	Developing, planning and communicating ideas	Working with tools, equipment, materials and components	Evaluating processes and products	Knowledge and understanding of materials and components
Early Years	I can build and construct with a wide range of objects, selecting appropriate resources and adapting my work where necessary. I can select the tools and techniques I need to shape, assemble and join the materials I am using.	I can use a small range of equipment. I can handle tools, objects, construction and malleable materials safely and with increasing control. I can use programmable toys to support my learning.	I can ask questions about why things happen and how things work	I can select and use activities and resources independently (where appropriate).
Year 1	<ul> <li>I can generate ideas by drawing on my own experiences.</li> <li>I can develop ideas by exploring different materials and putting together components.</li> <li>I can talk about my ideas.</li> <li>I can plan by suggesting what to do next (may be prompted by adult).</li> <li>I can communicate my ideas by drawing and making models.</li> </ul>	With help, I can select tools, techniques and materials for making my product from a range suggested by the teacher. I can explore the sensory qualities of materials. I can mark out, cut and shape basic materials. I can assemble/join materials and components.	I can talk about my ideas. I can identify what I could have done differently (may be prompted by adult).	With help, I can show how to make materials stronger [for example, folding paper to make it stiffer, plaiting string to make it stronger]. I can talk about what I notice about different mechanisms [for example, wheels and axles, joints that allow movement].

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Year 2	I can generate ideas by drawing on my own and other people's experiences. I can develop ideas by shaping materials and putting together components. I can talk about my ideas. I can plan by suggesting what to do next as my ideas develop. I can communicate my ideas using a variety of methods, including drawing and making models.	I can select tools, techniques and materials for making my product from a range suggested by the teacher. I can explore the sensory qualities of materials. I can measure, mark out, cut and shape a range of materials. I can assemble, join and combine materials and components. I can use simple finishing techniques to improve the appearance of my product.	I can talk about my ideas, saying what I like and dislike. I can identify what I could have done differently or how I could improve my work in the future.	I know about the working characteristics of materials [for example, folding paper to make it stiffer, plaiting string to make it stronger]. I understand how mechanisms can be used in different ways [for example, wheels and axles, joints that allow movement].

	Developing, planning and communicating ideas	Working with tools, equipment, materials and components	Evaluating processes and products	Knowledge and understanding of materials and components
Year 3/4	I can generate ideas for products after discussing with others who will use them and what they will be used for. I can develop some ideas and explain them. I can plan what I have to do, suggesting a sequence of actions.	I can select appropriate tools and techniques from a limited range. I can suggest alternative ways of making my product, if first attempts fail. I can explore the sensory qualities of materials. I can measure, mark out, cut, assemble, join and combine a few components and materials. I can use finishing techniques to strengthen and improve the appearance of my product from a range of equipment provided.	I can reflect on the progress of my work as I design and make, identifying ways I could improve my products. I can recognise that the quality of a product depends on how well it is made.	I know how the working characteristics of materials affect the ways they are used. I know how materials can be combined and mixed to create more useful properties [for example, using cardboard triangles on the corners of a wooden framework to strengthen it, using a particular stitch to make something more secure]. I know how electrical circuits can be used. (Y4)

	Developing, planning and communicating ideas	Working with tools, equipment, materials and components	Evaluating processes and products	Knowledge and understanding of materials and components
Year 5 / 6	I can generate ideas for products after thinking about who will use them and what they will be used for, using information from a number of sources, including ICT-based sources. I can develop ideas and explain them clearly, putting together a list of what I want the design to achieve. I can plan what I have to do, suggesting a sequence of actions and alternatives, if needed. I can communicate design ideas in different ways as these develop, bearing in mind aesthetic qualities (overall appearance), and the uses and purposes for which the product is intended.	I can select appropriate tools and techniques for making my product. I can suggest alternative ways of making my product, if first attempts fail. I can explore the sensory qualities of materials and how to use different materials. I can measure, mark out, cut and shape a range of materials, and assemble, join and combine components and materials accurately. I can select and use finishing techniques to strengthen and improve the appearance of my product, using a range of equipment and drawing upon, where appropriate, internet research.	I can reflect on the progress of my work as I design and make, identifying ways to improve my products. I can carry out appropriate tests before making any changes if necessary. I can recognise that the quality of a product depends on how well it is made and how well it meets its intended purpose.	I know how the working characteristics of materials affect the ways they are used. I know how materials can be combined and mixed to create more useful properties [for example, using cardboard triangles on the corners of a wooden framework to strengthen it]. I know how mechanisms can be used to make things move in different ways, using a range of equipment including an ICT control program. I know how electrical circuits, including those with simple switches, can be used to achieve results that work.