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| **TO MASTER PRACTICAL SKILLS** | **TO DESIGN, MAKE, EVALUATE AND IMPROVE** | **TO TAKE INSPIRATION FROM DESIGN THROUGHOUT HISTORY** |
| **Class: 4B SUMMER** | **Title: ELECTRICALS AND ELECTRONICS** |
| **Topic summary:** Design and create a paper circuit greetings card with one illumination – series circuit. Rethink and break design to include more than one illumination – parallel circuit. |
| **DT Objectives** | **Unit of work end points** |
| **Create series and parallel circuits.****Make products by working efficiently (such as by carefully selecting materials).****Refine work and techniques as work progresses, continually evaluating the product design.****Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs.****Improve upon existing designs, giving reasons for choices.** | * What does conductive mean?
* What is copper tape?
* List some advantages of using copper tape in projects.
* What is an LED?
* Describe how an LED should be connected to a cell.
* What is an exploded diagram?
* Draw annotated diagrams to show the correct way to connect an LED to a cell.
* • Draw exploded diagrams that show how switches can be made with copper tape.
 |
| **Key vocabulary** | **Important Dates**  | **Questions?** |
| **LED** | Light Emitting Diode – a type of light bulb |  | **Can you label both visible and non-visible design features of the paper circuit?** |
| **Conductive** | a material that is conductive allows electricity to pass through it |  | What techniques are appropriate for this task?Can you identify which martials and components you will need to include? |
| **Adhesive** | able to stick to a surface |  | Can you detail the product design steps including annotations? |
| **Exploded diagram** | a diagram that is enlarged to show more detail |  | Can you adapt your design to include more than one LED?How did you rethink your design? |

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| **Class: 1/2H Summer**  | **Title: FOOD TECHNOLOGY** |
| **Make a portable snack for example a sandwich or a wrap including seasonal ingredients. Children practise and develop the following skills: spreading, grating, peeling, fork secure, the bridge hold, folding, stirring, snipping and weighing.** |
| **DT Objectives** | **Unit of work end points** |
| • Cut, peel or grate ingredients safely and hygienically.• Measure or weigh using measuring cups or electronic scales.• Assemble or cook ingredients.• Design products that have a clear purpose and an intended user.• Make products, refining the design as work progresses.• Use software to design• Explore objects and designs to identify likes and dislikes of the designs.• Suggest improvements to existing designs.• Explore how products have been created | Label and annotate pictures of the following portable snacks showing their design features:• a sandwich• a wrap• a sausage roll• a pie• a samosa.• Describe the safety features to be taken into account when preparing one of these snacks.• List the ingredients that one of the snacks is made from.• Describe how you would transport one of these snacks. |
| **Key vocabulary** | **Important Dates**  | **Questions?** |
| **Portable** | Easy to take somewhere else | The origins of the sandwich dates back to ancient times; however, it was the Earl of Sandwich, John Montagu, who popularized the hand-held food in the late 18th century. | Can you design and make a portable snack of your own choice?  |
| **Inspiration** | Where you got your ideas from | But the wrap was reportedly didn't come around until 1982, when it was invented by **Bobby Valentine**. |  |
| **Purpose** | The reason for which something is made |  |  |
| **User** | the person for whom the product is designed |  |  |
| **Automatically** | An automatic action is one you do without thinking about it |  |  |
| **Fluency**  | If you are fluent in something you do it effortlessly |  |  |
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