St Monica's RC Primary School: Curriculum Progression and End Points

	End of EYFS	End of KS1	End of LKS2	End of UKS2
Designing ***Understanding contexts, users and purposes***	• Begin to use the language of designing and making for example join, build, shape. • Learning about planning and how to come up with an idea but try to make it even better. • Be able to talk about what they will make and how.	• Work confidently within a range of contexts, such as imaginary, story-based, home, school, gardens, playgrounds, local community, industry and the wider environment. • State what products they are designing and making • Say whether their products are for themselves or other users • Describe what their products are for • Say how their products will work • Say how they will make their products suitable for their intended users • Use simple design criteria to help develop their ideas	***Across KS2 Children should:*** • Work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment • Describe the purpose of their products • Indicate the design features of their products that will appeal to intended users • Explain how particular parts of their products work • Gather information about the needs and wants of particular individuals and groups • Develop their own design criteria and use these to inform their ideas	• Analyse findings and draw conclusions from their research • Distinguish between needs, wants, values, interests and preferences. • Design products for individuals, clients, consumers and target groups.
Designing ***Generating, developing, modelling and communicating ideas***		• Generate ideas by drawing on their own experiences • Use knowledge of existing products to help come up with ideas • Develop and communicate ideas by talking and drawing • Model ideas by exploring materials, components and construction kits and by making templates and mock- ups • Use information and communication technology, where appropriate, to develop and communicate their ideas	***Across KS2 pupils should:*** • Share and clarify ideas through discussion • Model their ideas using prototypes and pattern pieces • Use annotated sketches, cross-sectional drawings and exploded diagrams to develop and communicate their ideas • Use computer-aided design to develop and communicate their ideas • Generate realistic ideas, focusing on the needs of the user	• Generate innovative ideas, drawing on research
Making ***Planning***	• To learn to construct with a purpose in mind. • Be able to select tools and techniques needed to shape, assemble and join materials • To talk about what they will be making and what they will use to make it.	• Plan by suggesting what to do next • Select from a range of tools and equipment, explaining their choices • Select from a range of materials and components according to their characteristics	***Across KS2 Children should:*** • Select tools and equipment suitable for the task • Explain their choice of tools and equipment in relation to the skills and techniques they will be using • Select materials and components suitable for the task • Explain their choice of materials and components according to functional properties and aesthetic qualities • Order the main stages of making	• Produce appropriate lists of tools, equipment and materials that they need • Formulate step-by-step plans as a guide to making •

<table>
<tr>
<td>Making
Practical skills and techniques</td>
<td>• To use tools carefully and safely with purpose.
• Junk modelling as a way of experimenting and constructing with freedom.
• Explore materials when making, show freedom of experimenting.</td>
<td>• Follow procedures for safety and hygiene
• Use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components
• Measure, mark out, cut and shape materials and components
• Assemble, join and combine materials and components
• Use finishing techniques, including those from art and design</td>
<td colspan="2">Across KS2 Children should:
• Follow procedures for safety and hygiene
• Use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components

• Measure, mark out, cut and shape materials and components with some accuracy
• Assemble, join and combine materials and components with some accuracy
• Apply a range of finishing techniques, including those from art and design, with some accuracy

• Accurately measure, mark out, cut and shape materials and components
• Accurately assemble, join and combine materials and components
• Accurately apply a range of finishing techniques including those from art and design
• Use techniques that involve a number of steps
• Demonstrate resourcefulness when tackling practical problems</td>
</tr>
<tr>
<td>Evaluate
Own ideas and products</td>
<td>• To talk with others about what they have made with some explanation of the process
• Begin to talk about changes made during the making process. What went well or not so well and why that may have been.</td>
<td>• Talk about their design ideas and what they are making
• Make simple judgements about their products and ideas against design criteria
• Suggest how their products could be improved</td>
<td colspan="2">Across KS2 Children should:
• Identify the strengths and areas for development in their ideas and products
• Consider the views of others, including intended users, to improve their work

• Refer to their design criteria as they design and make
• Use their design criteria to evaluate their completed products

• Critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make
• Evaluate their ideas and products against their original design specification</td>
</tr>
<tr>
<td>Evaluate
Existing products</td>
<td>• To look at a range of products and give suggestions for how they work.
• To know the names of a range of materials e.g. plastic, paper, wood, metal and notice this on products
• To compare products
• To discuss who might use certain products</td>
<td>To explore:
• What products are
• Who products are for
• What products are for
• How products work
• How products are used
• Where products might be used
• What materials products are made from
• What they like and dislike about products</td>
<td colspan="2">Across KS2 Children should investigate and analyse:
• How well products have been designed
• How well products have been made
• Why materials have been chosen
• What methods of construction have been used?
• How well products work
• How well products achieve their purposes
• How well products meet user needs and wants

Investigate and analyse:
• Who designed and made the products
• Where products were designed and made
• When products were designed and made
• Whether products can be recycled or reused

Investigate and analyse:
• 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</td>
</tr>
<tr>
<td>Evaluate
Key events and individuals</td>
<td>• To know that products are made by designers, inventors etc.</td>
<td>• To be introduced to the work of some designers and engineers</td>
<td colspan="2">Across KS2 Children should:
• Know about inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products</td>
</tr>
<tr>
<td>Technical Knowledge</td>
<td>• To learn how to use a range of tools including scissors, stapler, hole punch, rolling pins, pastry cutters.</td>
<td>To know:
• About the simple working characteristics of materials and components</td>
<td colspan="2">Across KS2 Children should know:
• How to use learning from science to help design and make products that work
• How to use learning form mathematics to help design and make products that work
• That materials have both functional properties and aesthetic qualities</td>
</tr>
</table>

<table>
<tr>
<td rowspan="2">Making products work</td>
<td rowspan="2">

Learn how everyday objects work by dismantling them and investigating as a class. Use of technology box to get used to tools and what they are used for.

</td>
<td rowspan="2">

About the movement of simple mechanisms such as levers, sliders, wheels and axles
How freestanding structures can be made stronger, stiffer and more stable
That a 3-D textiles project can be assembled from two identical fabric shapes
That food ingredients should be combined according to their sensory characteristics
The correct terminology for the projects they are undertaking

</td>
<td colspan="2">

That materials can be combined and mixed to create more useful characteristics
That mechanical and electrical systems have an input and output
The correct technical vocabulary for the projects they are undertaking

</td>
</tr>
<tr>
<td>
To know:

How mechanical systems such as levers and linkages or pneumatic systems create movement
How simple electrical circuits and components can be used to create functional products
How to program a computer to control their products
How to make strong, stiff shell structures
That a single fabric shape can be used to make a 3D textiles product
That food ingredients can be fresh, pre-cooked and processed

</td>
<td>
To know:

How mechanical systems such as cams or pulleys or gears create movement
How more complex electrical circuits and components can be used to create functional products
How to program a computer to monitor changes in the environment and control their products
How to reinforce and strengthen a 3D framework
That a 3D textiles product can be made from a combination of fabric shapes
That a recipe can be adapted by adding or substituting one or more ingredients

</td>
</tr>
<tr>
<td>Cooking and Nutrition
Where food comes from</td>
<td>

To know that food comes from plants and animals

</td>
<td>
To know:

That all food comes from plants or animals
That food has to be farmed, grown elsewhere (e.g. home) or caught

</td>
<td colspan="2">
Across KS2 Children should know:

That a recipe can be adapted by adding or substituting one or more ingredients
That food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world

In UKS2 pupils should also know:

That seasons may affect the food available
How food is processed into ingredients that can be eaten or used in cooking

</td>
</tr>
<tr>
<td rowspan="2">Cooking and Nutrition
Food preparation, cooking and nutrition</td>
<td rowspan="2">

To begin to understand some of the tools, techniques and processes involved in food preparation.
Children to have basic hygiene awareness.
Develop fine motor skills, cutting/chopping.
Working as a team, sharing equipment
To know which foods are healthy and unhealthy

</td>
<td rowspan="2">
To know:

How to name and sort foods into the five groups in the eatwell guide
That everyone should eat at least five portions of fruit and vegetables every day
How to prepare simple dishes safely and hygienically, without using a heat source
How to use techniques such as cutting, peeling and grating

</td>
<td colspan="2">
Across KS2 Children should know:

How to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source
How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking

</td>
</tr>
<tr>
<td>
To know:

That a healthy diet is made up of a variety and balance of different food and drink, as depicted in the Eatwell Guide
That to be active and healthy, food and drink are needed to provide energy for the body

</td>
<td>
To know:

That recipes can be adapted to change the appearance, taste, texture and aroma
That different food and drink contain different substances – nutrients, water and fibre – that are needed for health

</td>
</tr>
</table>