

**Year 5 DT: How can we keep ourselves safe on the roads? How can technology help us attract attention to ourselves on the road?**



Lesson	Working at	Greater depth	Assessment activity/ evidence Quiz/questioning (written or oral), map, diagram/essay	Assessment
1– Design a road safety product	Know the importance of road safety Select materials based on their properties Combine materials to fulfil a design brief	Can give insightful and detailed reasons for road safety Have a n excellent understanding of materials selected Combine materials to fulfil a de- sign brief at a high level	Oral Questions for as- sessment D.T book/showbie photos Vocabulary task 1	
2– Make a road safety product	Use different fasteners Measure and cut a paper template Use basic stitching techniques Explain how a product meets a design brief	Use the most appropriate fastener Measure accurately and use the template well Stitching techniques of a high standard Detailed explanation of the design brief and how their design met it	D.T book/showbie photos oral	
3– use technology , evaluate a prod- uct	Use technology to control, programme and moni- tor products Develop an algorithm Write and test a simple program using coding Evaluate a product against a design brief	Accurate coding skills High standard of presentation	Questions for as- sessment Oral D.T book Vocab task 2	

**END OF UNIT TEACHER ASSESSMENT:** WT EXP GD

**NATIONAL CURRICULUM:** Through a variety of **creative and practical activities**, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of **designing and making**. They should work in a range of relevant contexts [for example, **the home**, school, leisure, culture, enterprise, **industry** and the wider environment]

**Design:** use research and develop design criteria to inform the design of **innovative, functional, appealing products** that are fit for purpose, aimed at particular individuals or groups generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, **prototypes, pattern pieces** and computer-aided design.

**Make:** select from and use a wider range of tools and equipment to perform practical tasks [for example, **cutting, shaping, joining and finishing**], accurately select from and use a wider range of materials and components, including **construction materials, textiles** and ingredients, according to their functional properties and aesthetic qualities

**Evaluate:** **investigate and analyse a range of existing products** evaluate their ideas and products against their own design criteria and consider the views of others to improve their work understand how **key events and individuals in design and technology have helped shape the world**.

**Technical knowledge:**  
apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]. understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] **apply their understanding of computing to program, monitor and control their products**