

## KS2 DT Curriculum Plan

| Year    | Autumn<br>Christmas  |                    | Spring<br>Easter     |                      | Summer            |                     |
|---------|----------------------|--------------------|----------------------|----------------------|-------------------|---------------------|
| 3/4/5/6 |                      |                    |                      |                      |                   |                     |
|         | <u>Y3/4</u>          | <u>Y5/6</u>        | <u>Y3/4</u>          | <u>Y5/6</u>          | <u>Y3/4</u>       | <u>Y5/6</u>         |
|         | Food product         | Food product       | Textiles product     | Textiles product     | Sheet materials   | Sheet materials     |
| Year A  | linked to topic      | linked to topic    | linked to topic      | linked to topic      | product linked to | product linked to   |
|         | Follow instructions. | Select and prepare | Understand seam      | Create 3D products   | <u>topic</u>      | <u>topic</u>        |
|         | Join and combine a   | foods for a        | allowance.           | using pattern pieces | Cut slots and     | Cut slots.          |
|         | range of             | particular purpose | Join fabrics using   | and seam allowance   | internal shapes.  | Cut accurately and  |
|         | ingredients (for     | Weigh and          | running stitch, over | Understand pattern   | Use lolly         | safely to a marked  |
|         | example snack        | measure using      | sewing and back      | layout               | sticks/cards to   | line.               |
|         | foods).              | scales             | stitch.              | Decorate textiles    | make levers and   | Join and combine    |
|         | Work safely and      | Cut and shape      | Explore fastenings   | appropriately, often | linkages.         | materials with      |
|         | hygienically.        | ingredients using  | and recreate some    | before joining       | Use linkages to   | temporary, fixed or |
|         | Understand a         | appropriate tools  | (for example sew on  | components           | make movement     | moving joinings.    |
|         | balanced diet.       | and equipment (for | buttons and make     | Pin and tack fabric  | larger or more    | Use a craft knife,  |
|         | Measure and          | example grating).  | loops).              | pieces together      | varied.           | cutting mat and     |
|         | weigh food items.    | Join and combine   | Produce a prototype  | Join fabrics using   | Use and explore   | safety ruler under  |

|                  | food in group in reta | uning Lalatha      | aver couring had   |                     |                     |
|------------------|-----------------------|--------------------|--------------------|---------------------|---------------------|
|                  | food ingredients      | using J cloths.    | over sewing, back  | more complex pop-   | one to one          |
| Eat something    | appropriately (for    | Use appropriate    | stitch and blanket | ups.                | supervision.        |
| you've not tried | example beating,      | decoration         | stitch             | Create nets.        | Choose an           |
| before           | rubbing in).          | techniques (for    | Combine fabrics to | <b>Construction</b> | appropriate sheet   |
|                  | Decorate              | example appliqué). | create more useful | materials product   | material for the    |
|                  | appropriately.        | Create a simple    | properties         | linked to topic     | purpose.            |
|                  | Work safely and       | pattern.           |                    | Incorporate a       | <b>Construction</b> |
|                  | hygienically.         |                    | Make a dessert     | circuit with a bulb | product linked to   |
|                  | Understand a          | Make chocolate     | Learn to knit      | or buzzer into a    | <u>topic</u>        |
|                  | balanced diet.        | Learn to sew a     |                    | model.              | Use a bradawl to    |
|                  |                       | button new         |                    | Create shell or     | mark hole           |
|                  | Plan and cook a       |                    |                    | frame structures,   | positions           |
|                  | meal                  |                    |                    | strengthen frames   | Use a hand drill    |
|                  | Organise tea for      |                    |                    | with diagonal       | Cut strip wood,     |
|                  | parents and carers    |                    |                    | struts.             | dowel, square       |
|                  |                       |                    |                    | Make structures     | section wood        |
|                  |                       |                    |                    | more stable by      | accurately          |
|                  |                       |                    |                    | giving them a       | Join materials      |
|                  |                       |                    |                    | wider base.         | Incorporate a       |
|                  |                       |                    |                    | Prototype frame     | motor and a switch  |
|                  |                       |                    |                    | and shell           | into a model        |
|                  |                       |                    |                    | structures          | Control a model     |
|                  |                       |                    |                    | Measure and mark    | using an ICT        |
|                  |                       |                    |                    | square selection,   | program             |
|                  |                       |                    |                    | strip and dowel.    | Use a cam to make   |
|                  |                       |                    |                    | Use glue gun under  | an up and down      |

|        |                   |                     |                         |                      | supervision.         | mechanism                   |
|--------|-------------------|---------------------|-------------------------|----------------------|----------------------|-----------------------------|
|        |                   |                     |                         |                      |                      | Build a framework           |
|        |                   |                     |                         |                      | Make a large scale   | using a range of            |
|        |                   |                     |                         |                      | model                | materials                   |
|        |                   |                     |                         |                      |                      | Use a glue gun              |
|        |                   |                     |                         |                      |                      | under supervision           |
|        |                   |                     |                         |                      |                      | Make a large scale<br>model |
|        | <u>Y3/4</u>       | <u>Y5/6</u>         | <u>Y3/4</u>             | <u>Y5/6</u>          | <u>Y3/4</u>          | <u>Y5/6</u>                 |
|        | Sheet materials   | Sheet materials     | <u>Textiles product</u> | Textiles product     | Food product         | Food product                |
| Year B | product linked to | product linked to   | linked to topic         | linked to topic      | linked to topic      | linked to topic             |
|        | <u>topic</u>      | <u>topic</u>        | Understand seam         | Create 3D products   | Follow instructions. | Select and prepare          |
|        | Cut slots and     | Cut slots.          | allowance.              | using pattern pieces | Join and combine a   | foods for a                 |
|        | internal shapes.  | Cut accurately and  | Join fabrics using      | and seam allowance   | range of             | particular purpose          |
|        | Use Iolly         | safely to a marked  | running stitch, over    | Understand pattern   | ingredients (for     | Weigh and                   |
|        | sticks/cards to   | line.               | sewing and back         | layout               | example snack        | measure using               |
|        | make levers and   | Join and combine    | stitch.                 | Decorate textiles    | foods).              | scales                      |
|        | linkages.         | materials with      | Explore fastenings      | appropriately, often | Work safely and      | Cut and shape               |
|        | Use linkages to   | temporary, fixed or | and recreate some       | before joining       | hygienically.        | ingredients using           |
|        | make movement     | moving joinings.    | (for example sew on     | components           | Understand a         | appropriate tools           |
|        | larger or more    | Use a craft knife,  | buttons and make        | Pin and tack fabric  | balanced diet.       | and equipment (for          |
|        | varied.           | cutting mat and     | loops).                 | pieces together      | Measure and          | example grating).           |
|        | Use and explore   | safety ruler under  | Produce a prototype     | Join fabrics using   | weigh food items.    | Join and combine            |
|        | more complex pop- | one to one          | using J cloths.         | over sewing, back    |                      | food ingredients            |
|        | ups.              | supervision.        | Use appropriate         | stitch and blanket   | Eat something        | appropriately (for          |

| Create nets.             | Choose an           | decoration         | stitch             | you've not tried | example beating,   |
|--------------------------|---------------------|--------------------|--------------------|------------------|--------------------|
| <b>Construction</b>      | appropriate sheet   | techniques (for    | Combine fabrics to | before           | rubbing in).       |
| <u>materials product</u> | material for the    | example appliqué). | create more useful |                  | Decorate           |
| linked to topic          | purpose.            | Create a simple    | properties         |                  | appropriately.     |
| Incorporate a            | <b>Construction</b> | pattern.           |                    |                  | Work safely and    |
| circuit with a bulb      | product linked to   |                    | Make chocolate     |                  | hygienically.      |
| or buzzer into a         | topic               | Make chocolate     | Learn to knit      |                  | Understand a       |
| model.                   | Use a bradawl to    | Learn to sew a     |                    |                  | balanced diet.     |
| Create shell or          | mark hole           | button new         |                    |                  |                    |
| frame structures,        | positions           |                    |                    |                  | Plan and cook a    |
| strengthen frames        | Use a hand drill    |                    |                    |                  | meal               |
| with diagonal            | Cut strip wood,     |                    |                    |                  | Organise tea for   |
| struts.                  | dowel, square       |                    |                    |                  | parents and carers |
| Make structures          | section wood        |                    |                    |                  |                    |
| more stable by           | accurately          |                    |                    |                  |                    |
| giving them a            | Join materials      |                    |                    |                  |                    |
| wider base.              | Incorporate a       |                    |                    |                  |                    |
| Prototype frame          | motor and a switch  |                    |                    |                  |                    |
| and shell                | into a model        |                    |                    |                  |                    |
| structures               | Control a model     |                    |                    |                  |                    |
| Measure and mark         | using an ICT        |                    |                    |                  |                    |
| square selection,        | program             |                    |                    |                  |                    |
| strip and dowel.         | Use a cam to make   |                    |                    |                  |                    |
| Use glue gun under       | an up and down      |                    |                    |                  |                    |
| supervision.             | mechanism           |                    |                    |                  |                    |
|                          | Build a framework   |                    |                    |                  |                    |

| Make a large scale | ising a range of   |
|--------------------|--------------------|
| model              | naterials          |
|                    | Jse a glue gun     |
|                    | inder supervision. |
|                    |                    |
|                    | Aake a large scale |
|                    | nodel              |
|                    |                    |

Activity passport experiences

| Key Stage 1   | Key Stage 2                                 |  |  |
|---|---|--|--|
| Design  | Design                                      |  |  |
| <ul> <li>Design purposeful, functional and</li> </ul> | Use research and develop design criteria to |  |  |

appealing products for themselves and others 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.

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 computeraided 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, 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

| <ul> <li>Explore and use mechanisms (for</li> </ul> | the world.  |
|---|---|
| example, levers, sliders, wheels and                | Technical Knowledge   |
| axles) in their products.                           | <ul> <li>Apply their understanding of how to</li> </ul>                                   |
| Cooking and nutrition                               | strengthen, stiffen and reinforce more  |
| • Use the basic principles of a healthy and         | complex structures  |
| varied diet to prepare dishes.                      | Understand and use mechanical systems in  |
| • Understand where food comes from.                 | 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).                                       |
|   | <ul> <li>Apply their understanding of computing to</li> </ul>                             |
|   | programme, monitor and control their  |
|   | products.   |
|   | Cooking and nutrition   |
|   | <ul> <li>Understand and apply the principles of a<br/>healthy and varied diet.</li> </ul> |
|   | <ul> <li>Prepare and cook a variety of</li> </ul>   |
|   | predominantly savoury dishes using a range  |
|   | of cooking techniques.  |
|   | <ul> <li>Understand seasonality, and know where</li> </ul>                                |
|   | and how a variety of ingredients are grown,   |
|   | reared, caught and processed.   |