

# Belmont Cheveley Park Primary School



DT

Passport



# Year 1

## DT Passport



### Autumn 1: Structures: Model Houses and Homes

- Design: I can look at model houses and talk about what is good and bad and draw my own model house.
- Make: I can measure and join materials together with glue and talk about how to make them stronger, stiffer and more stable.
- Evaluate: I can talk about my model house, linking it to what I was asked to do, and say what was good and what I could do better.

### Spring 1: Cooking and Nutrition: Seasonal Salads

- Design: I can investigate a variety of fruit and vegetables and decide which ones I would like to put into a salad. I can talk about and draw my salad.
- Make: I can follow hygiene procedures. I can use simple utensils and equipment to peel, cut, slice, squeeze, grate and chop safely.
- Evaluate: I can talk about my seasonal salad, linking it to what I was asked to do, and say what was good and what I could do better. I can discuss how some fruit and vegetables are healthy.

### Summer 1: Textiles: Weaving Wonders

- Design: I can explore a range of existing textile products relevant to the project and explain which ones I like. I can explain my ideas through mock-ups with paper and card.
- Make: I can choose suitable textiles to weave with, and cut, shape and join fabric with glue. I can explore different finishing techniques e.g. using fabric crayons, sequins, buttons and ribbons.
- Evaluate: I can talk about my weaving wonder, linking it to what I was asked to do, and say what was good and what I could do better.



# Year 2

## DT Passport



### Autumn 1: Structures and Mechanisms: Drawbridge

- Design: I can design a drawbridge linked to our topic, 'The Great Fire of London', and explain what I want to do and how I may do it, and use drawings.
- Make: I can select from and use paper, card, plastic and wood, and cut and join them together to allow movement. I can understand that different mechanisms make different movements and use a slider and lever to make my castle move.
- Evaluate: I can describe what went well, thinking about the design criteria and what I liked about products with sliders and levers. I can say what I would do differently and why.

### Spring 1: Cookery and Nutrition: Dips and dippers

- Design: I can investigate a variety of dips and dippers and design a new dip and dipper from healthy foods from the Eatwell plate. I can draw and explain my ideas and explain who my dips and dippers are for.
- Make: I can follow hygiene procedures. I can use utensils and equipment to peel, cut, slice, squeeze, grate and chop safely. I can combine ingredients based on their colour, texture and taste. I can explain that different foods come from different countries and that all food comes from plants and animals.
- Evaluate: I can describe what went well, thinking about the design criteria and what I liked about existing dips and dippers. I can say what I would do differently and why.

### Summer 2: Textiles: Caribbean clothes

- Design: I can look at different fabrics and dresses relevant to the project and choose which ones I would like to use, using ICT. I can explain who my dress is for, draw a picture of my dress and make a paper copy of it.
- Make: I can mark out and cut two identical shapes from fabric and join them together using running stitch. I can use different finishing techniques e.g. fabric crayons, sequins, buttons and ribbons to copy my design onto my dress.
- Evaluate: I can describe what went well, thinking about the design criteria and what I liked about existing Caribbean clothes. I can say what I would do differently and why.



# Year 3

## DT Passport



### Autumn 1: Textiles: School badge

- Design: I can research the meaning behind the existing school badge. I can use these ideas in my own design, thinking about the needs of the user. I can produce annotated sketches of pattern pieces and the final school badge. I can make a prototype.
- Make: I understand the need for patterns and a seam allowance and can use the appropriate tools to measure and cut fabric. I can securely join two pieces of fabric together using running stitch and glue. I can use different fabrics and finishing techniques that will appeal to the user.
- Evaluate: I can explain what I think about the existing school badge and where it came from and who designed it. I can say whether my badge fits the design criteria with the intended user, say what I could improve and listen to other people's views.

### Spring 2: Structures: Pyramids

- Design: I can research existing pyramid structures and can design my own Pyramid structure based on this. I can complete annotated sketches of the inside and outside of my pyramid to show my realistic ideas.
- Make: I can order the main stages of making my pyramid. I can make a strong, stiff structure, and can select and use tools to measure, mark out, cut, score, shape and assemble materials with some accuracy. I can choose how I am going to add colour to my pyramid to make it look realistic.
- Evaluate: I can investigate existing pyramid structures and think about the materials, components and techniques that have been used to make them. I can use my design criteria to evaluate my pyramid and say what I would change to make my design better. I can say if my pyramid was fit for purpose.

### Summer 2: Cooking and Nutrition: Making Cakes

- Design: I can talk about my ideas with peers and adults to design a cake recipe. I can think about the appearance, the taste, the texture and aroma of my cake and use annotated sketches and web-based recipes to show my ideas.
- Make: I can plan the main stages of a cake recipe, listing ingredients, utensils and equipment. I can select and use appropriate utensils and equipment, and can mash, whisk, crush, grate, cut, bake and weigh ingredients to the nearest gram and millilitre. I can use a heat source to cook ingredients and follow hygiene procedures.
- Evaluate: I can carry out sensory evaluations of a variety of ingredients and cakes and record my evaluations in a table. I can say what I liked about my cake using my senses and what I could do to improve my design next time, listening to the views of others.



# Year 4 DT Passport



## Autumn 2: Structures and Mechanisms: Levers and Linkages

- Design: I can use research for design ideas and begin to create my own design criteria. I can say how realistic my design is and create annotated sketches and a prototype of my ideas.
- Make: I can order the main stages of making my underwater scene. I can make a strong, stiff structure, and can select and use tools to measure, mark out, cut, score, shape and assemble different materials with some accuracy. I can use lever and linkage mechanisms to make my underwater scene move. I can explain the difference between fixed and loose pivots. I can use electrical systems in my Underwater scene, such as series circuits incorporating switches, bulbs and buzzers.
- Evaluate: I can investigate online, and where appropriate, other products with lever and linkage mechanisms. I can evaluate my underwater scene against my design criteria and the user's needs as I design and make it. I can suggest improvements to my original design. I can investigate and analyse a range of existing battery-powered products.

## Spring 2: Textiles: Roman Shields

- Design: I can use research for design ideas and begin to create my own design criteria for an appealing, functional Roman Shield aimed at a specific user. I can say how realistic my design is and produce annotated sketches of pattern pieces and my final product.
- Make: I can plan the main stages of making my Roman Shield in a systematic order. I can select and use appropriate tools with some accuracy to measure, cut, join and finish. I can select fabrics according to their strength and aesthetic qualities (pattern etc). I can join textiles using a running and backstitch and improve their appearance with finishing techniques such as hemming, tie-dye, fabric paints and digital graphics.
- Evaluate: I can investigate a range of relevant textile products. I can test my product against my original design criteria and with the intended user, considering others' views.

## Summer 1: Cooking and nutrition: Austrian food

- Design: I can generate and clarify my ideas for an Austrian food recipe through discussion with peers and adults to develop design criteria including appearance, taste, texture and aroma for an appealing recipe for a particular user and purpose. I can use annotated sketches and web-based recipes, to develop and communicate my ideas.
- Make: I can plan the main stages of a recipe, listing ingredients, utensils and equipment. I can select and use appropriate utensils and equipment to prepare and combine ingredients e.g. use of a heat source to cook ingredients and show awareness of the need to control the temperature of the hob/oven; use a range of techniques such as mashing, whisking, crushing, grating, cutting, kneading and baking; and measure and weigh ingredients to the nearest gram and millilitre. I can select from a range of ingredients to make appropriate food products, thinking about sensory characteristics and follow hygiene procedures. I can begin to understand when, where and how food is grown and explain that a healthy diet is made up of a variety and balance of different food and drink and apply this when cooking my dish.
- Evaluate: I can carry out sensory evaluations of a variety of ingredients and products and record my evaluations in a table and simple graph. I can evaluate the ongoing work and my final dish with reference to my design criteria and the views of others.



# Year 5 DT Passport



## Autumn 2: Mechanisms: CAMS

- Design: I can generate innovative ideas by carrying out research using surveys, interviews, questionnaires and web-based resources. I can create my own simple design criteria and show my design through annotated drawings and drawings from different views.
- Make: I can understand that mechanical systems have an input, process and output. I can understand how cams can be used to produce different types of movement and change the direction of movement. I can select from and use a range of tools and equipment to accurately assemble a well finished, working cam mechanism.
- Evaluate: I can compare my final product to my original design criteria. I can consider the views of others to improve my work. I can test products and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose.



## Spring 1: Cooking and Nutrition: Bread Making

- Design: I can generate innovative ideas through research and discussion with peers and adults to develop a design brief and criteria for a design specification. I can explore a range of initial ideas, and make design decisions to develop a final product linked to user and purpose. I can use words, annotated sketches and information and communication technology as appropriate to develop and communicate ideas.
- Make: I can write a step-by-step recipe, including a list of ingredients, equipment and utensils. I can select and use appropriate utensils and equipment, including heat sources, accurately to measure and combine appropriate ingredients to make, decorate and present my bread appropriately for the intended user and purpose. I can calculate ratios of ingredients to scale up or down from a recipe and I can follow hygiene procedures.
- Evaluate: I can carry out sensory evaluations of a range of relevant products and ingredients and record the evaluations using e.g. tables/graphs/charts such as star diagrams. I can evaluate my final bread product with reference back to my design brief and design specification, taking into account the views of others when identifying improvements.



## Summer 2: Textiles: Fabric Bags using CAD

- Design: I can generate innovative ideas through research including surveys, interviews and questionnaires. I can develop, model and communicate my ideas through talking, drawing, templates, mock-ups and prototypes including using computer-aided design. I can design a purposeful, functional, appealing fabric bag for the intended user that is fit for purpose based on a simple design specification.
- Make: I can produce detailed lists of equipment and fabrics relevant to the tasks. I can formulate step-by-step plans and, if appropriate, allocate tasks within my team. I can select from and use a range of tools and equipment, including CAD, to make a bag that is accurately assembled and well finished. I can create a 3D textile bag from pattern pieces, fabric shapes and different fabrics using different stitches such as running stitch, backstitch and blanket stitch. I can measure, make a seam allowance, tape, pin, cut, shape and join fabric.
- Evaluate: I can investigate and analyse textile products linked to my final product. I can compare my final bag to my original design specification. I can consider the views of others to improve my work.





# Year 6 DT Passport



## Autumn 2: Cooking and Nutrition: Seasonal Food

- Design: I can generate innovative ideas through research and discussion with peers and adults to develop a design brief and criteria for a design specification. I can explore a range of initial ideas, and make design decisions to develop a final recipe linked to user and purpose. I can use words, annotated sketches and information and communication technology as appropriate to develop and communicate my ideas.
- Make: I can write a step-by-step recipe, including a list of ingredients, equipment and utensils. I can select and use appropriate utensils and equipment, including heat sources accurately to measure, combine appropriate ingredients and cook food. I can add or substitute one or more ingredients to change the appearance, taste, texture and aroma of my food. I can alter methods, cooking times and/or temperatures. I can explain and give examples of food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world.
- Evaluate: I can carry out sensory evaluations of a range of relevant products and ingredients and record the evaluations using e.g. tables/graphs/charts such as star diagrams. I can evaluate my final product with reference back to my design brief and design specification, taking into account the views of others when identifying improvements. I can understand how key chefs have influenced eating habits to promote varied and healthy diets.

## Spring 1: Structures: Anderson Shelters

- Design: I can carry out research into existing products and develop a simple design specification to guide the development of my ideas and product, taking account of constraints including time, resources and cost. I can generate, develop and model innovative ideas, through discussion, prototypes and annotated sketches. I can research key events and individuals relevant to the structures used in the project.
- Make: I can formulate a clear plan, including a step-by-step list of what needs to be done and list resources to be used. I can competently select from and use appropriate tools to accurately measure, mark out, score, cut, shape and join construction materials to make frameworks and use finishing and decorative techniques suitable for my Anderson Shelter. I can strengthen, stiffen and reinforce 3-D frameworks.
- Evaluate: I can critically evaluate my Anderson Shelter against my design specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests.

## Summer 1: Textiles: Phone Cases

- Design: I can generate innovative ideas by carrying out research including surveys, interviews and questionnaires and develop, model and communicate ideas through talking, drawing, templates, mock-ups and prototypes. I can design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification.
- Make: I can produce detailed lists of equipment and fabrics, and formulate step-by-step plans. I can make a 3-D textile product from a combination of accurately made pattern pieces, fabric shapes and different fabrics. I can independently take exact measurements and mark out, to within 1 millimetre. I can demonstrate how to measure, make a seam allowance, tape, pin, cut, shape and join fabric with precision to make a more complex product, and join textiles using a greater variety of stitches, such as backstitch, whip stitch, blanket stitch. I can strengthen, stiffen and reinforce where appropriate.
- Evaluate: I can investigate and analyse existing textile phone covers. I can compare my final phone case to my original design specification. I can test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. I can consider the views of others to improve my work.