

Design Technology



Design Technology with links to Sustainable Travel KS1 - Vehicles

Objectives:	<p>Design design purposeful, functional, appealing products for themselves and other users based on design criteria generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</p> <p>Make select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</p> <p>Evaluate explore and evaluate a range of existing products evaluate their ideas and products against design criteria</p>
Success Criteria:	<ul style="list-style-type: none"> • designs that successfully meet the criteria • ideas communicated through appropriate means • tools and equipment selected appropriately for the task • skills performed successfully • materials selected to meet the design • finished task evaluated against existing products and comparisons made
<p>QCA Units to be adapted for Sustainable Travel</p>	
<p>2A Vehicles http://webarchive.nationalarchives.gov.uk/20090608182316/http://standards.dfes.gov.uk/schemes2/designtech/det2a/?view=Download</p> <p>This unit builds on children's experiences of joining and combining sheet and reclaimed materials and of using moving joints. They learn about wheels and axles and how to use these when making wheeled vehicles for a specific purpose. They are encouraged to develop their design ideas based on investigating vehicles in the world around them. Work in this unit also offers opportunities to use construction kits, and computer-generated graphics or text to enhance their finished products, to apply basic measuring skills and to draw on knowledge of forces from science.</p> <p>This unit could be adapted and based on other wheeled products <i>e.g. service vehicles (fire engine, tip-up truck, milk float, ambulance), carnival float, prams and buggies, wheelchairs, shopping trolleys, wheelbarrows</i>. The main features of the particular vehicle would be the purpose of the product.</p> <p>Adaptation for Sustainable Travel: It could also be used to design skateboards or scooters – strong links to ICT for taking photographs of skateboards in the Early Years playground and those the children are using.</p>	<p>Resources</p> <ul style="list-style-type: none"> • toy vehicles, models, pictures of vehicles, video of vehicles moving • various types of wheels, including wooden and plastic wheels, cotton reels and card discs • collage materials • straws, doweling and plastic tubing, reclaimed boxes, card, clothes pegs, single-hole punch or card punch, thin corrugated plastic sheet • simple jigs for holding materials • computer and printer with paint, draw or graphics programs <p>Assessment</p> <ul style="list-style-type: none"> • Can design products that successfully meet the criteria. • Can communicate ideas through appropriate means including charts, drawings and discussions • Can select tools and equipment appropriately for the task • Can perform skills successfully • Can select materials to meet the design • Can evaluate the finished task against existing products and make comparisons