Art and D&T				
Year group	**Design**	**Make**	**Evaluate**	**Technical knowledge**
1	• Design purposeful, functional, appealing products for themselves and other users based on design criteria e.g. ***Freeze It***-making an igloo/designing weather appropriate clothing	• Begin to use a range of art and design techniques using colour, texture, pattern, line, form, shape and space • Use a range of materials creatively to design and make products e.g. ***The Magic Toymaker-*** *designing and making their own toys.* • Begin to use a range of tools and equipment to perform practical tasks. • Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. e.g. ***The Magic Toymaker***-making their own toys. • Use drawing, painting and sculpture to develop and share their ideas, experiences and imagination • Use the basic principles of a healthy and varied diet to prepare dishes *e.g.* ***I'm Alive***	• Evaluate their ideas and products against design criteria	• Understand where food comes from. • Know the basic principles of a healthy and varied diet. e.g. ***I'm Alive*** • Know about the work of artists and designers e.g. **I'm Alive** Giuseppe Arcimboldi's vegetable paintings
2	• Generate design ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology • Develop, model and communicate their ideas e.g. **From A-B** end project to build a city.	• Build structures, exploring how they can be made stronger, stiffer and more stable e.g. ***From A-B*** researching and designing their own buildings • Develop a wide range of art and design techniques in using colour, pattern, texture, line, shape, form and space • Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] • Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics e.g. ***From A-B*** -Batik painting, paper Mache and paint • Use drawing, painting and sculpture to develop and share their ideas, experiences and imagination	• Explore and evaluate a range of existing products and use this information to inform their own designs • Evaluate their own and others' products against design criteria	• Know about the work of a range of artists, craft makers and designers, describing the differences and similarities between different practices and disciplines, and making links to their own work e.g. **From A-B** designers of modes of transport and comparing transport today with the past/ various architects of famous buildings
3	• Generate, develop, model and communicate their ideas through discussion, annotated sketches and prototypes e.g. ***Footprints From the Past***-dinosaur clay models • Use research to inform their design choices	• Begin to master art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay] • Prepare and cook savoury dishes using a range of cooking techniques e.g***. Different Places Similar Lives***-dishes from around the world • Use a wider range of materials and components, including: clay, paint, printmaking materials, felt tip pens and pencils	• Review and revisit ideas recorded in IPC sketch books • Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • Investigate and analyse a range of existing products	• Understand how key events and individuals in design and technology have helped shape the world e.g. ***Footprints From the Past***- tessellation M.C. Escher graphic artist • Understand and apply the principles of a healthy and varied diet e.g***. Different Places Similar Lives***-dishes from around the world

4	• Generate, develop, model and communicate their ideas through discussion and annotated sketches. • Use research to begin to develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups e.g. ***Building a Village*** Using historical knowledge to re-create Anglo Saxon arts and crafts	• Improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay] e.g. ***Building a Village***-Anglo Saxon coil pots • Use a wider range of tools and equipment to perform practical tasks e.g. ***Building a Village–*** glue guns to make felt brooches • Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques e.g. ***Building a Village***-Anglo Saxon shortbread	• Develop the use of IPC sketch books to record their observations and use them to review and revisit ideas • Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • Investigate and analyse a range of existing products • Understand how key events and individuals in design and technology have helped shape the world-e.g. ***They Made a Difference***-Tesla	• Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] e.g. ***They Made a Difference*** • Understand and apply the principles of a healthy and varied diet e.g. ***How Humans Work***
5	• Research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups • Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design • Begin to apply their understanding of computing to program, monitor and control their products e.g. ***Fascinating Forces and Full Power***-hack saws and glue guns	• Build on their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay] • Begin to select from and use a wider range of tools and equipment to perform practical tasks e.g. ***Fascinating Forces and Full Power***-hack saws and glue guns • Select from and use a wider range of materials and components, including construction materials e.g. ***Fascinating Forces and Full Power***-batons, dowel, cardboard tissue paper • Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques e.g. ***Going Global***	• Create IPC sketch books to record their observations and use them to review and revisit ideas • Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • Investigate and analyse a range of existing products • Build on their understanding of how key events and individuals in design and technology have helped shape the world	• Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] • Apply their understanding of how to strengthen, stiffen and reinforce more complex structures • Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages e.g. ***Fascinating Forces and Full Power-***building their own cars • Understand and apply the principles of a healthy and varied diet e.g. ***Going Global*** • Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed e.g. ***Going Global***
6	• Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups • Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design	• Continue to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay] e.g. ***Battle of Britain (WW11) and end of Year Production*** • Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately	• Create detailed IPC sketch books to record their observations and use them to review and revisit ideas • Give detailed evaluations of their ideas and products against their own design criteria and consider the views of others to improve their work • Investigate and analyse a range of existing products e.g. ***End of Year Production*** -Set and costumes from professional shows • Draw on prior knowledge and build on their understanding of how key events and individuals in design and technology have helped shape the world	• Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages) e.g. ***End of Year Production***