**Progression of Knowledge Document**

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| Unit | Nursery | Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Design criteria | Can we make something linked to our interests?  During CP and when the opportunity arises ask the children what they are making and why. | | What is a design criteria?  Know what a design criteria is and understand its purpose. | What is a target audience?  Know what a target audience is. | Based on research what should we add to the design criteria?  Understand how research can affect a design criteria. | Based on the target audience what should we add to the design criteria?  Understand how a target audience can affect a design criteria. | Can we create our own design criteria?  Understand how a design brief, research and a target audience are used to create a design criteria. | Can we choose a target audience and create an appropriate design criteria?  Understand how a design brief and research influence the audience you can target.  Understand how a design brief, research and a target audience are used to create a design criteria. |
| Design process | How will you create….?  During CP and when the opportunity arises ask the children how they will make…….. | | How can we share our ideas and help to make sure they will work?  Understand how we can communicate our ideas through discussion and drawing.  Understand how we can use templates to help with sizing of design. | How can we share our ideas and help to make sure they will work?  Understand how we can communicate ideas through drawing, mock ups and ICT. | How can we share our ideas and help to make sure they will work?  Understand how we can communicate through annotated sketches | How can we share our ideas and help to make sure they will work?  Understand how we can communicate through annotated sketches and computer aided design (available on Purple Mash) | How can we share our ideas and help to make sure they will work?  Understand how we can communicate through exploded diagrams | How can we share our ideas and help to make sure they will work?  Understand how we can communicate ideas through pattern pieces (summer)  Understand how to choose the best method to communicate ideas for the given product. (christmas) |
| Creation | How can we create our product?  Understand how to use a glue stick.  Understand how to hold scissors accurately with some support.  Understand how to explore different ways of joining materials.  Understand how to use glue spreaders appropriately with support. | | How can we create our product?  Understand how to use glue spreaders independently.  Understand how to use glue sticks with accuracy  Understand how to use scissors independently with some accuracy | How can we create our product?  Understand how to use glue spreaders with accuracy  Understand how to use scissors accurately | How can we create our product?  Understand how to begin to select the appropriate tools for joining with support.  Understand how to select the appropriate type of scissors for cutting- including fabric scissors. | How can we create our product?  Understand how to select the appropriate tools for joining independently and use with some accuracy- glue guns.  Understand how to begin to use saws for cutting with some accuracy | How can we create our product?  Understand how to select and use appropriate tools for joining independently and accurately- glue guns.  Understand how to use saws for cutting with accuracy. | How can we create our product?  Understand how to select and use appropriate tools for joining including the use of mechanical tools.  Understand how to select the appropriate tools for cutting using accurate measurements. |
| Evaluation | Did it work?  During CP and when the opportunity arises ask the children what they have made and if it worked well, if not what might they do next time. | | What do you like about your product?  Understand how to identify what we like about our products. | What would you do to improve your product?  Understand how to identify what we would like to improve our product | How has your product met the design criteria?  Understand how to compare our product to the design criteria. | How can you change your product so that it better meets the design criteria?  Understand how we can change our products so that it better meets the design criteria. | How did your target audience respond to product and why it is important to acknowledge their feedback?  Understand how we can use our target audience to gain feedback on our product and why this is important. | Using the information gathered from your target audience what do you think is good about your product and what would you change next time?  Understand how we can change our product so that it meets the needs of the design criteria and the target audience. |

**Progression of Procedural Knowledge Document**

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|  | **N** | **R** | **1** | **2** | **3** | **4** | **5** | **6** |
| Design criteria | Children to create something during CP that is linked to their interests. | | Use a design criteria to aid in product discussions and designs. | use knowledge of target audience to discuss what product they will make. | use research to add elements to a design criteria | Use knowledge of the target audience to add elements to the design criteria | Use knowledge of the design brief, research and a target audience are used to create a design criteria. | Use knowledge of the design brief and research to influence the audience you CAN target.  Use knowledge of a design brief, research and a target audience to create a design criteria. |
| Design process | Discuss during CP how they will create their product. | | Use discussions and drawings to communicate ideas.  use templates to help with sizing of design. | Use drawings, mock ups and ICT to communicate ideas. | Use annotated sketches to communicate ideas. | Use annotated sketches and computer aided design (available on Purple Mash) to communicate ideas. | Use exploded diagrams to communicate ideas. | Use pattern pieces to communicate ideas. (summer)  Choose the correct method of communication for your product. (Christmas) |
| Creation | To begin to use a glue stick.  To begin to hold scissors accurately with some support.  To begin to explore different ways of joining materials.  To begin to use glue spreaders appropriately with support. | | To begin to use glue spreaders independently.  To use glue sticks with accuracy  To begin to use scissors independently with some accuracy | To use glue spreaders with accuracy  To use scissors accurately | To begin to select the appropriate tools for joining with support.  To select the appropriate type of scissors for cutting- including fabric scissors. | To select the appropriate tools for joining independently and use with some accuracy- glue guns.  To begin to use saws for cutting with some accuracy | To select and use appropriate tools for joining independently and accurately- glue guns.  To use saws for cutting with accuracy | To select and use appropriate tools for joining including the use of mechanical tools.  To select the appropriate tools for cutting using accurate measurements. |
| Evaluation | Discuss during CP what worked well about their product. | | Discuss what we like about our products. | identify what we would like to improve our product. | Compare created products to the design criteria. | Describe how we could change our products so that it better meets the design criteria. | Use target audiences to gain feedback on products and explain why this is important. | Describe how we can change our product so that it meets the needs of the design criteria and the target audience. |

**Yearly map**

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| --- | --- | --- |
|  | Year 1 | |
|  | Christmas project | Summer project |
| question | **How can we create a Christmas wreath using a range of textiles and construction materials?** | **How can we create a garage for toy cars that is fit for purpose?**  Thinking about making sturdy structure for nursery use |

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|  | Year 2 | |
|  | Christmas project | Summer project |
| question | **How can we adapt a staple food into a Festive treat?**   * Adapt bread recipes to make them more festive.   Look at healthy eating and why carbs are important | **How can we create a card that shows our appreciation?**  Sliding mechanisms in cards or toys |

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|  | Year 3 | |
|  | Christmas project | Summer project |
| question | **How can we create an eye-catching decoration?**  Choose textiles and construction materials for their visual qualities.  Sock snowmen | **How can we encourage wildlife with our creations?**  Insect houses |

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|  | Year 4 | |
|  | Christmas project | Summer project |
| question | **How can we make a moving Christmas toy?**  Cam mechanism | **What savoury dishes can we create?**  Range of savoury dishes  Create menu |

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|  | Year 5 | |
|  | Christmas project | Summer project |
| question | **What would make a good Christmas treat?**  Sweet dishes | **How can we use motor mechanics to create a mini car?**  Controlled car |

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|  | Year 6 | |
|  | Christmas project | Summer project |
| question | **How can we make a decoration that incorporates an electrical circuit?**  Light up Rudolph  Singing Christmas card | **How can we create object objects that remind us of important times in our lives?**  Memory cushions etc |