|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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. | | | | | | Design  design purposeful, functional, appealing products for themselves and other users based on design criteria  generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology  Make  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  Evaluate  explore and evaluate a range of existing products  evaluate their ideas and products against design criteria  Technical knowledge  build structures, exploring how they can be made stronger, stiffer and more stable  explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.  Cooking and Nutrition  use the basic principles of a healthy and varied diet to prepare dishes  understand where food comes from. | | | | | | | | | | | Design  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  Make  select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately  select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities  Evaluate  investigate and analyse a range of existing products  evaluate their ideas and products against their own design criteria and consider the views of others to improve their work  understand how key events and individuals in design and technology have helped shape the world  Technical knowledge  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]  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 Nutrition  understand and apply the principles of a healthy and varied diet  prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques  understand 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 design  criteria.  Work in a range of contexts (imaginary, home, school, wider community, story based). | | | | | | Think of own ideas and  plan what to do next.  Describe designs using pictures, diagrams,  models, mock-ups, words and ICT.  Design a product for  themselves and others,  following design criteria.  Work confidently in a range of contexts  (imaginary, home, school, wider  community, story-based  etc). | | | | Create a design that  meets a range of  requirements.  Consider the equipment  and tools needed when  planning.  Describe a design using  an accurately labelled  diagram, 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-sectional  diagrams and  prototypes.  Suggest alternative  plans, considering the  positive aspects and  drawbacks 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 shape  Build and join 3D structures using a range of materials for a specific purpose    Experiments with colour, design, texture and function  Use 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 appropriate  tools and  equipment for the purpose.  Use sheet materials  and construction  tools with  appropriate  supervision. | | | | Explain what is  being made and  why the audience  will like it.  Choose appropriate  tools and  equipment,  describing and  explaining why they  are being used.  Use sheet materials  and construction  tools with  appropriate  supervision.  Cut, then join  textiles using a  running stitch,  over sewing or  glue. Decorate  using a range of  items (buttons,  sequins, beads,  ribbons etc). | | | | Use a range of tools  and equipment  accurately.  Measure, mark out,  assemble and join  materials and  components with  some accuracy.  Use sheet materials  and construction  tools with  appropriate  supervision. | | | | Use a range of tools  and equipment  with accuracy.  Measure, mark out,  join, assemble  materials and  components with  accuracy.  Use sheet materials  and construction  tools with  appropriate  supervision.  Cut, then join  textiles using a  running stitch,  over sewing, back  stitch or fastenings.  Understand seam  allowances, create simple patterns and  appropriate decoration  techniques (e.g. applique). | | Use a range of tools  and equipment expertly.  Consider the  aesthetic qualities  and functionality of  their work when  making.  Use sheet and  construction materials  appropriately. | | | | 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 own  and pre-existing  products, saying  what is good or  bad about them.  Say whether their product does what it is meant to (fits the design  brief) and how it  could be  improved. | | | | Describe how  their own and  pre-existing  products work,  evaluating what  went well and  what could be  done differently.  Suggest what  went well and  what would be  done differently  when evaluating  their own  product. | | | | | | Evaluate own and  pre-existing  products.  Suggest what  could be changed  to improve a  design, beginning  to link this to the  design brief. | | Evaluate the  appearance and  usability of own  and pre-existing  products.  Explain  how the original  design could be  improved,  considering the  appearance and  usability and  linking this to the  design 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 and  test 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, considering  materials, methods, sustainability of the product and  how much a product would cost to make. | | | |
| **Skill** | | | **EYFS** | | | **KS1** | | | | | **LKS2** | | | | | | | | **UKS2** | | | | | | | |
| **Technical Knowledge** | | |  | | | Know about movement of simple  mechanisms 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 and  mould foods (with close supervision). | | Know how to peel, cut, grate, mix and mould foods (with  supervision). | | | Know how to peel,  cut, grate, mix, mould and begin to  cook foods (using  toasters and  microwaves with  supervision). | | | | | Know how to peel,  cut, grate, mix,  mould and begin to  cook foods (using  toasters and  microwaves with  supervision). | | | Cut, mix, mould  and begin to use hobs to heat food  with appropriate  supervision. | | | | | Cut, mix, mould  and use hobs to  heat food,  developing  independence with  this as appropriate. | | |