Riverside Meadows Academy – KS3 Design & Technology Level Descriptors		
Subject		
Strands		
National	Pupils generate ideas for purposeful designs and recognise characteristics of familiar products.	
Curriculum	They show that, with help, they can create products for a use and purpose, using their practical ideas.	
Level 1	They use models, pictures and words to describe what they want to do.	
	They explain what they are making and which tools they are using.	
	They use tools and manipulate materials with help, where needed.	
	They talk about their own and other people's work in simple terms and describe how a product works	
National	Pupils generate ideas based on their investigations of products.	
Curriculum	They use models, pictures and words to describe their designs.	
Level 2	They plan what to do next based on their experience of working with materials and components.	
	Th <mark>ey select appropriate tools, techniques and materials, explaining their choices. </mark>	
	They assemble, join and combine materials and components in a variety of ways to make functional products.	
	They recognise what they have done well and suggest things they could do better in the future	
National	Pupils generate ideas and recognise that their designs have to meet a range of different needs and users.	
Curriculum	 They clarify ideas when asked and use words, labelled sketches and models to communicate the details of their designs. 	
Level 3	 They think ahead about the order of their work and make realistic plans for achieving their aims. 	
	 They choose appropriate tools, equipment, components and techniques to make their functional products. 	
	 They apply their knowledge and understanding of the nature of materials to cut, shape and join them with some accuracy. 	
	After reflecting on the design and make process and their products, they identify some improvements	
National	Pupils generate ideas by collecting and using information.	
Curriculum	They take users' views about aesthetic and technical issues into account as they respond to briefs.	
Level 4	They communicate alternative ideas using words, labelled sketches and models, showing that they are aware of constraints. They use	
	some ideas from othe <mark>rs' des</mark> igning to inform their own work.	
	They produce step-by-step plans and then select and work with a range of tools and equipment.	
	They apply their knowledge and understanding of materials, ingredients and components, and work with them with some accuracy,	
	paying attention to quality of finish and to function.	
	They identify what is working well and what could be improved to overcome technical problems.	
	They reflect on their designs as they develop, recognising the significance of knowledge and previous experience	
National	Pupils develop ideas by drawing on and using various sources of information.	
Curriculum	They clarify their ideas through discussion, drawing and modelling, showing understanding of aesthetic and economic dimensions. They	
Level 5	respond to briefs showing understanding of how culture and society are reflected in familiar products when developing and	
	communicating their own ideas.	

	They show that they are aware of constraints as they apply knowledge and understanding of materials, ingredients and techniques. They
	use understanding of others' designing as they develop their work.
	They work from their own detailed plans, modifying them where appropriate.
	 They work with a range of tools, materials, ingredients, equipment, components and processes with some precision.
	They check their work as it develops, solve technical problems and show some evidence of creativity as they modify their approach in
	the light of progress.
	 They test and evaluate their products, showing that they understand the situations in which the products will function.
National Curriculum	 Pupils draw on and use a range of sources of information, and show that they understand the form and function of familiar products as they develop and model ideas.
Level 6	• They respond creatively to briefs, exploring and testing their design thinking.
	They develop detailed criteria for their products and use these to explore proposals.
	• They apply their knowledge and understanding by responding to several aspects of the problem.
	They recognise the significance of others' designing and modify their approaches accordingly.
	They produce plans that outline alternative methods of making progress.
	They work with a range of tools, materials, ingredients, equipment, components and processes, showing that they understand their
	characteristics.
	They check their work as it develops and solve technical problems by modifying their approach in the light of progress.
	They evaluate how effectively they have used information sources, using the results of their research to inform their judgements when
	developing products.
	They evaluate their products as they are being used, and identify ways of improving them
National	Pupils use a wide range of appropriate sources of information when developing and modelling ideas.
Curriculum	They investigate form, function and production processes as they respond creatively to briefs.
Level 7	They apply their knowledge and understanding, recognising the different needs of a range of users, and search for trends and patterns in
	existing solutions as they develop fully realistic products.
	They use their understanding of others' designing to inform their own as they communicate creative ideas.
	They produce plans that predict the time needed to carry out the main stages of making products.
	They work with a range of tools, materials, ingredients, equipment, components and processes, taking full account of their
	characteristics.
	• They adapt their methods of manufacture to changing circumstances as they solve technical problems, providing a sound explanation for
	any change from the design proposal.
	They select appropriate techniques to evaluate how their products would perform when used and modify their products in the light of
	this evaluation to improve their performance
National	Pupils use a range of strategies to fully develop and model appropriate ideas, responding to information they have identified. They
Curriculum	identify conflicting demands on a product and respond creatively to briefs, suggesting ways forward and explaining how their ideas
Level 8	address these demands.
	When applying knowledge they make decisions on materials, ingredients and techniques based on their understanding of physical
	properties and working characteristics.
	 They use their understanding of others' designing by reinterpreting and applying learning in new contexts.
	,

	 They organise their work so that they can carry out processes accurately and consistently, and use tools, equipment, materials, ingredients and components with precision. They use accurate testing to inform their judgements when solving technical problems. They identify a broad range of criteria for evaluating their products, clearly relating their findings to environmental, ethical, and social and cultural dimensions.
Exceptional	Pupils seek out information to help their design thinking.
Progress	They recognise how products contribute to the lifestyle and choices of a variety of client groups as they develop and model ideas in an
	innovative way.
	 Responding creatively to briefs, they are discriminating in their selection and use of information sources to support their work. They
	interpret and apply knowledge and understanding creatively in new design contexts and communicate ideas in new or unexpected ways.
	They use understanding of others' designing in innovative ways.
	• They work with tools, equipment, materials, ingredients and components to a high degree of precision.
	They make products that are reliable and robust and that fully meet the quality requirements given in the design proposal.
	They reflect critically and effectively throughout designing and making processes

