

Palace Fields Primary School Whole School D & T Curriculum Overview Academic Year 2018 - 2019

| | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
|--------|--|--------------------------------|--|--|---|---|
| Year 1 | Year 1 Nesign a hat for a Meerkat for any weather (textiles) D & T Key Skills | | Key Question What could be in our fruit salad? (nutrition) | | Key Question What else could the three little pigs have made their house with? (Materials) | |
| | | | D & T Key Skills I can use my own ideas to make something. I can cut food safely. I can explain to someone else how I want to make my product. I can choose appropriate resources and tools. National Curriculum Objectives Use the basic principles of a healthy and varied diet to prepare dishes Understand where food comes from | | I can use my own ideas to make s I can describe how something wo I can explain to someone else how I can choose appropriate resourc I can make a simple plan before n National Currica Generate, develop, model and con talking and drawing Select from and use a wide range | rks. v I want to make my product. ves and tools. naking. ulum Objectives nmunicate their ideas through |
| Year 2 | Key Question Why might our dinosaur bite you? (mechanisms) | | <u>Key Question</u> How can we put on a finger puppet show for the queen? | | including construction materials of characteristics Key Qu What makes a fairgr | uestion |
| | <u>D & T Key Skills</u> I can think of an idea and plan what to do next. I can choose materials and tools and explain why I have chosen them. I can explain what went well with my work. I can measure materials to use in a mechanism. National Curriculum Objectives Generate, develop, model and communicate their ideas through | | (textiles) D & T Key Skills I can think of an idea and plan what to do next. I can choose tools and materials and explain why I have chosen them. I can join materials and components in different ways. I can explain what went well with my work. I can explain why I have chosen specific textiles. National Curriculum Objectives | | D & T K I can think of ideas and plan wha I can choose the best tools and r these are the best. I can incorporate some kind of m I can join material in different w I can use joining, folding or rollin | naterials and give reasons why ovement into my model. ays. g to make my model stronger. |
| | talking and drawing Explore and use mechanisms, (for e and axles), in their products. Select from and use a range of tool practical tasks, | xample levers, sliders, wheels | Generate, develop, model and cortalking and drawing Select from and use a wide range including textiles | nmunicate their ideas through | Design purposeful, functional, apply and other users based on design Build structures, exploring how the stiffer and more stable Explore and evaluate a range of Evaluate their ideas and products. | pealing products for themselves criteria hey can be made stronger, existing products |
| Year 3 | <u>Key Ques</u> Can you design your own volcano erupt | and work out how to make it | | <u>uestion</u> helter for the Early Britons le sheet material) | <u>Key Q</u> ı How did the Greeks 'coil' | <u>uestion</u> to make their clay pots? |

| | (Use of materials) | | <u>D & T Key Skills</u> | |
|---------|--|--|---|--|
| | | <u>D & T Key Skills</u> | I can put together a step-by-step plan which shows the order and | |
| | <u>D & T Key Skills</u> | I can put together a step by step plan which shows the order and | also what equipment and tools they need. | |
| | I can describe my design using an accurately labelled sketch and | also what equipment and tools I need | I can use equipment and tools accurately. I can explain what I changed which made their design even better. | |
| | words | I can use equipment and tools accurately | | |
| | I can use equipment and tools accurately | I can join materials | | |
| | I can select the most appropriate materials | I can work accurately to make cuts and holes | I can select the most appropriate materials. | |
| | I can use a range of techniques to shape and mould | | I can use a range of techniques to shape and mould. | |
| | I can use finishing techniques | National Curriculum Objectives | I can use finishing techniques. | |
| | | Generate, develop, model and communicate their ideas through | | |
| | National Curriculum Objectives | discussion, annotated sketches, cross sectional and exploded | National Curriculum Objectives | |
| | Generate, develop, model and communicate their ideas through | diagrams, prototypes, pattern pieces and computer-aided design | Generate, develop, model and communicate their ideas through | |
| | discussion, annotated sketches, cross sectional and exploded | Select from and use a wider range of tools and equipment to | discussion, annotated sketches, cross sectional and exploded | |
| | diagrams, prototypes, pattern pieces and computer-aided design | perform practical tasks, such as cutting, shaping, joining and | diagrams, prototypes, pattern pieces and computer-aided design | |
| | Select from and use a wider range of tools and equipment to | finishing, accurately | Select from and use a wider range of tools and equipment to | |
| | perform practical tasks, such as cutting, shaping, joining and | Apply their understanding of how to strengthen, stiffen and | perform practical tasks, such as cutting, shaping, joining and | |
| | finishing, accurately | reinforce more complex structures | finishing, accurately | |
| | Evaluate their ideas and products against their own design | ' | Evaluate their ideas and products against their own design | |
| | criteria and consider the views of others to improve their work | | criteria and consider the views of others to improve their work | |
| Year 4 | Key Question | Key Question | Key Question | |
| / Eui 1 | How can we catch a thief? | Can you create a Roman banquet? | Will our 'bag for life' last that long? | |
| | (mechanisms) | (Nutrition) | (textiles) | |
| | (meename) | California | (| |
| | <u>D & T Key Skills</u> | <u>D & T Key Skills</u> | <u>D & T Key Skills</u> | |
| | I can use ideas from other people when I am designing. | I can produce a plan and explain it. | I can use ideas from other people when I am designing. | |
| | I can plan and explain it. | I can evaluate and suggest improvements for my design. | I can produce a plan and explain it. | |
| | I can evaluate and suggest improvements from my designs. | I can measure accurately. | I can evaluate and suggest improvements for my design. | |
| | I can evaluate products for both purpose and appearance. | I know how to be both hygienic and safe when using food. | I can evaluate products for both their purpose and appearance. | |
| | I can measure accurately. | | I can explain how I have improved my original design. | |
| | | National Curriculum Objectives | I can measure accurately. | |
| | National Curriculum Objectives | Investigate and analyse a range of existing products | I can use a range of tools and equipment competently. | |
| | Understand how key events and individuals in design and | Understand and apply the principles of a healthy and varied diet | | |
| | technology have helped shape the world | Prepare and cook a variety of predominantly savoury dishes using | <u>National Curriculum Objectives</u> | |
| | Understand and use mechanical systems in their products | a range of cooking techniques | Understand how key events and individuals in design and | |
| | Evaluate their ideas and products against their own design | | technology have helped shape the world | |
| | criteria and consider the views of others to improve their work | | Select from and use a wider range of materials and components, | |
| | | | including construction materials, textiles and ingredients, | |
| | | | according to their functional properties and aesthetic qualities | |
| Year 5 | <u>Key Question</u> | <u>Key Question</u> | <u>Key Question</u> | |
| | Who will win the Great Year 5 Bake off? (nutrition) | How will we make a shaduf? | How handy are our gloves? - Textile (Carnival outfit/ headdress) | |
| | | (mechanisms) | | |
| | <u>D & T Key Skills</u> | · | D & T Key Skills | |
| | I can come up with a range of ideas after collecting information | D & T Key Skills | I can come up with a range of ideas after collecting information | |
| | from different sources. | I can follow and refine my plans. | from different sources. | |
| | I can produce a detailed step-by-step plan. | I can justify my plans in a convincing way. | I can produce a detailed step-by-step plan. | |
| | I show that I can be both hygienic and safe in the kitchen. | I show that I can test and evaluate my products. | I can explain how a product will appeal to a specific audience. | |
| | | , F | I can evaluate the appearance. | |
| | | a contract the contract to the | 1.1 | |

| | National Curriculum Objectives Understand and apply the principles of a healthy and varied diet Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. | I can evaluate my product against a clear criteria. National Curriculum Objectives Understand and use mechanical systems in their products Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design | National Curriculum Objectives Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work |
|--------|---|--|--|
| Year 6 | <u>Key Question</u> Can you design and make a Viking longboat (Construction) | <u>Key Question</u> Can you design and make pyramids in the style of the Mayan (Mouldable materials) | <u>Key Question</u> How does the London Eye turn round? D & T Key Skills |
| | <u>D & T Key Skills</u> I can use a range of information to inform their design I can use tools and materials precisely I can change the way I am working, if needed I can test and evaluate my final product I can discuss how to improve my product | D & T Key Skills I can use a range of inform to inform my design I can consider culture and society in my design I can change the way I work if I need to I can explain how I can improve my product | I can use a range of information to inform my design. I can use tools and materials precisely. I can use different kinds of circuits in my products. I can test and evaluate my final product. I can explain what would improve my product. |
| | National Curriculum Objectives Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work | National Curriculum Objectives Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic quality Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work | National Curriculum Objectives Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups Understand and use electrical systems in their products, (for example series circuits incorporating switches, bulbs, buzzers and motors) Apply their understanding of computing to programme, monitor and control their products |