

Design Technology Skill Progression

Design and Technology Projects for Year 1



AUTUMN : MECHANISMS	Sliders and levers <i>E.g. Make a toy with a moving part</i>		
Possible links with other subjects	Science: Identifying everyday materials	Maths: Measure	History: Investigate, design and make a toy, based on what we have learnt about toys in the past.
Designing	Making		Evaluating
<p>Understand what a toy is and who it is for.</p> <p>Understand how toys work.</p> <p>Identify where and when you might find a range of toys.</p> <p>To suggest ideas and explain what they want to create.</p> <p>Explain who their toy will be used by.</p> <p>Discuss what their steps for making could be</p> <p>Represent ideas through talking and drawing</p> <p>Identify the materials they could use to make the toy.</p>	<p>Order the main stages of making.</p> <p>Make simple sliding and lever mechanisms.</p> <p>Follow safety procedures: Know how to use scissors safely.</p> <p>Observe a hole punch and a glue gun being used safely.</p> <p>Make their design (with adult help) using appropriate techniques</p> <p>Choose suitable tools for making their toy.</p> <p>Measure, mark, cut, shape and join materials and components</p> <p>Explain their choice of materials according to functional properties and aesthetic qualities.</p> <p>Use finishing techniques suitable for the product they are creating.</p>		<p>Evaluate their toy by discussing how well it works in relation to the purpose</p> <p>Talk about their design ideas and what they have made</p> <p>Make simple judgements of how the product met their design ideas</p> <p>Suggest with adult help how they could have improved their toy.</p>
			Technical Knowledge
			<p>To know that simple levers and sliding mechanisms can be used to create movement</p> <p>To know that construction kits can be used to try out ideas</p> <p>Know and use technical vocabulary relevant to the project.</p>

Design Technology Skill Pogram

Design and Technology Projects for Year 2



AUTUMN : MECHANISMS	Wheels and axles <i>E.g. Make a moving vehicle/ make a machine which will collect/carry and disperse/dispense water.</i>			
Possible links with other subjects	Science: Properties and uses of materials	Maths: Measure and using a ruler to draw to the nearest cm.	History: Investigate, design and make a vehicle which could have carried water to put out The Great Fire of London.	
Designing	Making		Evaluating	Technical Knowledge
<p>Understand what existing machines are and what their purpose is.</p> <p>Identify the materials used to make the machine.</p> <p>Express an opinion about the machines being investigated.</p> <p>Generate realistic ideas through discussion and design criteria for an appealing, functional product fit for purpose and specific user/s.</p> <p>To develop their design ideas through discussion, observation, drawing and annotating</p>	<p>Order the main stages of making.</p> <p>Select and use appropriate tools to Join, assemble and combine materials and components to make their machine.</p> <p>Explain their choice of materials according to functional properties and aesthetic qualities.</p> <p>Use finishing techniques suitable for the product they are creating.</p> <p>To apply rules which will control risk when using materials, tools and equipment.</p> <p>To use hand tools safely and appropriately.</p>		<p>Investigate and evaluate a range of existing vehicles and machines including the materials, components and techniques that have been used.</p> <p>Talk about their design ideas and what they have made</p> <p>Test and evaluate their own machines against design criteria and the intended user and purpose.</p> <p>Make simple judgements of how the product met their design ideas</p> <p>Suggest how their product could be improved</p>	<p>To use wheels and axles, understanding that wheels and axles can be assembled in two different ways: - either the wheel is attached tightly to the axle and the axle is free to rotate, or the axle is fixed with the wheel free to rotate around</p> <p>Know and use technical vocabulary relevant to the project.</p>