

Wood End Park Academy

DT Skills Ladder, adapted for new National Curriculum 2014

PoS	Generating ideas 1a, 1b	Making plans 1b, 1c	Communicating ideas 1b, 1d	Selecting equipment 2a, 2b, 2c, 4a, 4b, 4d	Increasing accuracy 2b, 2d, 2e, 2f, 4b, 4c	Evaluation & reflection 2b, 3a, 3b, 3c
New NC	Design			Technical Knowledge	Make	Evaluate
Level 1	I can generate ideas and recognise characteristics of familiar products.	<u>My plans show that the design is purposeful, functional and appealing to the audience.</u>	I can use pictures and words to describe what I want to do.	I explain what I am making and which tools I am using.	I can use a <u>range of tools and equipment</u>	I recognise what I have done well as my work progresses, and suggest things I could do better in the future.
Level 2	I can generate ideas and plan what to do next, based on my experience of working with materials and components.	<u>My plans show that the design is purposeful, functional and appealing to the audience based on design criteria</u>	<u>I generate, develop, model and communicate ideas through talking, drawing, templates, mock ups and ICT</u>	I select appropriate tools, techniques and materials, <u>exploring how they can be made stronger, stiffer and more stable</u> I can explore and use mechanisms	I can use <u>a wide range of materials and components</u> to assemble, join and combine <u>construction materials, textiles and ingredients</u>	I can evaluate ideas and products against design criteria. <u>I can explore and evaluate a range of existing products</u>
Level 3	I can generate ideas and recognise that my designs have to meet a range of different needs <u>from research completed</u>	I can make realistic plans for an <u>innovative, functional and appealing product</u>	<u>I can generate, develop and model ideas through discussion, annotated sketches and diagrams.</u>	I can think ahead about the order of my work, choosing appropriate tools, equipment, materials, components and <u>techniques to strengthen, stiffen and reinforce more complex structures</u>	I can <u>select from and use a wider range of</u> tools and equipment with increasing accuracy to cut and shape materials and to put together components.	I can identify where evaluation of the design and make process and my products has led to improvements.

Level 4	I can generate ideas by collecting and <u>using research and design criteria</u>	I can produce step-by-step plans for a <u>product that is fit for purpose</u>	<u>I can generate, develop and model ideas through cross sectional and exploded diagrams and prototypes</u>	I can select and work with a range of tools and equipment. <u>I can understand and use mechanical systems</u> <u>I can understand and use electrical systems</u>	<u>I can select from and use a wider range of materials and components with accuracy, paying attention to quality of finish and to function.</u>	I can reflect on my designs as they develop, bearing in mind the way the product will be used. <u>I can consider the views of others as to what is working well and what could be improved.</u>
Level 5	I can <u>research from various sources of information.</u>	I can use my <u>understanding of the design criteria</u> when developing and communicating my own ideas for a <u>particular audience</u> I work from my own detailed plans, modifying them where appropriate.	<u>I can generate, develop and model ideas through patterns pieces and CAD.</u>	I work with a range of tools, materials, equipment, components and processes with some precision. <u>I can apply their understanding of computing to programme, monitor and control the products</u>	<u>I can select from and use a wider range of materials and components with accuracy, according to their functional properties and aesthetic qualities</u> I check my work as it develops and modify my approach in the light of progress.	I test and evaluate my products, showing that I understand the situations in which my designs will have to function and am aware of resources as a constraint. I evaluate my products and my use of information sources. <u>I understand how key events and individuals in D&T have shaped the world</u>