

St Helens Progression in Design and Technology – Practical skills, techniques and vocabulary for different areas.

This document aims to give guidance on the progression of design and technology skills and techniques across the year groups and to aid planning. It can also be used to differentiate work, and expectations, appropriately for pupils working above and below age-related expectations (particularly SEND pupils and GD pupils). Potential GD pupils should also be encouraged to produce work with greater independence as well as be encouraged to experiment with and use materials and methods of their own choice. Their increasingly critical thinking and in-depth evaluation of their own and others' designs or work should be reflected in their sketch books. Refer to the long term plan to check coverage of skills taught in previous year groups. Also refer to the Pupil Asset document which breaks down objectives into Design, Making and Evaluating. This document breaks down 'Making: Practical skills and techniques' into specific areas of DT.

	Reception	Year 1 IN ADDITION TO PREVIOUS YEARS:	Year 2 IN ADDITION TO PREVIOUS YEARS:	Year 3 IN ADDITION TO PREVIOUS YEARS:	Year 4 IN ADDITION TO PREVIOUS YEARS:	Year 5 IN ADDITION TO PREVIOUS YEARS:	Year 6 IN ADDITION TO PREVIOUS YEARS:
Making: Practical skills and techniques for CONSTRUCTION (Mechanisms, Structures, Electrical Systems)	• Explore a variety of materials, tools and techniques, experimenting with design, form and function. • Represent and construct my own ideas, thoughts and feelings through design. • Explore different techniques for joining materials, such as how to use adhesive tape and different sorts of glue. • Use a range of materials and tools with care and precision	• Mark materials before cutting. • Cut paper and other materials safely and with some accuracy. • Join paper and other materials using a variety of basic methods such as gluing, taping, clipping, tying. • Use simple components, such as split pins. • Create a basic mechanism (lever/slider). • Test their product as they work. • Experiment with ways to make a structure stiffer/more stable as they work.	• Mark materials before cutting and sometimes measure. • Cut paper and other materials safely and with increasing accuracy. • Begin to choose the most effective joining methods for the task/materials. • Use simple components, such as split pins. • Test their product as they work, to see if it meets the requirements of the intended user. • Apply their knowledge of materials to make a structure stiffer/more stable as they work.	• Measure and mark materials before cutting. • Cut materials accurately, using appropriate tools. • Join a range of materials using a variety of methods, usually choosing the method most suited to the task. • Test their product as they work, making informed adjustments to ensure their product meets the design criteria. • Apply their prior knowledge and understanding to make structures stiffer/ more stable as they work. • Create a working mechanism (levers and linkages) and incorporate it into their product. • Pay attention to the finishing of their product.	• Measure and mark materials before cutting. • Cut materials accurately, using appropriate tools. • Score and fold paper/card accurately. • Join a range of materials using a variety of methods, usually choosing the method most suited to the task. • Test their product as they work, making informed adjustments to ensure their product meets the design criteria. • Apply their prior knowledge and understanding to make structures stiffer/ more stable as they work. • Create a basic electrical circuit and incorporate it into their product. • Pay attention to the finishing of their product.	• Measure and mark materials with increased accuracy, before cutting. • Cut materials accurately, using appropriate tools. • Join a range of materials using a variety of suitable methods. • Test their product as they work, making informed adjustments and sometimes anticipating problems. • Apply their prior knowledge and understanding to make structures stiffer/ more stable as they work. • Create a polished and well-finished product.	• Measure and mark materials with increased accuracy, before cutting. • Cut materials accurately, using appropriate tools. • Join a range of materials using a variety of suitable methods. • Test their product as they work, making informed adjustments and striving to address any anticipated problems. • Apply their prior knowledge and understanding to make structures stiffer/ more stable as they work. • Create a working mechanism (pulleys and gears) and incorporate it into their product. • Create a basic electrical circuit and incorporate it into their product. • Programme a computer to control their product. • Create a polished and well-finished product.

Making: Practical skills and techniques for FOOD & NUTRITION	•Begin to work safely and hygienically. •Weigh using non-statutory measures e.g. spoons/cups. •Begin to use some techniques e.g. mix, spread, knead. •Make healthy choices in relation to eating. •Know the importance of a healthy diet.	• Observe basic food hygiene procedures with support – washing hands, washing fruit/veg, keeping meat separate, cleaning surfaces before and after preparing food. • Peel fruit where necessary. • Use a knife and chopping board safely. • Serve food in an appealing way. • Clean/wash up after themselves.	• Observe basic food hygiene procedures with support – washing hands; washing fruit/veg; keeping meat separate; cleaning surfaces before and after preparing food. • Use a knife and chopping board to neatly chop ingredients. • Use a spoon to add condiments. • Serve food in an appealing way. • Clean/wash up after themselves.	• Observe basic food hygiene procedures – washing hands, washing fruit/veg; avoiding cross contamination when preparing raw meat; cleaning surfaces before and after preparing food. • Use appropriate tools to peel, chop, slice, grate and mix ingredients. • Make a simple sauce. • Cook the product in the oven, ensuring it is fully cooked. • Serve food in an appealing way. • Clean/wash up after themselves.	• Observe basic food hygiene procedures - washing hands, washing fruit/veg; avoiding cross contamination when preparing raw meat; cleaning surfaces before and after preparing food. • Use appropriate tools to peel, chop, slice, grate and mix ingredients. • Knead and roll out dough. • Cook the product in the oven, ensuring it is fully cooked. • Serve food in an appealing way. • Clean/wash up after themselves.	• Observe basic food hygiene procedures – washing hands, washing fruit/veg; avoiding cross contamination when preparing raw meat; cleaning surfaces before and after preparing food. • Use appropriate tools to peel, chop, slice, grate and mix ingredients. • Cook food in the oven and/or on a stove top, ensuring it is fully cooked. • Serve food in an appealing way. • Clean/wash up after themselves.	• Observe basic food hygiene procedures – washing hands, washing fruit/veg; avoiding cross contamination when preparing raw meat; cleaning surfaces before and after preparing food. • Use appropriate tools to peel, chop, slice, grate and mix ingredients. • Cook food in the oven and/or on a stove top, ensuring it is fully cooked. • Serve food in an appealing way. • Clean/wash up after themselves.
Subject Specific Vocabulary KEY WORDS	Please note these definitions of key words which need to be understood in the specific context of primary Design and Technology , design 1. <i>plan to do something with a specific purpose in mind</i> 2. <i>do a drawing of something before making it</i> designer 1. <i>a person who creates a plan for something they want to make</i> 2. <i>KS2 – also focus on ‘designer’ as a job title/career, e.g. ‘fashion designer’</i> technology <i>using what we know about Science to help us make useful things</i> product <i>an outcome piece with a function/that does something - not necessarily a thing which can be sold</i> brief <i>the initial instructions that tell us what we need to do in our project</i> user <i>the person who we are designing our product for, whose needs/wants must be taken into account</i>						
Subject Specific Vocabulary by Year Group	Plan, ideas, design, make, build, construct, join, shape, tools, change, like, dislike, different, improve, healthy, unhealthy	design designer materials tools brief product evaluate problem-solving	design designer brief product evaluate label technology problem-solving	designer technology product intended user annotated sketch component	designer technology product intended user design criteria computer-aided design	designer technology product intended user design criteria cross-sectional diagram	designer technology product intended user design criteria exploded diagram innovation