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| **mage result for aquila archbishop courtenay Progression Map****ABC Design & Technology***Each skill at a glance for each year group so that planning can build on previous knowledge.* *Skills to be identified on long term and medium-term planning for each hub.* |
| **Skill** | **EYFS** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** |
| **Thread** | Technology: Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.Exploring and using media and materials: Children sing songs, make music and dance, and experiment with ways of changing them. They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. | Designdesign purposeful, functional, appealing products for themselves and other users based on design criteriagenerate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technologyMakeselect 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 characteristicsEvaluateexplore and evaluate a range of existing productsevaluate their ideas and products against design criteriaTechnical knowledgebuild structures, exploring how they can be made stronger, stiffer and more stableexplore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.Cooking and Nutritionuse the basic principles of a healthy and varied diet to prepare dishesunderstand where food comes from. | Designuse research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groupsgenerate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided designMakeselect from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accuratelyselect from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualitiesEvaluateinvestigate and analyse a range of existing productsevaluate their ideas and products against their own design criteria and consider the views of others to improve their workunderstand how key events and individuals in design and technology have helped shape the worldTechnical knowledgeapply their understanding of how to strengthen, stiffen and reinforce more complex structuresunderstand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]apply their understanding of computing to program, monitor and control their products.Cooking and Nutritionunderstand and apply the principles of a healthy and varied dietprepare and cook a variety of predominantly savoury dishes using a range of cooking techniquesunderstand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. |
| **Skill** | **EYFS** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** |
| **Design** | Produce recognisable drawings of people and objects.Articulate what they are drawing to an adult | Think of own ideas for design.Use pictures and words to plan.Design a product for themselves, following designcriteria.Work in a range of contexts (imaginary, home, school, wider community, story based). | Think of own ideas andplan what to do next.Describe designs using pictures, diagrams,models, mock-ups, words and ICT.Design a product forthemselves and others,following design criteria.Work confidently in a range of contexts(imaginary, home, school, widercommunity, story-basedetc). | Create a design thatmeets a range ofrequirements.Consider the equipmentand tools needed whenplanning.Describe a design usingan accurately labelleddiagram, and in words. | Generate more than one idea for how to create a product.Gather information to help design a successful product (i.e. by asking others' views).Produce a detailed plan with labelled diagrams, a written explanation and step-by-step guide.Suggest improvements to develop and refine a planned idea. | Generate a range of ideas after collating relevant information (i.e.users’ views).Produce a detailed plan, with step-by-step instructions, cross-sectionaldiagrams andprototypes.Suggest alternativeplans, considering thepositive aspects anddrawbacks of each. | Use a range of information to inform a design (i.e. market research using surveys, interviews, questionnaires or web-based resources).Produce a detailed plan, with cross-sectional diagrams and computer-generated designs).Work within constraints, refining and justifying plans as necessary. |
| **Skill** | **EYFS** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** |
| **Make** | Use scissors along straight and curved shapeBuild and join 3D structures using a range of materials for a specific purpose Experiments with colour, design, texture and functionUse a wide range of tools with greater accuracy to shape, assemble and join materials – glue, tape, scissors, string, staples, clips, weaving | Explain what is being made and why.Select appropriatetools andequipment for the purpose.Use sheet materialsand constructiontools withappropriatesupervision. | Explain what isbeing made andwhy the audiencewill like it.Choose appropriatetools andequipment,describing andexplaining why theyare being used.Use sheet materialsand constructiontools withappropriatesupervision.Cut, then jointextiles using arunning stitch,over sewing orglue. Decorateusing a range ofitems (buttons,sequins, beads,ribbons etc). | Use a range of toolsand equipmentaccurately.Measure, mark out,assemble and joinmaterials andcomponents withsome accuracy.Use sheet materialsand constructiontools withappropriatesupervision. | Use a range of toolsand equipmentwith accuracy.Measure, mark out,join, assemblematerials andcomponents withaccuracy.Use sheet materialsand constructiontools withappropriatesupervision.Cut, then jointextiles using arunning stitch,over sewing, backstitch or fastenings.Understand seamallowances, create simple patterns andappropriate decorationtechniques (e.g. applique). | Use a range of toolsand equipment expertly.Consider theaesthetic qualitiesand functionality oftheir work whenmaking.Use sheet andconstruction materialsappropriately. | Use a range of tools and equipment precisely.Consider the aesthetic qualities and functionality of their product as making it, refining details as necessary.Use sheet and construction materials appropriately.Pin and tack fabrics, use patterns and seam allowances and join fabrics to make quality products. |
| **Skill** | **EYFS** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** |
| **Evaluate** |  | Talk about ownand pre-existingproducts, sayingwhat is good orbad about them.Say whether their product does what it is meant to (fits the designbrief) and how itcould beimproved. | Describe howtheir own andpre-existingproducts work,evaluating whatwent well andwhat could bedone differently.Suggest whatwent well andwhat would bedone differentlywhen evaluatingtheir ownproduct. | Evaluate own andpre-existingproducts.Suggest whatcould be changedto improve adesign, beginningto link this to thedesign brief. | Evaluate theappearance andusability of ownand pre-existingproducts. Explainhow the originaldesign could beimproved,considering theappearance andusability andlinking this to thedesign brief. | Evaluate the appearance and function of a product (own and pre-existing) against the original criteria, saying whether it is fit for purpose.Suggest improvements that could be made, considering materials and methods that have been used. | Evaluate the appearance andtest the function of a product (own and pre-existing) against the original criteria, saying whether it is fit for purpose.Suggest improvements that could be made, consideringmaterials, methods, sustainability of the product andhow much a product would cost to make. |
| **Skill** | **EYFS** | **KS1** | **LKS2** | **UKS2** |
| **Technical Knowledge** |  | Know about movement of simplemechanisms such as levers, sliders, wheels and axels. | Know about movement of simple mechanisms such as levers and linkages. | Understand how mechanical systems such as cams, pulleys or gears create movement. |
| **Skill** | **EYFS** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** |
| **Food and****Nutrition** | Children know the importance for good health of physical exercise, and a healthy diet, and talk about ways to keep healthy and safe. | Know how to peel, cut, grate, mix andmould foods (with close supervision). | Know how to peel, cut, grate, mix and mould foods (withsupervision). | Know how to peel,cut, grate, mix, mould and begin tocook foods (usingtoasters andmicrowaves withsupervision). | Know how to peel,cut, grate, mix,mould and begin tocook foods (usingtoasters andmicrowaves withsupervision). | Cut, mix, mouldand begin to use hobs to heat foodwith appropriatesupervision. | Cut, mix, mouldand use hobs toheat food,developingindependence withthis as appropriate. |