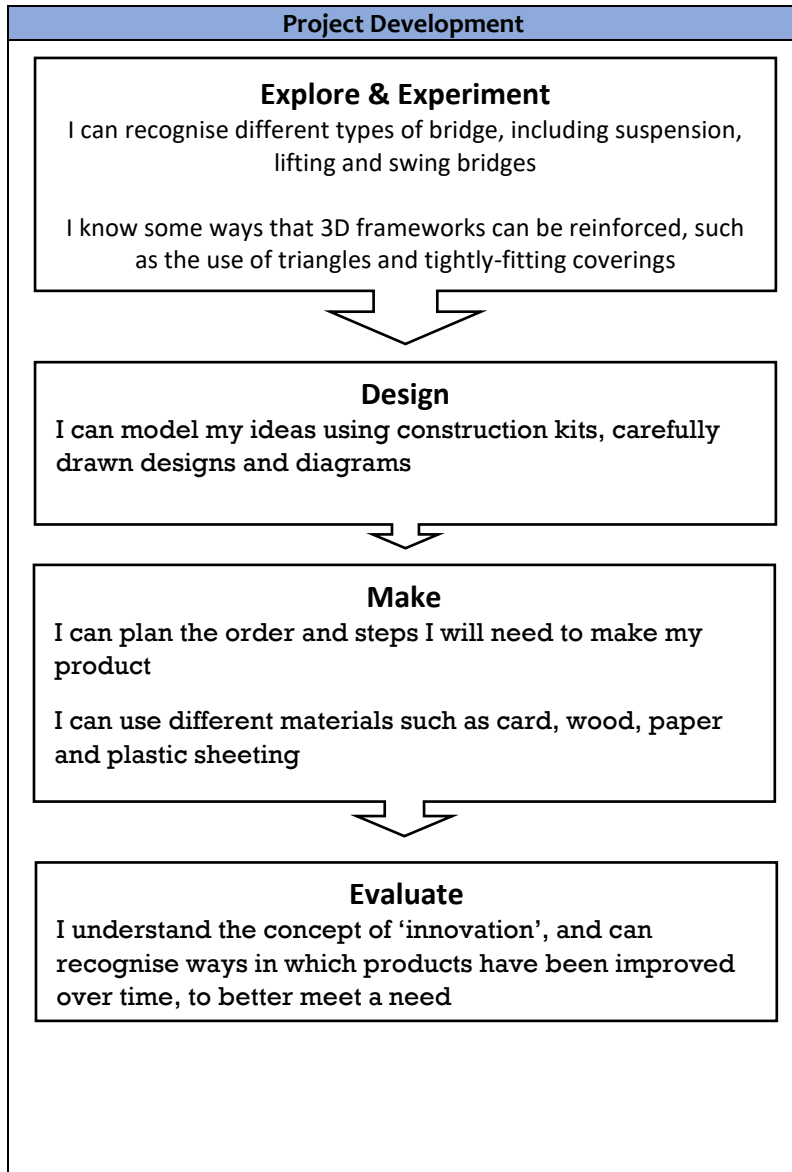




Subject	Design & Technology	Theme	Bridges	Term	5/6
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What should I already know?

- That accuracy of measuring and cutting is important if parts are to be joined successfully

What should I know by the end of the unit?

Know how to reinforce and strengthen a 3D framework

Know that construction kits such as K-Nex are very useful for modelling ideas

Know that innovation is making changes to an existing product, in order to better meet a need. Innovations in bridge design include suspension bridges, lifting bridges and swing bridges

- D&T Knowledge & Skills**
- Begin to understand the D&T cycle: explore – design – make - evaluate*
- **Model ideas** using construction kits, carefully drawn designs and diagrams
 - **Planning:** order the stages of making and produce an appropriate list of tools, equipment and materials they will need
 - **Tools:** scissors, saws
 - **Materials:** card, paper, wood, plastic sheeting
 - **Measuring and marking out:** rulers for accurate measurement
 - **Assemble and join:** PVA, glue gun
 - **Finishing techniques:** fabric/plastic covering
 - **Evaluate an existing product:** why is/was a product successful? What made it successful? What materials were chosen and why? What construction methods were/are used?
 - **Investigate and analyse:** How innovative products are
 - **Evaluate their finished product against design specification:** is it successful? What are the strengths of their product? What could be improved and how?

Key Vocabulary	
innovation	making changes to an existing product, in order to better meet a need
modelling (ideas)	using a construction kit or prototype to practice and test an idea
reinforce	make something stronger
framework	the, sometimes hidden, 'skeleton' that gives a product or building its shape and strength