Design Technology Progression of Skills

	Nursery		Reception	Year 1	Year 2
	2 Year Olds	3 & 4 Year Olds		Puppets, Cars and Moving Pictures	Road Safety and Towers
Design	Explore different materials, using all their senses to investigate them. Manipulate and play with different materials.	Explore different materials freely, to develop their ideas about how to use them and what to make.	Select appropriate resources for making and building Use gestures, talking and arrangements of materials and components to show design Use contexts set by the teacher and myself Use language of designing and making (join, build, shape, longer, shorter, heavier etc.)	Have my own ideas and explain what I want to do. Explain what my product is for, and how it will work. Use pictures and words to plan, begin to use models. Design a product for myself following design criteria. With support, research similar existing products.	Have own ideas and plan what to do next. Explain what I want to do and describe how I may do it. Explain the purpose of a product, how it will work and how it will be suitable for the user. Describe a design using pictures, words, models and diagrams. Design products for myself and others following design criteria. Choose the best tools and materials and explain their choices. Use knowledge of existing products to produce ideas.
Make	Use their imagination as they consider what they can do with different materials. Make simple models which express their ideas.	Develop their own ideas and then decide which materials to use to express them. Join different materials and explore different textures.	Construct with a purpose, using a variety of resources. Use simple tools and techniques. Build / construct with a wide range of objects. Select tools & techniques to shape, assemble and join. Replicate structures with materials / components. Discuss how to make an activity safe. Record experiences by drawing, writing, voice recording. Understand different media can be combined for a purpose.	Explain what I'm making and why. Consider what I need to do next. Select tools/equipment to cut, shape, join, finish and explain choices. Measure, mark out, cut and shape, with support. Choose suitable materials and explain choices. Try to use finishing techniques to make a product look good. Work in a safe and hygienic manner.	Explain what I am making and why it fits the purpose. Make suggestions as to what I need to do next. Join materials/components together in different ways. Measure, mark out, cut and shape materials and components, with support. Describe which tools I'm using and why. Choose suitable materials and explain choices depending on characteristics. Use finishing techniques to make a product look good. Work safely and (Where appropriate) hygienically.
Evaluate		Adults will talk to children about why they have made things and if they feel they have been successful.	Adapt work if necessary Dismantle, examine, talk about existing objects/structures Consider and manage some risks Practise some appropriate safety measures independently Look at similarities and differences between existing objects / materials / tools.	Talk about my work, linking it to what I was asked to do. Talk about existing products considering: use, materials, how they work, audience, where they might be used. Talk about existing products, and say what is and isn't good. Talk about things that other people have made. Begin to talk about what could make a product better.	Describe what went well, thinking about design criteria. Talk about existing products considering: use, materials, how they work, audience, where they might be used and express personal opinions. Evaluate how good existing products are. Talk about what I would do differently if I were to do it again and why.
SVPS Curriculum Concepts					
Diversity and Adversity					
Change and Continuity					
Locality and Context					SVPS is located close to a busy road and this is firmly a part of our context as a school.

Design Technology Progression of Skills

	Year 3	Year 4	Year 5	Year 6
	Shelters and Moving Structures	**Torches and Paper Strength**	**Hand Warmers and Egg Protectors**	**CAD and Bridges**
Design	Begin to research others' needs and show that a design meets a range of requirements Describe the purpose of a product Follow a given design criteria Have at least one idea about how to create product Create a plan which shows order, equipment and tools needed. Describe a design using an accurately labelled sketch and words Make design decisions and explain how a product will work Make a simple prototype with support.	Use research for design ideas. Show that a design meets a range of requirements and is fit for purpose. Begin to create own design criteria. Have at least one idea about how to create a product and suggest improvements for design. Produce a plan and explain it to others and say how realistic plan is. Include an annotated sketch as part of a design. Make and explain design decisions considering availability of resources. Explain how product will work and make a simple prototype.	Use internet and questionnaires for research and design ideas. Begin to consider needs/wants of individuals/groups when designing and ensure product is fit for purpose. Create own design criteria. Have a range of ideas. Produce a logical, realistic plan and explain it to others. Use cross-sectional planning and annotated sketches. Make design decisions considering time and resources. Clearly explain how parts of product will work. Model and refine design ideas by making prototypes and using pattern pieces.	Draw on market research to inform design. Use research of user's individual needs, wants, requirements for design. Identify features of design that will appeal to the intended user. Create own design criteria and specification. Come up with innovative design ideas. Follow and refine a logical plan. Use annotated sketches, cross-sectional planning and exploded diagrams. Clearly explain how parts of a design will work, and how they are fit for purpose. Independently model and refine design ideas by making prototypes and using pattern pieces. Use computer-aided designs.
Make	Select suitable tools/equipment, explain choices and begin to use them accurately. Select appropriate materials that are fit for purpose. Work through a plan in order. Begin to measure, mark out, cut and shape materials/components with some accuracy. Begin to assemble, join and combine materials and components with some accuracy. Begin to apply a range of finishing techniques with some accuracy and support.	Select suitable tools and equipment, explain choices in relation to required techniques and use them accurately. Select appropriate materials, fit for purpose and explain their choices. Work through a plan in order. Realise if a product is going to be good quality. Measure, mark out, cut and shape materials/components with some accuracy. Assemble, join and combine materials and components with some accuracy. Apply a some finishing techniques with some accuracy.	Use selected tools/equipment with good level of precision. Produce suitable lists of tools, equipment/materials needed. Select appropriate materials, fit for purpose; explain choices, considering functionality. Create and follow a detailed step-by-step plan. Explain how product will appeal to an audience. Mainly accurately measure, mark out, cut and shape materials/components. Mainly accurately assemble, join and combine materials/components. Use techniques that involve a small number of steps. Apply a range of finishing techniques with some accuracy Begin to be resourceful with practical problems.	Use selected tools and equipment precisely. Produce suitable lists of tools, equipment and materials needed, considering possible constraints. Select appropriate materials, fit for purpose; explain choices, considering functionality and aesthetics. Create, follow, and adapt detailed step-by-step plans. Explain how product will appeal to audience; make changes to improve quality. Accurately measure, mark out, cut and shape materials/components. Accurately assemble, join and combine materials/components. Accurately apply a range of finishing techniques. Use techniques that involve a number of steps. Be resourceful with practical problems.
Evaluate	Use design criteria to evaluate finished product. Say what I would change to make design better. Begin to evaluate existing products, considering: how well they have been made, materials, whether they work, how they have been made and if they are fit for purpose. Learn about some inventors/designers/ engineers/ manufacturers of groundbreaking products.	Refer to design criteria while designing and making. Use criteria to evaluate product. Begin to explain how I could improve an original design. Evaluate existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose. Research whether products can be recycled or reused. Know about some inventors/designers/ engineers/manufacturers of ground-breaking products.	Evaluate quality of a design while designing and making. Evaluate ideas and finished product against specification, considering purpose and appearance. Test and evaluate a final product. Evaluate and discuss existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose. Research how sustainable some materials are. Talk about some key inventors/designers/ engineers/ manufacturers of groundbreaking products.	Evaluate quality of a design while designing and making; is it fit for purpose? Keep checking a design is the best it can be. Evaluate ideas and finished product against specification, stating if it's fit for purpose. Test and evaluate a final product; explain what would improve it and the effect different resources may have had. Consider the impact of products beyond their intended purpose. Discuss some key inventors/designers/ engineers/ manufacturers of groundbreaking products/designs.

SVPS Curriculum Concepts

Diversity and Adversity		The story of Lewis Latimer—the uncredited inventor!		
Change and Continuity	How have wild shelters evolved throughout time?			
Locality and Context	Shelters build on the school grounds in the woodlands.		Part of Captain Scott's Antarctic team came from Torquay.	Isambard Kingdom Brunel build many of the most iconic