

St Thomas of Canterbury Catholic Primary School
Scheme of Work for Design and Technology



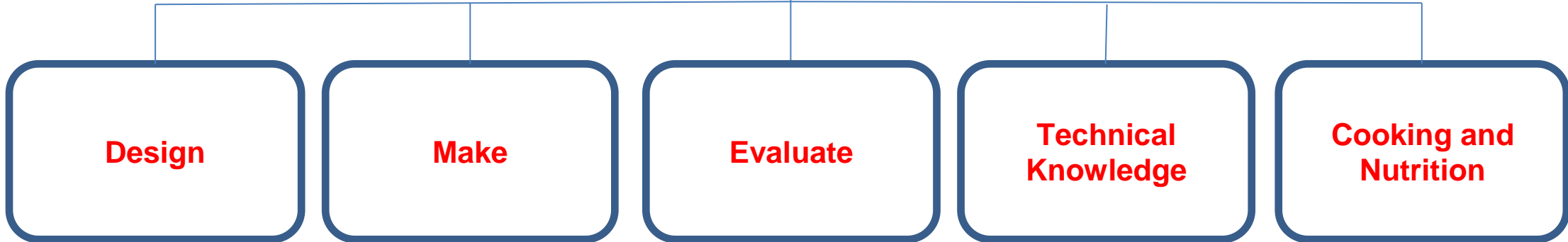
Where every child is special



Making **S=P+A+C+E** for learning

EYFS:
Understanding the World
Expressive Arts and Design
Physical Development

KS1 / KS2
Design and
Technology



Designing

Understanding contexts,
users and purposes

Generating, developing,
modelling and
communicating ideas

EYFS

Skills:

Working within a range of contexts: imaginary story-based, home and school, using these as a stimulus. Generating ideas from their own interests. Saying what their creations are, who will use them and how they will be used. Communicating ideas through talking/ drawing. Describing their products , Explaining how they will work. Being creative.

Content:

Hats
Sewing: puppet
Cooking/
Nutrition

Year 1

Skills:

Working within a range of contexts: imaginary story-based, home and school. Suggesting creative ideas and explaining what their products are for and who will use them. Drawing simple labelled sketches. Modelling their ideas in card and paper.

Content:

Flower pots
Shoe-box dream room: making furniture
Sewing
Mechanical bird
Cooking/
Nutrition

Year 2

Skills:

Working within a range of contexts: story-based, home, school and wider environment. Suggesting creative ideas and explaining what their products are for and who will use them. Drawing simple labelled sketches. Modelling their ideas in card and paper. Discussing what they are going to do.

Content:

Moveable puppets
Puppet theatre
3-D Ocean scene
Sewing: toy fish
Cooking/
Nutrition

Year 3

Skills:

Working within a range of contexts: school, leisure, culture and wider environment. Researching existing products to develop innovative ideas for a specific user/ purpose. Drawing labelled / annotated sketches and exploded diagrams to communicate ideas. Modelling ideas using prototypes.

Content:

Magnet game
Making a settlement
Making Stone-age implements
Cooking/
Nutrition

Year 4

Skills:

Working within a range of contexts: home, culture and wider environment. Researching / tasting existing products to develop innovative ideas for a specific user/ purpose. Using annotated sketches, cross-sectional drawings and exploded diagrams to develop and communicate ideas. Modelling ideas using pattern pieces.

Content:

Lamps
Sewing: purses
Cooking/
Nutrition

Year 5

Skills:

Working within a range of contexts: leisure, culture, and wider environment. Sharing and clarifying initial ideas through discussion. Making design decisions taking into account: -design specifications -available resources -particular individuals/ groups. Using clear labelled/ annotated diagrams to develop and communicate ideas.

Content:

Tudor houses
Dragsters
Cooking/
Nutrition

Year 6

Skills:

Working within a range of contexts: home, leisure, culture, enterprise and wider environment. Reaearching existing products to inform their own design of appealing products. Making design decisions taking into account: -design specifications -available resources -particular individuals/ groups. Using discussion and clear labelled/ annotated diagrams to develop and communicate ideas. Modelling their ideas using prototypes and pattern pieces.

Content:

Christmas decorations
WW2 Shelters
Book-making

Making

Planning

Practical skills and techniques

EYFS

Practical Skills Techniques:

Following procedures for health, safety and hygiene.
Using construction kits.
Suggesting what to do next.
Selecting from a range of tools, equipment, materials, textiles and food ingredients, explaining why they have chosen them.
Cutting out, assembling, joining and combining materials in different ways.
Using finishing techniques, from art and design.

Content:
As above

Year 1

Practical Skills Techniques:

Following procedures for health, safety and hygiene.
Using construction kits.
Suggesting what to do next.
Selecting from a range of tools, equipment, materials, textiles and food ingredients explaining why they are suitable for a task.
Measuring, marking, cutting out, assembling, joining, shaping and combining materials.
Using finishing techniques, including those from art and design.

Content:
As above

Year 2

Practical Skills Techniques:

Following procedures for health, safety and hygiene.
Using construction kits.
Suggesting what to do next.
Selecting from a range of tools, equipment, materials, textiles and food ingredients explaining why they are suitable for a task.
Measuring, marking, cutting out, assembling, joining, shaping and combining materials.
Using finishing techniques, including those from art and design.

Content:
As above

Year 3

Practical Skills Techniques:

Following procedures for health, safety and hygiene.
Selecting from and using a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients and mechanical components
Ordering the main stages of making.
Measuring, marking, cutting out, assembling, joining and shaping materials with some accuracy.
Applying a range of finishing techniques, including those from art and design.

Content:
As above

Year 4

Practical Skills Techniques:

Following procedures for health, safety and hygiene.
Selecting from and using a wider range of materials and components than KS1, including electrical components (switches and bulbs).
Explaining their choice of materials and components according to functional properties and aesthetic qualities.
Ordering the main stages of making.
Measuring, marking, cutting out, assembling, joining and combining materials with some accuracy.
Applying a range of finishing techniques, including those from art and design.

Content:
As above

Year 5

Practical Skills Techniques:

Following procedures for health, safety and hygiene.
Using a wider range of materials, tools and equipment. Explaining choice of materials and components according to functional properties and aesthetic qualities.
Formulating step-by-step plans.
Producing appropriate lists of tools, equipment and materials needed.
Measuring, marking, cutting out, assembling, joining and combining materials accurately.
Demonstrating resourcefulness when tackling practical problems.
Applying a range of finishing techniques, including those from art and design, accurately.

Content:
As above

Year 6

Practical Skills Techniques:

Following procedures for health, safety and hygiene.
Using a wider range of materials, tools and equipment. Explaining their choice of materials and components including electrical components (switches and bulbs), according to functional properties and aesthetic qualities.
Formulating step-by-step plans.
Producing appropriate lists of tools, equipment and materials needed.
Measuring, marking, cutting out, assembling, joining and combining materials accurately.
Demonstrating resourcefulness when tackling practical problems.
Applying a range of finishing techniques, including those from art and design, accurately.

Content:
As above

Evaluating

Existing products

Own ideas and products

Key events and individuals (KS2)

EYFS

Skills:

Exploring / talking about:
• what products are and what they are for
• how products work
• what materials products are made from
• what they like and dislike about them.
Talking about their ideas and creations, saying what they like and dislike about them.

Content:

Hats
Sewing: puppet
*Cooking/
Nutrition*

Year 1

Skills:

Exploring / talking about:
• what products are for
• how products work
• what materials products are made from and why they are / are not suitable
• what they like and dislike about them.
Talking about their own design ideas and what they are making.
Evaluating work against design criteria
Identifying what worked well and possible improvements.

Content:

Flower pots
Shoe-box dream room: making furniture
Sewing
Mechanical bird
*Cooking/
Nutrition*

Year 2

Skills:

Exploring / talking about:
• what products are for
• how products work
• what they like and dislike about them.
Talking about their own design ideas and what they are making.
Evaluating work against design criteria, taking into account the views of others.
Identifying what worked well and possible improvements.

Content:

Moveable puppets
Puppet theatre
3-D Ocean scene
Sewing: toy fish
*Cooking/
Nutrition*

Year 3

Skills:

Exploring / discussing:
• how well products have been designed and made
• what materials have been used
• how the materials work
• how well the product works
Discussing their own design ideas and what they are making.
Evaluating work against design criteria;
identifying strengths and possible improvements.
Considering views of others.

Content:

Magnet game
Making a settlement
Making Stone-age implements
*Cooking/
Nutrition*

Year 4

Skills:

Exploring / discussing:
• how well products have been designed and made
• what materials have been used
• how the materials work
• how well the product works
Discussing their own design ideas and what they are making.
Evaluating work against design criteria;
Identifying strengths and possible improvements.
Considering views of others.

Understanding how key events and individuals in D&T have helped shape the world.

Content:

Lamps
Swan, Edison
Sewing: purses
*Cooking/
Nutrition*

Year 5

Skills:

Investigating and analysing:
• how well products have been designed
• why materials have been chosen
• how well products work
Discussing their own design ideas and what they are making.
Evaluating work against design criteria during and at the end of a topic;
Identifying strengths and possible improvements
Considering views of others.

Content:

Tudor houses
Dragsters
*Cooking/
Nutrition*

Year 6

Skills:

Investigating and analysing:
• how much products cost to make
• how innovative products are
• how sustainable the materials in products are
• what impact products have beyond their intended purpose
Discussing their own design ideas and what they are making.
Evaluating work against design criteria during and at the end of a topic;
Identifying strengths and possible improvements
Considering views of others.

Understanding how key events and individuals in D&T have helped shape the world.

Content:

Christmas decorations
WW2 Shelters
Morrison, Anderson
Book-making
'Fiver Fayre'

Technical Knowledge

Making products work

EYFS

Skills:

Understanding about the simple working characteristics of materials:

- that a 3-D textiles product can be assembled from two identical fabric shapes

Using the correct technical vocabulary for the projects they are undertaking.

Content:

Hats
Sewing: puppet
Cooking/
Nutrition

Year 1

Skills:

Understanding about the simple working characteristics of materials:

- about the movement of simple levers,
 - how freestanding structures can be made stronger, stiffer and more stable.
- Using the correct technical vocabulary for the projects they are undertaking.

Content:

Flower pots
Shoe-box dream room: making furniture
Sewing
Mechanical bird
Cooking/
Nutrition

Year 2

Skills:

Understanding about the simple working characteristics of materials:

- about the movement of simple mechanisms such as levers.
- how freestanding structures can be made stronger, stiffer and more stable

• that a 3-D textiles product can be assembled from two identical fabric shapes.
Using the correct technical vocabulary for the projects they are undertaking

Content:

Moveable puppets
Puppet theatre
3-D Ocean scene

Year 3

Skills:

Applying learning from Science and Maths to help design and make products that work.

Choosing materials for their functional properties and aesthetic qualities
Understanding that materials can be combined and mixed to create more useful characteristics.
Using the correct technical vocabulary for the projects they are undertaking.

Content:

Magnet game
Making Stone-age implements
Cooking/
Nutrition

Year 4

Skills:

Applying learning from Science and Maths to help design and make products that work.

Using simple electrical circuits and components to create functional products,
Choosing materials for their functional properties and aesthetic qualities
Understanding how a single fabric shape can be used to make a 3D textiles product.
Understanding that a 3-D textiles product can be assembled from two identical fabric shapes.

Content:

Lamps
Sewing: purses
Cooking/

Year 5

Skills:

Applying learning from Science and Maths to help design and make products that work.

Understanding that materials have both functional properties and aesthetic qualities.
Using materials that can be combined and mixed to create more useful characteristics
Knowing how some mechanical systems create movement.
Using the correct technical vocabulary for the projects they are undertaking.

Content:

Tudor houses
Dragsters
Cooking/
Nutrition

Year 6

Skills:

Applying learning from Science and Maths to help design and make products that work.

Reinforcing and strengthening a more complex, 3D framework.

Understanding that materials have both functional properties and aesthetic qualities. Using simple electrical circuits and components to create functional products,
Using the correct technical vocabulary for the projects they are undertaking.

Content:

Christmas decorations
WW2 Shelters
Book-making

Cooking and Nutrition

Where food comes from

Food preparation,
cooking and nutrition

EYFS

Skills:

Understanding:
-that food comes from plants or animals;
-that food has to be farmed or grown
Preparing simple dishes safely and hygienically
Using techniques such as cutting, peeling, grating, measuring, weighing, combining, stirring, shaping and mixing.
Understanding about seasonality.

Content:

Apple crumble
'Rainbow Fish' biscuit
'Mini-Beast' fairy cake
Fruit smoothie
Pizza

Year 1

Skills:

Understanding:
-that food comes from plants or animals;
-that food has to be farmed or grown
Preparing simple dishes safely and hygienically, without using a heat source.
Using techniques such as cutting, peeling, grating, measuring, weighing, combining and mixing.
Understanding about seasonality.

Content:

Vegetable pasty
Vegetable kebab
Gingerbread biscuit
Seasonal fruit salad

Year 2

Skills:

Understanding:
-that vegetables care parts of plants which are grown in farms or elsewhere (wild or at home) .
-that ingredients can be used fresh.
Preparing simple dishes safely and hygienically,
Applying the principles of a healthy, varied diet (that everyone should eat at least five portions of fruit and vegetables every day) when preparing simple dishes without using a heat source.
Using techniques such as peeling, chopping, grating, slicing.
Combining ingredients according to their sensory characteristics.

Content:

'Rainbow of colours' salad

Year 3

Skills:

Understanding:
- that some ingredients are grown, harvested and processed.
-that ingredients can be fresh, pre-cooked and processed.
Naming and sorting foods into the five groups in The Eatwell Plate.
Combining food ingredients according to their sensory characteristics.
Using techniques such as weighing, measuring, mixing, kneading, combining and shaping.
Understanding about seasonality.
Preparing and cooking safely and hygienically using a heat source.

Content:

Savoury tartlets
Bread

Year 4

Skills:

Understanding:
- that some ingredients are grown in different parts of the world,
- that ingredients can be fresh, pre-cooked and processed.
Applying the principles of a healthy, balanced diet (that everyone should eat at least five portions of fruit and vegetables every day).
Adapting a recipe by adding or substituting ingredients.
Preparing and cooking a savoury dish safely and hygienically using a heat source.
Using techniques such as weighing, mixing, kneading, chopping, measuring, combining, and shaping,

Content:

Bread

Year 5

Skills:

Understanding:
• that food is grown, reared and caught in the UK, Europe and the wider world.
• that seasons may affect the food available
• how food is processed into ingredients that can be eaten or used in cooking.
Understanding about seasonality.
Adapting a recipe by adding or substituting ingredients.
Preparing and cooking a savoury dish safely and hygienically using a heat source.
Using techniques such as peeling, chopping, slicing, measuring and combining,

Content:

'Tudor' Pottage

Year 6

Skills:

Content: