



# Bleasby Primary School

## Design Technology Knowledge Progression Map



|                      | Autumn A   | Spring A  | Summer A   | Autumn B   | Spring B  | Summer B   |  |
|----------------------|--|---|--|--|---|--|--|
| <b>Enquiry Focus</b> | <p>British History Timeline</p> <p><i>What can we learn from the past?<br/>What did the people of the past give to us?</i></p> | <p>World Achievements</p> <p><i>What difference does it make that we are part of a bigger world?<br/>Does ancient history matter?</i></p> | <p>Plants &amp; Habitats</p> <p><i>Can we look after our world better?<br/>Are we looking after our local environment?</i></p> | <p>Contrasting and impactful periods in British History</p> <p><i>When would you prefer to have lived?</i></p> | <p>Knowledge of the World</p> <p><i>Why is it important to be globally connected?</i></p> | <p>Animals &amp; Healthy Bodies</p> <p><i>Are we looking after our bodies as well as we could?</i></p>   | Famous designer or engineer                        |
| <b>FS/1/2</b>        | <p><b>Mechanisms</b></p> <p><i>(this is materials in science)</i></p>  | <p><b>Textiles</b></p> <p><b>Food and nutrition</b></p>   | <p><b>Structures</b></p>   | <p><b>Mechanisms</b></p> <p><i>(this is materials in science)</i></p>  | <p><b>Textiles</b></p> <p><i>(this is forces in science)</i></p>                          | <p><b>Structures</b></p> <p><b>Food &amp; Nutrition</b></p> <p><i>(this is nutrition in science)</i></p> | <p>A</p> <p>B-</p> <p><b>Granville T Woods</b></p> |
| <b>3/4</b>           | <p><b>Structures</b></p> <p><b>Electricity</b></p> <p><i>(Light Electricity in science)</i></p>                                | <p><b>Mechanisms</b></p>  | <p><b>Textiles</b></p> <p><b>Food &amp; Nutrition</b></p>  | <p><b>Textiles</b></p> <p><b>Electricity</b></p> <p><i>(Magnets &amp; Sound in science)</i></p>                | <p><b>Structures</b></p> <p><i>(materials in science)</i></p>                             | <p><b>Food &amp; Nutrition</b></p>   | <p>A</p> <p>B</p>                                  |
| <b>5/6</b>           | <p><b>Electricity</b></p> <p><i>(Light, Electricity in science)</i></p>  | <p><b>Structures</b></p> <p><b>Food &amp; Nutrition</b></p>   | <p><b>Textiles</b></p> <p><b>Mechanisms</b></p>  | <p><b>Electricity</b></p> <p><b>Mechanisms</b></p>   | <p><b>Structures</b></p>  | <p><b>Textiles</b></p> <p><b>Food &amp; Nutrition</b></p>  | <p>A</p> <p>B</p>                                  |



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| <b>Textiles</b>  |  |  |  |   |  |
|--|--|--|--|---|--|
| (R)/1/2 Spring A   | (R)/1/2 Spring B   | 3/4 Summer A   | 3/4 Autumn   | 5/6 Summer A  | 5/6 Summer B   |
| <p><b>Cultural sewing</b></p> <p>I know how to use <i>running stitch</i> on felt</p> <p>I know how to sort threads and fabrics</p> <p>I know how to make weavings with fabrics or threads.</p> <p>I know how to plait and understand the basic method.</p> | <p><b>Peacock feathers</b></p> <p>Y2 – I know the basics of <i>cross-stitch and backstitch</i> and how to sew sequins on my work.</p> <p>Y1 – running stitch feather</p> <p>I use scissors precisely when cutting out.</p> <p>I know that textiles have different properties: feel, insulation, texture and waterproof. I select the appropriate textile so that it does the job I want it to.</p> <p>I know how to measure textiles</p> | <p><b>Applique collage cushion cover</b></p> <p>I know the basics of <i>quilting, padding and gathering</i> fabric.</p> <p>I know how to use my textiles skills to create artwork that is matched to an idea or purpose.</p> <p>I have made a textile product that has a good finish and can do the job it was made for.</p> | <p><b>Tudor purses/pouches</b></p> <p>I know how to <i>join</i> textiles of different types and in different ways</p> <p>I know of textiles work from other <i>cultures</i> and times.</p> <p>I know the basics of <i>quilting, padding, hemming and gathering</i> fabric.</p> | <p>Y5 – <b>drawstring bags</b></p> <p>Y6 – <b>zip fastener</b></p> <p>I know how to join textiles using a greater variety of stitches, eg <i>back, whip and blanket</i>.</p> <p>I know how to demonstrate how to <i>measure, make a seam allowance, tape, pin, cut, shape &amp; join</i> fabric with precision to make a more complex product</p> | <p>Y5 – <b>drawstring bags</b></p> <p>Y6 – <b>zip fastener</b></p> <p>I know how to join textiles using a greater variety of stitches, eg <i>back, whip and blanket</i>.</p> <p>I know how to demonstrate how to <i>measure, make a seam allowance, tape, pin, cut, shape &amp; join</i> fabric with precision to make a more complex product.</p> <p>I have a sound understanding of how to use the techniques of sewing (<i>cross stitch &amp; backstitch</i>) <i>appliqué, embroidery, plaiting, finger knitting</i>.</p> |



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| <b>Mechanisms</b>  |   |  |   |   |   |
|--|---|--|---|---|---|
| (R)/1/2 Autumn A   | (R)/1/2 Autumn B  | 3/4 Spring A   | 3/4 Summer B  | 5/6 Summer A  | 5/6 Autumn B  |
| <p><b>Fire engine<br/>Wheels &amp; axis</b></p> <p>I know how to saw doweling</p> <p>I know how to make a product that uses movement.</p> <p>I know how to add design to my product.</p> | <p><b>Steam Train<br/>Wheels &amp; axis</b></p> <p>I know how to saw doweling</p> <p>I know how to join materials together as part of a moving product.</p> <p>I know how to add design elements to my piece.</p> | <p><b>Water Well</b></p> <p>I know how to make a pulley system for retrieving water from a well.</p> <p>I know how to be accurate when making cuts and holes.</p> <p>I know how to saw wood doweling and balsa lengths</p> | <p><b>Puppets</b></p> <p>I know how to use levers &amp; linkages to create moving animals.</p> <p>I know how to saw wood doweling and balsa lengths.</p> <p>I know how to evaluate my puppet against the design criteria.</p> | <p><b>Recycling game – cams</b></p> <p>I know how to assemble, join and combine materials &amp; components with accuracy.</p> <p>I know how to refine the finish my piece using techniques to improve the appearance of the product - such as sanding or more precise scissor cut after rough cutting.</p> <p>I know how to saw wood doweling and balsa lengths</p> | <p><b>Automata animals – cams</b></p> <p>I know how to assemble, join and combine materials &amp; components with accuracy.</p> <p>I know how to refine the finish my piece using techniques to improve the appearance of the product - such as sanding or more precise scissor cut after rough cutting.</p> <p>I know how to saw wood doweling and balsa lengths</p> |



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## Design Technology Knowledge Progression Map



| <b>Structures</b>  |   |  |   |  |  |
|--|---|--|---|--|--|
| (R)/1/2 Summer A   | (R)/1/2 Summer B  | 3/4 Autumn A   | 3/4 Spring B  | 5/6 Spring A   | 5/6 Spring B   |
| <p><b>Habitats – houses</b></p> <p>I know how to build simple structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>I know how to improve my construction and can make alterations.</p> | <p><b>Human skeleton – bones</b></p> <p>I know how to build simple structures, exploring how they can be made stronger, stiffer and more stable. (tubes and triangles)</p> <p>I know how to use a range of joins.</p> | <p><b>Structures of different dwellings.</b></p> <p>Stone age caves – strongest shapes</p> <p>I know how to make structures stronger by folding joining or by shape (columns, triangles).</p> <p>I know how to choose appropriate materials, work accurately and can join them together, so they are the strongest they can be.</p> <p>I know how to measure accurately.</p> | <p><b>Bridges – when does a bridge become a sculpture?</b></p> <p>.</p> <p>I know how to make structures stronger by folding joining or by shape (columns, triangles).</p> <p>I know, by looking at variety of bridge structures, what makes them strong?</p> <p>I know why triangulation is used in bridges and large structures (telegraph poles)</p> | <p><b>Greek architecture, Tube &amp; triangulation – strength in columns, Parthenon.</b></p> <p>I know how to shape &amp; score materials with precision &amp; accuracy.</p> <p>I know how to independently take exact measurements &amp; mark out to within 1mm.</p> <p>I know how to evaluate appearance and function against the original criteria.</p> <p>I know that my measurements are accurate enough to ensure everything is precise.</p> | <p><b>Architectural Structures</b></p> <p>I know how to independently take exact measurements &amp; mark out to within 1mm.</p> <p>I know how to evaluate appearance and function against the original criteria.</p> <p>I know that my measurements are accurate enough to ensure everything is precise.</p> <p>I know how to hide joints to improve the look of my product.</p> |



# Bleasby Primary School

## Design Technology Knowledge Progression Map



| Food & Nutrition  |  |   |   |  |   |
|---|--|---|---|--|---|
| (R)/1/2 Autumn A  | (R)/1/2 Spring B   | 3/4 Summer A  | 3/4 Summer B  | 5/6 Spring A   | 5/6 Autumn B  |
| <p><b>Bread Making</b></p> <p>I know where in the world different foods originate from.</p> <p>I know that all foods come from animals or plants.</p> <p>I know how to prepare food safely and hygienically and can describe what this means.</p> | <p><b>Indian curry</b></p> <p>I know how to weigh or measure my ingredients accurately.</p> <p>I know how to describe the properties of the food ingredients: taste, smell, texture, and consistency.</p> <p>I know what I have done well in my work. I suggest things I could do in the future.</p> | <p>*</p> <p>I know how to use a range of techniques such as mashing, whisking, crushing, grating, cutting, kneading and baking.</p> <p>I know how to choose the right ingredients for a product.</p> <p>I know what to do to be hygienic and safe.</p> <p>I know how to make sure that my product looks attractive.</p> | <p><b>Smoothies</b></p> <p>To know how to measure and weigh ingredients to the nearest gram and millilitre</p> <p>I know how the combined ingredients come together and can describe it.</p> <p>I know what I can do to present my product in an interesting way.</p> | <p>I know how to be hygienic and safe when preparing food.</p> <p>I know what to do to present my work well.</p> <p>I know that a recipe can be adapted by adding or substituting one or more ingredients.</p> | <p><b>Veg Soup</b></p> <p>I know that seasons may affect the food available.</p> <p>I know how food is processed into ingredients that can be eaten or used in cooking.</p> <p>I know that a recipe can be adapted by adding or substituting one or more ingredients.</p> |
|   |  |   |   |  |   |
|   |  |   |   |  |   |



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| Electricity  |   |  |  |
|--|---|--|--|
| 3/4 Autumn A   | 3/4 Autumn B  | 5/6 Autumn A   | 5/6 Autumn B   |
| <p><b>Light up Christmas card</b> – battery and LED bulb</p> <p>I know how to use a simple circuit in my design.</p> <p>I can use a number of appropriate components to create a visually attractive Christmas card.</p> | <p><b>Buzzer</b> – <i>link with electricity science.</i></p> <p>I know how to use a simple circuit in my design.</p> <p>I know how to add things to my circuit to enhance the performance.</p> <p>I know how to alter my product after checking it.</p> | <p><b>Y5 – light up Christmas card</b><br/><b>Y6 – light up silhouette box</b></p> <p>Independently take exact measurements and mark out, to within 1mm</p> <p>I know how to incorporate a switch into my product.</p> | <p><b>Hydraulics and pneumatics</b></p> <p>Independently take exact measurements and mark out, to within 1mm</p> <p>I know how to incorporate hydraulics and pneumatics into my product</p> <p>I know how to use different kinds of circuits in my product.</p> <p>I know how to add a circuit in order to improve my product.</p> |