

# St Bartholomew's C of E Primary School Design Technology Curriculum Overview



Year 1

Throughout all three of the projects they need to:

- Think of some of their own ideas and explain what they want to do.
- Explain what they are making and what tools they are using.
- Talk about their own work and what they have made.

Autumn term	Spring term	Summer term
<p>Theme: Puppets Textiles</p> <p>How are puppets made?</p> <p>What we want them to know/experience:</p> <ol style="list-style-type: none"> <li>1. To understand that models (puppets) are made out of different materials.</li> <li>2. To know that sewing is stronger than gluing.</li> <li>3. To be able to measure and cut textiles.</li> <li>4. To join textiles together.</li> <li>5. To say why they chose a textile.</li> </ol>	<p>Theme: Fruit Kebabs Cooking and nutrition</p> <p>How can we be safe in the kitchen?</p> <p>What we want them to know/experience:</p> <ol style="list-style-type: none"> <li>1. How to cut safely.</li> <li>2. To be able to compare taste and texture.</li> <li>3. How to properly wash their hand for food preparation.</li> <li>4. Knife skills – bridge grip to cut soft foods.</li> </ol>	<p>Theme: Moving pictures Mechanisms</p> <p>Why do books and pictures use moving parts?</p> <p>What we want them to know/experience</p> <ol style="list-style-type: none"> <li>1. To know how to make a product that moves.</li> <li>2. To be able to cut materials with scissors.</li> <li>3. To know why some mechanisms have moving parts.</li> <li>4. To add some kind of design to their product.</li> </ol>

## Year 2

Throughout all three of the projects they need to:

- Choose the best materials and give reasons why they are best.
- Describe their design using pictures, models and words.
- Join things in different ways.
- Say what went well with their work and how they could improve it next time.

### Autumn 2

Theme: Fire engine

Use of materials

Skills:

- To make a model using different materials.
- To keep their work tidy.
- To make their model stronger if it needs to be.
- To measure the materials they use.
- To join materials in different ways.

### Spring 2

Theme: Castles

Structures

Skills:

- To talk about how they will construct their product and make a sensible choice on which materials to use.
- To make a simple plan before making their structure.
- To try to incorporate some type of movement into their models.
- To consider how to improve their construction.

### Summer 2

Theme: Cooking

Cooking and nutrition

Skills:

- To describe the properties of ingredients they are using.
- To explain what it means to be hygienic.
- To be hygienic in the kitchen.

## Year 3

Throughout all three of the projects they need to:

- Put together a step by step plan which shows the order and what equipment they will be using.
- Describe their design with an accurately labelled sketch.
- Think what they could change to make their designs better.

Autumn term	Spring term	Summer term
<p style="text-align: center;">Theme: Photo Frames</p> <p>Stiff and flexible sheet materials.</p> <p style="text-align: center;">Skills:</p> <ol style="list-style-type: none"> <li>1. To use the most appropriate materials.</li> <li>2. To cut and measure accurately.</li> <li>3. To join different materials together.</li> <li>4. To attempt to make their products strong.</li> </ol>	<p style="text-align: center;">Theme: Sandwich Snacks</p> <p style="text-align: center;">Cooking and nutrition</p> <p style="text-align: center;">Skills:</p> <ol style="list-style-type: none"> <li>1. To choose the right ingredients for a product (Sandwich/Scones)</li> <li>2. Use equipment safely.</li> <li>3. Describe how they used their ingredients to make their product.</li> <li>4. Knife Skills – To start to independently cut harder foods using the claw and bridge grips.</li> </ol>	<p style="text-align: center;">Theme: Money Containers</p> <p style="text-align: center;">Textiles</p> <p style="text-align: center;">Skills:</p> <ol style="list-style-type: none"> <li>1. Design product that takes consideration of size, durability and practicality.</li> <li>2. To cut with accuracy.</li> <li>3. To join textiles in different ways.</li> <li>4. To choose textiles for their appearance and qualities.</li> <li>5. To consider how they can make their product stronger.</li> <li>6. To use a running stitch</li> </ol>

## Year 4

Throughout all three of the projects they need to:

- To create a plan and also be able to explain their plan to others.
- To suggest improvements and say what is good and bad about other designs.
- To be conscience that their products will need to be liked by others.
- To show a good level of expertise when using equipment and tools they have used before.
- To be able to explain to evaluate their products think about both its appearance and how it worked.

Autumn term	Spring term	Summer term
<p>Theme: Light up Signs</p> <p>Electrical and mechanical components</p> <p>Skills:</p> <ol style="list-style-type: none"> <li>1. To create a simple circuit.</li> <li>2. To use a number of different components.</li> <li>3. To add things to a basic circuit.</li> <li>4. To alter products after testing if it doesn't work.</li> <li>5. To try out new ideas to improve circuit.</li> </ol>	<p>Theme: Brazilian feijoada</p> <p>Cooking and nutrition</p> <p>Skills</p> <ol style="list-style-type: none"> <li>1. To know how to be hygienic and safe.</li> <li>2. To present food in an interesting way.</li> </ol>	<p>Theme: Canopic Jars</p> <p>Mouldable materials</p> <p>Skills:</p> <ul style="list-style-type: none"> <li>• To select the most appropriate material.</li> <li>• To shape and mould using a range of techniques.</li> <li>• To use a finishing technique.</li> </ul>

## Year 5

Throughout all three of the projects they need to:

- To create a detailed step by step plan, using alternative ideas and be able to say what is good and bad about both.
- To be able to explain why their finished product will be of good quality.
- To show a good level of expertise when using equipment and tools they have used before.
- To keep checking their product is the best it can be.
- To evaluate their product against the original design criteria.

Autumn term	Spring term	Summer term
<p>Theme: Moving Toys</p> <p>Skills:</p> <ol style="list-style-type: none"> <li>1. Understand that a cam can be used with a lever or a slider to change rotary motion into oscillating or reciprocating motion</li> <li>2. To refine their product after testing it.</li> </ol>	<p>Theme: Bridges</p> <p>Skills:</p> <ol style="list-style-type: none"> <li>1. Decide on different ways of joining materials and which is the strongest.</li> <li>2. To measure and cut with accuracy to 1mm.</li> <li>3. To ensure their work is precise and accurate.</li> <li>4. To test and adapt product independently ensuring it is fit for purpose.</li> <li>5. To try to hide joints to improve the look of their products.</li> </ol>	<p>Theme: Greek Food</p> <p>Skills:</p> <ol style="list-style-type: none"> <li>1. To be able to describe what they need to be both hygienic and safe.</li> <li>2. To present their final product well.</li> <li>3. Knife skills – To dice harder foods into large evenly sized pieces.</li> </ol>

## Year 6

Throughout all three of the projects they need to:

- To use a range of information to inform their designs.
- To work within constraints.
- To follow their plans and refine if necessary.
- To think of a way to test and evaluate their product.
- To think of how different resources could have improved their project.

Autumn term	Spring term	Summer 1
<p>Theme: Funky Furnishings</p> <p>Skills:</p> <ol style="list-style-type: none"> <li>1. To make their product attractive and strong.</li> <li>2. To think of what the user would want when choosing their textile.</li> <li>3. To use a range of stiches independently. (Blanket, cross, running, overstitch)</li> <li>4. To think about how their product could be sold.</li> <li>5. To consider what would improve their product even more.</li> </ol>	<p>Theme: Great British Dishes</p> <p>Skills:</p> <ol style="list-style-type: none"> <li>1. To explain how their product should be stored.</li> <li>2. Knife Skills – To use both grips independently with sharper knives. To finely dice food into evenly sized pieces.</li> </ol>	<p>Theme: Bird House Builder</p> <p>Skills:</p> <ol style="list-style-type: none"> <li>1. To select the appropriate materials to make product.</li> <li>2. To ensure their work is precise and accurate.</li> <li>3. To think of ways to improve the look of their product.</li> <li>4. To try to make a product that meets all of the design criteria.</li> </ol>