Class: Year 6

Unit		
Aut 1/2 **Unit title:** Electrical Systems – Steady hand game	**National Curriculum coverage** - Explain simply what is meant by 'form' (the shape of a product) and 'function' (how a product works) - State what they like or dislike about an existing children's toy and why - Learn about skills developed through play and apply this knowledge in a survey of one or more children's toys - Identify the components of a steady hand game - Design a steady hand game of their own according to their design criteria, using four different perspective drawings - Create a secure base for their game, with neat edges, that relates to their design - Make and test a functioning circuit and assemble it within a case	**Key designing skills** - Designing a steady hand game, identifying and naming the components required - Drawing a design from three different perspectives - Generating ideas through sketching and discussion - Modelling ideas through prototypes - Understanding the purpose of products (toys), including what is meant by 'fit for purpose' and 'form over function' - Constructing a stable base for a game - Accurately cutting, folding and assembling a net - Decorating the base of the game to a high-quality finish - Making and testing a circuit - Incorporating a circuit into a base - Testing their own and others' finished games, identifying what went well and making suggestions for improvement - Gathering images and information about existing children's toys - Analysing a selection of existing children's toys
Spr 1/2 **Unit title:** Textiles – Stuffed Toys	**National Curriculum coverage** - Design a stuffed toy, considering the main component shapes of their toy - Create an appropriate template for their stuffed toy - Join two pieces of fabric using a blanket stitch. - Neatly cut out their fabric - Use appliqué or decorative stitching to decorate the front of their stuffed toy - Use blanket stitch to assemble their stuffed toy, repairing when needed - Identify what worked well and areas for improvement	**Key designing skills** - Designing a stuffed toy considering the main component shapes required and creating an appropriate template - Considering the proportions of individual components - Creating a 3D stuffed toy from a 2D design - Measuring, marking and cutting fabric accurately and independently - Creating strong and secure blanket stitches when joining fabric - Threading needles independently - Using appliqué to attach pieces of fabric decoration - Sewing blanket stitch to join fabric - Applying blanket stitch so the spaces between the stitches are even and regular - Testing and evaluating an end product and giving points for further improvements
Sum 1/2 **Unit title:** Structures - Playgrounds	**National Curriculum coverage** - Create five apparatus designs, applying the design criteria to their work - Make suitable changes to their work after peer evaluation - Make roughly three different structures from their plans using the materials available - Complete their structures, improving the quality of their rough versions and applying some cladding to a few areas - Secure their apparatus to a base - Make a range of landscape features using a variety of materials which will enhance their apparatus	**Key designing skills** - Designing a playground featuring a variety of different structures, giving consideration to how the structures will be used - Considering effective and ineffective designs - Building a range of play apparatus structures drawing upon new and prior knowledge of structures - Measuring, marking and cutting wood to create a range of structures - Using a range of materials to reinforce and add decoration to structures - Improving a design plan based on peer evaluation - Testing and adapting a design to improve it as it is developed - Identifying what makes a successful structure