|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **DT** | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **EYFS** |  |  |  |  |  |  |
| **Year 1** |  | **Mechanisms**  Pop-ups – cards / story pages  Simple Card Levers and sliders  Start to use technical vocabulary when describing mechanisms, tools and materials  Mark out materials to be cut using a template  Fold, tear and cut paper and card  Cut along lines, straight and curved  Use a hole punch  Insert paper fasteners for card  Experiment with levers and sliders to find different ways of making things move in a 2D plane | **Food**  Preparing and combing foods  Fruit salad  Develop a food vocabulary using taste, smell, texture and feel  Cut, peel, grate, chop a range of ingredients  Work safely and hygienically  Understand the need for a variety of foods in diets |  | **Structures**  Stability and strength  Playground equipment  Refer to materials, tools and techniques using appropriate vocabulary  Explore how to make structures stronger  Investigate different techniques for stiffening a variety of materials  Test different methods of enabling structures to remain stable  Join appropriately for different materials and situations, e.g. glue, tape  Mark out materials and situations using a template  Use a glue gun with close supervision |  |
| **Year 2** |  |  | **Mechanisms**  Wheels and Axels  A vehicle for moon travel?  Join appropriately for different materials and situations, e.g. glue, tape  Try out different axle fixings and their strengths and weaknesses  Make vehicles with construction kits which contain free running wheels  Use a range of materials to create models with wheels and axles e.g. tubes, dowel, cotton reels  Roll paper to create tubes  Cut dowel using hacksaw and bench hook  Attach wheels to a chassis using an axle | **Food**  Where food comes from  The Eatwell Plate  Principles of a healthy diet  A simple savoury dish with NO cooking techniques  Group familiar food products e.g. fruit and vegetables  Explain where food comes from  Measure and weigh food items, non-statutory measures e.g. spoons, cup | **Textiles**  Using a template  Simple joining  Choice of stitches  Choice of materials  A puppet  Start to use appropriate vocabulary to refer to fabrics and tools  Cut out shapes which have been created by drawing round a template onto the fabric  Join fabrics by using e.g. running stitch, glue, staples, over sewing, tape  Decorate fabrics with attached items e.g. buttons, beads, sequins, braids, ribbons  Colour fabrics using a range of techniques e.g. fabric paints, printing, painting  Cut out shapes which have been created by |  |
| **Year 3** |  | **Food**  Healthy Picnic Item  Balanced diet  Simple cooking technique  Develop sensory vocabulary / knowledge using smell, taste, texture and feel  Analyse the taste, texture, smell and appearance of a range of foods (predominantly savoury)  Make healthy eating choices (the eatwell plate)  Join and combine a range of ingredients |  | **Mechanisms**  Making a robot with moving parts  Levers and linkages  Use lolly sticks / card to make levers / linkages  Use linkages to make movement larger or more varied  Use mechanical systems such as levers and linkages |  | **Structures**  Shell / frame structures  Strengthening  Planter  Develop vocabulary related to the subject  Create shell or frame structures  Strengthen frames with diagonal struts  Make structures more stable by giving them a wide base  Measure and mark square section, strip and dowel accurately to 1cm |
| **Year 4** | **Food**  Simple Savoury food and cooking techniques  Follow instructions / recipes  Prepare and cook using a range of cooking techniques  Explore seasonality of fruits and vegetables  Find out which fruit and vegetables are grown in countries / continents studied in geography  Develop understanding of how meat / fish are reared / caught |  |  | **Textiles**  Seams  Stiffening and strengthening  Materials and fastenings  Textile passport container  Develop vocabulary for tools, materials and their properties  Understand seam allowance  Join fabrics using running stitch, over sewing, blanket stitch  Prototype a product using J cloths  Use prototype to make a pattern  Explore strengthening and stiffening of fabrics  Explore fastenings and recreate some  Sew on buttons and make loops  Use appropriate decoration techniques |  | **ICT and electrical systems**  Control  Electrical components  Develop vocabulary related to the project  Use mechanical systems such as gears and pulleys  Incorporate circuits into a model  Use ICT to control products |
| **Year 5** |  | **Food**  Food from another culture  A variety of cooking techniques  Prepare mostly savoury dishes using their own selection of ingredients, taking into account their nutritional properties and sensory characteristics  Weigh and measure using scales  Select and prepare foods for a particular purpose  Work safely and hygienically  Use a range of cooking techniques  Join and combine a widening range of materials |  | **Mechanisms**  Mechanical systems  Pulleys  Gears  Cams  A vehicle using gears powered by an electric motor  Develop a technical vocabulary appropriate to the project  Use mechanical systems such as cams, pulleys and gears | **3D textiles**  using gussets  using patterns  joining with seam allowance  combining fabrics  A belt with loops and pouches  Use the correct vocabulary appropriate to the project  Create 3D products using patterns pieces and seam allowance  Understand pattern layout  Decorate textiles appropriately (often before joining components)  Pin and back fabric pieces together  Join fabrics using over sewing, back stitch, blanket stitch or machine stitching (closer supervision)  Combine fabrics to create more useful properties |  |
| **Year 6** |  |  | **Food**  Chefs  Food heroes  Designing a healthy menu  Consider influence of chefs e.g. Jamie Oliver and school meals, Hugh Fearnley-Whittingstall and sustainable foods  Develop an understanding of a healthy diet (using the eatwell plate) and apply in their ingredient choices  Know where and how ingredients are grown and processed |  | **Combining learning from across DT skill bases** – structures, mechanical systems, electrical systems, ICT programming and control  Use the correct terminology for tools, materials and processes  Use bradawl to mark hole positions  Use hand drill to drill tight and loose fit holes  Cut strip wood, dowel, square section wood accurately to 1mm  Join materials using appropriate methods  Build frameworks to support mechanisms  Stiffen and reinforce complex structures  Use electrical systems such as motors  Program, monitor and control using ICT | |