

Yattendon Design Technology Overview

Year 3 Design Technology			
Unit	Key knowledge and skills	Technical vocabulary	Assessment focus
Puppet Making – Textiles Add basic moving parts	Design for a user and purpose Session 1 – Explore a range of puppets, identify users and purpose (actual puppets and pictures) Session 2 – Design a puppet based on research. Annotate design with stitches to be used and details to add (features etc...) Use simple joining techniques (glue/sew) Session 3 – Create templates for their puppet and practice joining techniques. Session 4 – Cut out puppet pieces and sew together using running stitch. Add features and details using glue. Evaluate their puppet	Design Annotate Fabric Join Stitch glue Template decorate evaluate	Can the children explain who their puppet is for and how it works? Does the stitching successfully join the fabric pieces together?
Pop-Up Books	Explore levers and sliders Session 1 – Explore books with moving parts. Identify and learn different moving mechanisms – levers/sliders Measure, cut and assemble accurately Create and test simple pop-up mechanisms. Design a pop-up page/book for plant growth. Create movement using paper mechanisms Using knowledge and skills learnt, children to create a pop-up book	Lever Slide Fold Cut score Mechanism 2D 3D	Does the book have a range of mechanisms? Do the mechanisms move as intended?
Seasonal pasta salad	Understand seasonality and healthy choices Session 1 – Talk about different food groups. Discuss where food comes from and how seasons can affect this. Session 2 – investigate a range of pasta salads and from this design their own using seasonal ingredients Use basic food prep skills safely Session 3 – Using chopping and grating skills, children to create their pasta salad Identify food groups Children evaluate the taste and aesthetics of their salad, naming the ingredients chosen and why?	Seasonality Hygiene Chop Grate Utensils Fridge Pasta Vegetables Fruit	Can pupils explain why ingredients are healthy and seasonal?

Year 4 Design Technology

Unit	Key knowledge and skills, and learning sequence	Technical vocabulary	Assessment focus
Torches	Identify components Session 1 – Children investigate a range of torches and their features. Children design their own torch, annotating diagram. Build a simple circuit/Understand conductors and insulators Session 2 - Children revisit science work on circuits and build a simple circuit with battery, bulb and switch. Investigate different switch types and add to/refine design. Session 3 – Children to build their torch using their design	Circuit Battery Bulb Switch Conductor insulator	Does the torch work reliably?
Bug hotels	Design for a specific user Session 1 - Explore insects and existing bug hotels. Use research to design a bug hotel for a chosen insect. Strengthen and reinforce structures Session 2 - Learn how to strengthen basic structures. Use knowledge to refine design. Select materials for purpose Session 4 - Using design and knowledge of strengthening, children are to choose appropriate materials and build their bug hotels. Evaluate their designs based on strength of structure and suitability for insect.	Structure Reinforce Stable Frame Natural manmade	Is the structure stable and fit for purpose?
Viking Stew	Understand food origins Session 1 - Revisit work in Y3 on food origins and seasonality – how would this effect food eaten years ago? Explore foods available, grown and eaten by Vikings. Compare this to modern stew recipes. Follow and adapt a recipe Session 2 - Children design a seasonal stew based on Viking recipe. Note adaptations made and why. Use heat safely Children chop and grate ingredients and under supervision cook stew.	Ingredient Stock Simmer Boil Hob Flavour Season (S&P)	Can pupils talk about the difference between foods available historically and now and give reasons for this? Can the pupils explain how the meal is healthy?

Y5 Design Technology

Unit	Key knowledge and skills	Technical vocabulary	Assessment focus
Kites	Design for a specific purpose and use Session 1 - Children investigate existing kite designs. Children compare the materials, shape and tension used within the designs. Session 2 – children to use their research to design their own kite for ***. Children to annotate their design. Select materials for purpose/ Strengthen and reinforce structures Session 3 - Children choose materials for their design. Children test and adapt designs, creating their final piece.	Tension Frame Materials Test Adapt	Do the children transfer their learning into their designs? Does the design improve after testing? Does the kite fly?
Moving Toy	Explore mechanical systems - gears and cams Session 1 - Using examples and videos, children learn about gears and cams (mechanical motion) to create movement and understand rotary motion. Session 2 – using their learning, children to design their own moving toy, annotating their design. Session 3 – children to assemble materials accurately, using glue guns and saws safely.	Gear Cam Follower Rotary Glue gun Saw	Are materials and components assembled securely? Does the mechanism control movement? Can children explain how the different components create movement?
Healthy dips	Understand food origins Session 1 - Children explore the foods of South America, in particular the range of dips and their ingredients. Follow and adapt a recipe Session 2 - children to choose a dip to recreate, making their own tweaks Use basic food prep skills/heat safely Session 3 – children to use their knowledge of food prep (Y3/4) and cooking (Y4) to prepare their dips. Children evaluate the taste, texture, appearance and nutritional value of their dip.	Dip Recipe	Can children explain the reasons behind their adaptations to the dip recipes? Can children discuss the methods of preparations and why these are important?

Y6 Design Technology

Unit	Key knowledge and skills	Technical vocabulary	Assessment focus
Felt Tote Bag	Design for user and purpose. Children to research 'Tote' bags, looking at size, structure (pattern) and materials used. Children to create an annotated design of their bag, listing materials and techniques to be used. Children to create patterns to use in making their own bag. Use simple joining techniques (variety of stitches). Children to cut their pattern pieces and pin together. Children to use chosen stitches to join materials securely. <i>*More able children to add a pocket to the front of their bag.</i> Children to use learning from Y4 (applique) to create a design for the front of their bag. Reflection and Evaluation. Children to evaluate each other's bags, focusing on strength and durability and design (aesthetic)	Tote bag Pattern Seam Running stitch Back stitch Blanket stitch Finish Durable Applique Aesthetic	Is the product well finished and strong? Is the design clear and appealing?
Healthy Pizzas	Research and design. Children to investigate different pizza toppings and their origins. Children to use their findings and knowledge of seasonal ingredients to create a 'healthy' pizza topping, considering allergy needs etc Create and follow a recipe. Children to follow a pizza dough recipe, measuring ingredients and combining to make the dough. Following their toppings design, children to prepare ingredients and pizza for cooking Reflection and Evaluation. Children to evaluate their pizza, based on aesthetics, taste, crunch...	Yeast Knead Dough Proportion Adapt Pre-heat Preparation	Can pupils explain the food groups contained in their pizza and their importance?
Moving toy Working with Infants	Combine cams, levers and linkages Refine designs independently Evaluate against design criteria	Linkage Lever Evaluate refine	Does the toy meet its design brief?