|      | Autumn 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Autumn 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Spring 1                                                                                                                                                                                                                                                                                                                                                               | Spring 2 | Summer 1                                                                                                                                                                                                                              | Summer 2 |  |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--|
| EYFS | 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.  Being imaginative: children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role-play and stories. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                        |          |                                                                                                                                                                                                                                       |          |  |
|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Pop ups and levers- Pop up picture or moving picture illustrating the Great fire of London.  Design a purposeful and functional product for themselves Select and use a range of tools Explore and use mechanisms in their products.  Make To select from and use a range of tools and equipment to perform practical tasks (cutting shaping, joining, finishing.)  Evaluate To explore a range of existing products. Technical Knowledge- To explore mechanisms (levers, sliders, wheels and axels) in their products | Food - Fruit Kebabs/fruit salads.  Design To generate, develop and communicate their ideas through talking, drawing and where appropriate information and communication technology.  Make Select and use a range of ingredients  Evaluate: To evaluate their ideas/products Cooking and nutrition Use the basic principles of a healthy varied diet to prepare dishes. |          | Make an outdoor structure for the school grounds  Design-To design a purposeful and functional product for themselves and others.  Make- Select and use a range of tools To build structures, understanding how to make them stiffer. |          |  |

|   |  | Wheels and Axils-                                                                                                                                                                                                                                                                                                                                                                           | Food-                                                                                                                                                                                                                                                                                                                                | Textiles- Glove puppets to                                                                                                                                                                                                                                                                                                                               |  |
|---|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 2 |  | Create a vehicle for an explorer.  Design a purposeful and functional product for others based on a design criteria.  Select and use a range of tools Explore and use mechanisms in their products.  Make To select from and use a range of materials and components, including construction materials, textiles.  Evaluate To evaluate their ideas and products against a design criteria. | Create a salad dish based around the eat well plate.  Design To generate, develop and communicate their ideas through talking, drawing and where appropriate information and communication technology.  Make Select and use a range of ingredients  Evaluate: To evaluate their ideas/products  To understand where food comes from. | Pesign a purposeful and functional product for others based on a design criteria.  Select and use a range of tools Explore and use mechanisms in their products.  Make To select from and use a range of materials and components, including construction materials, textiles.  Evaluate To evaluate their ideas and products against a design criteria. |  |

|   | Textiles                                        | Food                                | Mechanical Systems                                        | Structures                                       |
|---|-------------------------------------------------|-------------------------------------|-----------------------------------------------------------|--------------------------------------------------|
| 3 | Weavings using a                                | Create a dish around the            | Use levers/pop ups or                                     | Investigate materials                            |
|   | variety of materials-<br>link to local History. | eat well plate using simple cooking | pneumatics to create a model/storybook to Iron Man.       | and their properties to create mini              |
|   | mik to local History.                           | techniques-boiling                  | modely story book to from within.                         | greenhouses                                      |
|   | Understand how key                              | <u>baking</u>                       | <b>Design</b> -To research and design                     | Desire Transcrip                                 |
|   | events and                                      |                                     | innovative appealing products fit for purpose, aimed at   | <b>Design</b> -To use research and develop       |
|   | individuals in design                           | Select from a wider                 | particular groups.                                        | own design criteria                              |
|   | technology have influenced the shape            | range of products/ingredients       |                                                           | to design innovative appealing products fit      |
|   | of the world.                                   | according to their                  | To generate, develop, model                               | for purpose.                                     |
|   | <u>?</u>                                        | functional and aesthetic qualities. | and communicate their ideas through discussion, annotated |                                                  |
|   | <u> </u>                                        | aesthetic quanties.                 | sketches, cross-sectional and                             | Make-Select from                                 |
|   |                                                 |                                     | exploded diagrams, prototypes,                            | and use a wider range                            |
|   |                                                 |                                     | pattern pieces and computer aided design.                 | of tools and equipment to perform                |
|   |                                                 |                                     | To explore the use of                                     | practical tasks 9for                             |
|   |                                                 |                                     | mechanical systems in their products                      | example cutting,<br>shaping, joining and         |
|   |                                                 |                                     | products                                                  | finishing) accurately.                           |
|   |                                                 |                                     |                                                           | <b>Evaluate</b> their ideas and products against |
|   |                                                 |                                     |                                                           | their own criteria and                           |
|   |                                                 |                                     |                                                           | consider the views of                            |
|   |                                                 |                                     |                                                           | others to improve their work.                    |
| 4 | Mechanical systems                              |                                     | <u>Textiles</u>                                           | Food                                             |
| 🕇 | Make a product which lights up using            |                                     | Design and make a wallet/purse for travelling             | Create a soup using the eat well plate as        |
|   | a simple circuit.                               |                                     | around the world.                                         | guidance.                                        |
|   | <u>Using a simple</u> circuit.                  |                                     |                                                           |                                                  |
|   | circuit.                                        |                                     |                                                           |                                                  |

|          | Dogian To areata a         |                           | Design To analyses a ronge                                |                              | Design To select   |
|----------|----------------------------|---------------------------|-----------------------------------------------------------|------------------------------|--------------------|
|          | <b>Design-</b> To create a |                           | <b>Design-</b> To analyse a range                         |                              | Design-To select   |
|          | design criteria.           |                           | of existing products.                                     |                              | from and use a     |
|          | Make-Make a                |                           | Use research and develop                                  |                              | wider range of     |
|          | product which              |                           | own design criteria to                                    |                              | ingredients        |
|          | lights up using a          |                           | design innovative appealing                               |                              | according to their |
|          | simple circuit.            |                           | products fit for purpose.                                 |                              | qualities.         |
|          | Using a simple             |                           |                                                           |                              | •                  |
|          | circuit.                   |                           |                                                           |                              |                    |
|          | NC links:                  |                           |                                                           |                              |                    |
|          |                            |                           |                                                           |                              |                    |
|          | Investigate and            |                           |                                                           |                              |                    |
|          | analyse a range of         |                           |                                                           |                              |                    |
|          | products                   |                           |                                                           |                              |                    |
|          | Understand and use         |                           |                                                           |                              |                    |
|          | electrical systems in      |                           |                                                           |                              |                    |
|          | their products.            |                           |                                                           |                              |                    |
|          | then products.             |                           |                                                           |                              |                    |
|          |                            |                           |                                                           |                              |                    |
|          |                            |                           |                                                           |                              |                    |
|          |                            |                           |                                                           |                              |                    |
|          |                            |                           |                                                           |                              |                    |
|          |                            |                           |                                                           |                              |                    |
| <b>-</b> |                            | Food:                     | Mechanical systems:                                       | Structures:                  |                    |
| 5        |                            | Create a dish from        | Cams, Pulleys, Gears                                      | Building Bridges             |                    |
|          |                            | another culture.          | Create a toy using mechanical                             | Design-To research and       |                    |
|          |                            | To understand and apply   | system                                                    | develop a design criteria    |                    |
|          |                            | the principles of a       | <b>Design</b> -To investigate and                         | to inform the design of      |                    |
|          |                            | healthy and varied diet.  | analyse a range of existing                               | innovative, functional,      |                    |
|          |                            | Become competent in a     | products.                                                 | appealing products that      |                    |
|          |                            | range of cooking          | Make-To understand and use                                | are fit for purpose, aimed   |                    |
|          |                            | techniques (for example,  | mechanical systems in their                               | at particular individuals or |                    |
|          |                            | selecting and preparing   | products (gears,                                          | groups.                      |                    |
|          |                            | ingredients; using        | pulleys,cams,lever,linkages)                              | To generate ,develop,        |                    |
|          |                            | utensils and electrical   | r J, earnis, ie : ex, iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii | model and communicate        |                    |
|          |                            | equipment; applying       | Evaluate-To evaluate their                                | through discussions,         |                    |
|          |                            | heat in different ways;   | ideas and products against their                          | annotated sketches, cross    |                    |
|          |                            | using awareness of taste, | own design criteria and                                   | sectional and exploded       |                    |
|          |                            |                           | o mir design emerita and                                  |                              |                    |
|          |                            | texture and smell to      |                                                           | diagrams, prototypes,        |                    |

|   | <br>                  |                        |                                 |                            |                        |
|---|-----------------------|------------------------|---------------------------------|----------------------------|------------------------|
|   | decide how to season  |                        | consider the views of others to | pattern pieces and         |                        |
|   | dishes and combine    |                        | improve their work.             | computer aided design.     |                        |
|   | ingredients; adapting |                        |                                 | Make -To select from and   |                        |
|   | and using their own   |                        |                                 | use a wide range of tools  |                        |
|   | recipes).             |                        |                                 | and equipment to perform   |                        |
|   |                       |                        |                                 | practical tasks            |                        |
|   |                       |                        |                                 | (cutting,shaping,joining   |                        |
|   |                       |                        |                                 | and finishing) accurately. |                        |
|   |                       |                        |                                 | To apply their knowledge   |                        |
|   |                       |                        |                                 | of how to strengthen,      |                        |
|   |                       |                        |                                 | stiffen and reinforce more |                        |
|   |                       |                        |                                 | complex structures.        |                        |
|   |                       |                        |                                 | Evaluate-                  |                        |
|   |                       |                        |                                 | To evaluate their ideas    |                        |
|   |                       |                        |                                 | and products against their |                        |
|   |                       |                        |                                 | own design criteria and    |                        |
|   |                       |                        |                                 | consider the views of      |                        |
|   |                       |                        |                                 | others.                    |                        |
|   |                       |                        |                                 | others.                    |                        |
|   |                       |                        |                                 |                            |                        |
|   |                       |                        |                                 |                            |                        |
| 6 |                       | Food                   |                                 |                            | Structures/            |
|   |                       | Create a Great British |                                 |                            | mechanical systems     |
|   |                       | Dish                   |                                 |                            | Design fairground      |
|   |                       | To understand the      |                                 |                            | ride/lights/scene      |
|   |                       | source, seasonality    |                                 |                            | using electrical       |
|   |                       | and characteristics of |                                 |                            | circuits/motors        |
|   |                       | a broad range of       |                                 |                            | Design-To research     |
|   |                       | ingredients.           |                                 |                            | and develop a design   |
|   |                       | Cook a repertoire of   |                                 |                            | criteria to inform the |
|   |                       |                        |                                 |                            | design of innovative,  |
|   |                       | predominantly          |                                 |                            |                        |
|   |                       | savoury dishes so that |                                 |                            | functional, appealing  |
|   |                       | they are able to feed  |                                 |                            | products that are fit  |
|   |                       | themselves and others  |                                 |                            | for purpose, aimed at  |
|   |                       | a healthy and varied   |                                 |                            | particular individuals |
|   |                       | diet.                  |                                 |                            | or groups.             |
|   |                       |                        |                                 |                            | To generate ,develop,  |
|   |                       |                        |                                 |                            | model and              |
|   |                       |                        |                                 |                            | communicate through    |

|  |  |  | 1:                      |
|--|--|--|-------------------------|
|  |  |  | discussions,            |
|  |  |  | annotated sketches,     |
|  |  |  | cross sectional and     |
|  |  |  | exploded diagrams,      |
|  |  |  | prototypes, pattern     |
|  |  |  | pieces and computer     |
|  |  |  | aided design.           |
|  |  |  | Make-To understand      |
|  |  |  | and use electrical      |
|  |  |  | systems in their        |
|  |  |  | products (series        |
|  |  |  | circuits, incorporating |
|  |  |  | switches,               |
|  |  |  | bulbs.buzzers and       |
|  |  |  | motors.                 |
|  |  |  | To apply their          |
|  |  |  | understanding of        |
|  |  |  | computing to            |
|  |  |  | programme, monitor      |
|  |  |  | and control their       |
|  |  |  | products.               |