

|        | Year 1   | Year 2  | Year 3   | Year 4  | Year 5  | Year 6   |
|--------|--|---|--|---|---|--|
| Design | To generate ideas from own<br>ideas an others experiences                        | To generate ideas from own<br>ideas an others experiences   | To generate ideas and recognise<br>that designs have to meet a range<br>of different needs                                 | To generate ideas by collecting<br>and using information  | To draw on and use various sources of information   | To draw on and use various<br>sources of information   |
|        | To develop ideas by shaping<br>materials and putting together<br>componants      | To develop ideas by shaping<br>materials and putting together<br>componants   | To make realistic plans to achieve aims  | To take the views of users' into<br>account when designing their<br>products  | To use understanding of familiar<br>products to help develop their<br>ideas   | To use understanding of familiar<br>products to help develop their<br>ideas                    |
|        | To talk about ideas  | To talk about ideas   | To think ahead about the order of<br>work, choose appropriate tools,<br>equipment, materials,<br>components and techniques | To begin to use step by step plans  | To work from detailed plans,<br>modifying where appropriate   | To work from detailed plans,<br>modifying where appropriate                                    |
|        | To plan by suggesting what to do next as ideas develop                           | To plan by suggesting what to do next as ideas develop  | To clarify ideas using labelled<br>sketches and models to<br>communicate details of the<br>design                          | To communicate alternative ideas<br>using words, labelled sketches<br>and models showing that they are<br>aware of the constraints of their<br>design | discussion, drawing and   | To clarify ideas through<br>discussion, drawing and<br>modelling                               |
|        | Communicate ideas using a<br>variety of method's including<br>drawing and models | To communicate ideas using a<br>variety of method's including<br>drawing and models<br>To think of ideas and plan what<br>to do next, based on their<br>knowledge of materials and<br>components.<br>To select appropriate tools,<br>techniques and materials,<br>explaining their choices<br>To use models, pictures and<br>words to describe my designs |  |   | To communicate ideas  | To communicate ideas   |
| Make   | To explore how moving objects work   | To make a structure that is strong  | To select the most appropriate tools and techniques to make my product   | To choose components that can<br>be controlled by switches or by<br>ICT equipment   | To use a motor in a product to move wheels, gears etc   | To use LEDs to make a circuit in a product   |
|        | To look at wheels, axles, turning<br>mechanisms, hinges and simple<br>levers     | To measure and mark out materials with care   | To come up with solutions to<br>problems as they happen  | To improve product after testing  | To use coding software to learn how to program and control  | To understand that LEDs need to<br>be the correct way round in a<br>circuit or they won't work |
|        |  | To use safe ways of cutting,<br>including using a saw   | To make a product that uses both electrical and mechanical components  | To ensure the product is well finished in a way that appeals  | To experiment with a range of<br>materials until they find the<br>correct ones for the job<br>(appropriate, affordability,<br>appeal) | To use coding softwear to<br>program and control   |

|          |                               | To use a range of joins   | To ensure the product is finished well                         | To use scoring and folding to shape materials accurately | To add colour and texture to their work         | To use cams to make a product that moves in an interesting way |
|----------|-------------------------------|---|--|--|---|--|
|          |                               |   | Well   |  | WORK  | that moves in an interesting way                               |
|          |                               | to make structures stronger by<br>folding, joining, or by shape<br>(columns, triangles) | To use appropriatemouldable materials suitable for the product | To make holes accurately                                 | To mark out using own patterns<br>and templetes |  |
|          |                               | To use accurate measurements  | To shape the product carefully                                 | To make cuts accurately and                              |   |  |
|          |                               | in cm   | using appropriate techniques and                               |  |   |  |
|          |                               |   | tools  | accurate   |   |  |
|          |                               | To use scissors precisely when  | To apply texture or design to the                              | To make sure methods of working                          |   |  |
|          |                               | cutting out   | product  | are precise  |   |  |
|          |                               | To join textiles using glue,  | To select appropriate textiles for                             |  |   |  |
|          |                               | staples, tying or a simple stitch   | my product   |  |   |  |
|          |                               | To make a textile product that is   | To use scissors accurately                                     |  |   |  |
|          |                               | finished well and does the job it   |  |  |   |  |
|          |                               | was made for  |  |  |   |  |
|          |                               | To know that textiles have  |  |  |   |  |
|          |                               | different properties (feel,   |  |  |   |  |
|          |                               | texture, insulation, waterproof)  |  |  |   |  |
|          |                               | To select the appropriate textile   |  |  |   |  |
|          |                               | so that it does the job well  |  |  |   |  |
| Evaluate |                               | To talk about ideas, saying what  | To reflect on work in relation to                              | To reflect on their designs and                          |   | To reflect on designs and develop                              |
|          |                               | they like and dislike   | intended use (and users) and                                   | develop them   | them  | them   |
|          |                               |   | identify improvements needed                                   |  |   |  |
|          | Identify what they could have | To identify what they could have  | , ,, ,   | To identify what is working well                         | To identify what is working well                | To identify what is working well                               |
|          |                               | done differently and how they   | first  | and what can be improved                                 | and what can be improved                        | and what can be improved                                       |
|          | •                             | could improve their work in the   |  |  |   |  |
|          | future                        | future  | To an extra south of a south of a                              |  | To have an average of the h                     | To have an even of the it                                      |
|          |                               | To recognise what has been  | To recognise quality depends on                                |  | To have an awareness of limit                   | To have an awareness of limit                                  |
|          |                               | donw well in their work   | how something is made and if it                                |  | resources (budget, time,                        | resources (budget, time,                                       |
|          |                               |   | meets its intended use   |  | availabilty)                                    | availabilty)<br>To have an awareness of limit                  |
|          |                               |   | To evaluate products and suggest                               |  | To understand how key events                    |  |
|          |                               |   | improvements   |  | and individuals in design and                   | resources (budget, time,                                       |
|          |                               |   |  |  | technology have helped shaped the world         | availabilty)   |
|          |                               |   |  |  |   | To understand how key events                                   |
|          |                               |   |  |  |   | and individuals in design and                                  |
|          |                               |   |  |  |   | technology have helped shaped                                  |
|          |                               |   |  |  |   | the world  |

| Technical                   | Cut materials using scissors   | To learn about the working   | To describe the qualities of the   | To ensure textile products include  | To ensure joins are strong and  | To ensure joins are strong and  |
|-----------------------------|--|--|--|---|---|---|
| knowledg<br>e               |  | characteristics of materials<br>(folding paper, plaiting yarn to<br>make it stronger)                              | material and say why it will be<br>the most suitable choice  | changes such as plaiting or<br>weaving to create new products<br>such as ropes, belts, bracelets<br>and to strengthen structures                          | stable, giving extra strength to products   | stable, giving extra strength to<br>products  |
|                             | Measure, mark out and cut fabric   | To understand how to<br>mechanisms can be used in<br>different ways (wheels and axles<br>that allow movement)      | To join materials to make<br>products using both permanent<br>and temporary fixings  | To ensure joins are strong and<br>stable, giving extra strength to<br>products  | To ensure some joints are flexible to allow for dismantling or folding                          | -   |
|                             | Join fabrics using glue  |  | To combine materials to add strength and visual appeal   | To ensure some joints are flexible to allow for dismantling or folding  | -   | To hide joins for aesthetic effect  |
|                             | Produce neat work  |  | To apply mechanisms to create<br>movement<br>To combine a number of<br>comonants well in my product<br>To learn how mechanisms can be<br>used to make things move in<br>different ways, using a range of<br>equipment, including ICT control<br>programs | *   |   |   |
| Cooking<br>and<br>Nutrition | To understand that food comes<br>from animals and plants   | To understand that vegetables<br>are parts of plants which are<br>grown in farms or elsewhere<br>(wild or at home) | To understand that some<br>ingredients are grown, harvested<br>and processed   | To understand that some<br>ingredients are grown in different<br>parts of the world   | •   | To understand that food is grown<br>reared and caught in the UK,<br>Europe and the wider world  |
|                             | To understand that food has to<br>be farmed or grown   | To understand that fresh<br>ingredients can be used without<br>cooking   | That ingredients can be fresh, pre-<br>cooked and processed  | To understand that ingredients<br>can be fresh, pre-cooked or<br>processed  | To understand that seasons may affect the food available  | To understand that seasons may affect the food available  |
|                             | To prepare simple dishes safely<br>and hygienically, without using a<br>heat source                                      | , , , , , , , , , , , , , , , , , , ,  | To name and sort foods into the five groups in The Eatwell Plate   | To understand the principles of a<br>healthy, varied, balanced diet<br>(that everyone should eat at least<br>5 portions of fruit and vegetables<br>a day) | To understand how food is<br>processed into ingredients that<br>can be eaten or used in cooking | To understand how food is<br>processed into ingredients that<br>can be eaten or used in cooking |
|                             | To use techniques such as<br>cutting, peeling, grating,<br>measuring, weighing, combining,<br>stirring, shaping & mixing | To prepare simple dishes safely  | To combine food ingredients<br>according to their sensory<br>characteristics   | To adapt a recipe by adding or substituting ingredients   | To understand seasonability   | To understand seasonability   |
|                             |  | To use techniques such as<br>peeling, chopping, grating, slicing   | To use use techniques such as<br>weighing, measuring, mixing,<br>kneading, combining and shaping   | To prepare and cook a savory dish<br>safely and hygienically using a<br>heat source   | To adapt a recipe by adding or<br>substituting ingredients                                      | To adapt a recipe by adding or<br>substituting ingredients                                      |

|  | To combine ingredients<br>according to their sensory<br>characterisitics |  | weighing, measuring, mixing, | safely and hygienically using a                                | To prepare and cook a savory dish<br>safely and hygienically using a<br>heat source                                      |
|--|--|--|------------------------------|--|--|
|  |  | To prepare and cook safely and<br>hygienically using a heat source |                              | weighing, measuring, mixing,<br>kneading, chopping, measuring, | To use use techniques such as<br>weighing, measuring, mixing,<br>kneading, chopping, measuring,<br>combining and shaping |