

DT home learning projects

| | Investigating and Evaluating activities | Focused Tasks | Design, Make and Evaluate assignment |
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| Year 1/2 | <p>Go on a walk and/or look at photographs of the local area to explore structures such as playground equipment, street furniture, walls, towers and bridges e.g. <i>What are the structures called and what is their purpose? Who might use them? What materials have been used? Why have these been chosen? How have the parts been joined together? How have the structures been made strong enough? How have they been made stable?</i></p> <ul style="list-style-type: none"> • Where possible, ask the children to draw or photograph the structures they have been exploring and label with the correct technical vocabulary in relation to the structure, materials used and shapes e.g. wall, tower, framework, base, joint, metal, wood, plastic, brick, triangle, square, rectangle, cuboid, cube | <p>Demonstrate measuring, marking out, cutting, shaping, joining and finishing techniques with a range of tools and new and reclaimed materials that children are likely to use to make their structures. Discuss the suitability of materials for their products according to their characteristics.</p> <ul style="list-style-type: none"> • Ask the children to build and explore a variety of freestanding structures using construction kits, such as wooden blocks, interconnecting plastic bricks and those that make frameworks e.g. <i>How can you stop your structures from falling over? How they can be made stronger and stiffer in order to carry a load?</i> Children could make models of the structures they have seen in school and the local area. • Ask children to fold paper or card in different ways to make freestanding structures, using masking tape where necessary to make joins. Encourage them to think about how folding materials can make them stronger, stiffer, stand up and be more stable e.g. <i>Can they support an object on top of their structures without it falling over or breaking?</i> | <p>Discuss with the children what structure they will be designing, making and evaluating e.g. <i>Who will your product be for? What will be its purpose? What materials will you use? How will you make it strong and stable?</i></p> <ul style="list-style-type: none"> • Generate some simple design criteria with the children e.g. the structure should stand up on its own, it should be strong enough to carry Teddy. • Encourage the children to develop their ideas through talking, drawing and making mock-ups of their ideas with construction kits and other materials. • As a whole class, plan the order in which the structures will be made. Children could make their final products from construction kits, new and reclaimed materials or any combination of these, according to their characteristics. • Ask children to evaluate their developing ideas and final products against original design criteria. |
| Year 3/4 | <p>Children investigate a range of food products e.g. the content of their lunchboxes over a week, a selection of foods provided for them, food from a visit to a local shop. Link to the principles of a varied and healthy diet using <i>The eatwell plate</i> e.g. <i>What ingredients have been used? Which food groups do they belong to? What</i></p> | <p>Learn to select and use a range of utensils and use a range of techniques as appropriate to prepare ingredients hygienically including the bridge and claw technique, grating, peeling, chopping, slicing, mixing, spreading, kneading and baking.</p> | <p>Discuss the purpose of the products that the children will be designing, making and evaluating and who the products will be for.</p> <ul style="list-style-type: none"> • Develop and agree on design criteria with the children within a context that is authentic and meaningful. This can include criteria relating to healthy |

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| | <p><i>substances are used in the products e.g. nutrients, water and fibre?</i></p> <ul style="list-style-type: none"> • Carry out sensory evaluations on the contents of the food from e.g. a variety of bought food products such as a range of wraps or sandwiches. Record results, for example using a table. Use appropriate words to describe the taste/smell/texture/appearance e.g. <i>How do the sensory characteristics affect your liking for the food?</i> • Gather information about existing products available relating to your product. Visit a local supermarket and/or use the internet. • Find out how a variety of ingredients used in products are grown and harvested, reared, caught and processed e.g. <i>Where and when are the ingredients grown? Where do different meats/fish/cheese/eggs come from? How and why are they processed?</i> | <ul style="list-style-type: none"> • Food preparation and cooking techniques could be practised by making a food product using an existing recipe. • Discuss basic food hygiene practices when handling food including the importance of following instructions to control risk e.g. <i>What should we do before we work with food? Why is following instructions important?</i> | <p>eating and a varied diet e.g. <i>What do you need to consider to make it part of a balanced diet? How do we select the ingredients? How could we make it appealing to eat?</i></p> <ul style="list-style-type: none"> • Ask children to generate a range of ideas encouraging realistic responses. • Using discussion, annotated sketches and information and communication technology if appropriate, ask the children to develop and communicate their ideas. • Ask children to consider the main stages in making the food product, before preparing/cooking the product including the ingredients and utensils they will need. • Evaluate as the assignment proceeds and the final product against the intended purpose and user, reflecting on the design criteria previously agreed. Consider what others think of the product when considering how the work might be improved. |
| <p>Year 5/6</p> | <p>Children use first hand and secondary sources to carry out relevant research into existing products to include personal/cultural preferences, ensuring a healthy diet, meeting dietary needs and the availability of locally sourced/seasonal/organic ingredients. This could include a visit to a local bakery, farm, farm shop or supermarket e.g. <i>What ingredients are sourced locally/in the UK/from overseas? What are the key ingredients needed to make a particular product? How have ingredients been processed? What is the nutritional value of a product?</i></p> | <p>Demonstrate how to measure out, cut, shape and combine e.g. knead, beat, rub and mix ingredients.</p> <ul style="list-style-type: none"> • Demonstrate how to use appropriate utensils and equipment that the children may use safely and hygienically. • Techniques could be practised following a basic recipe to prepare and cook a savoury food product. • Ask questions about which ingredients could be changed or added in a basic recipe such as types of flour, seeds, garlic, vegetables. Consider texture, taste, appearance and smell. | <p>Develop a design brief and simple design specification with the children within a context that is authentic and meaningful. This can include design criteria relating to nutrition and healthy eating.</p> <ul style="list-style-type: none"> • Discuss the purpose of the products that the children will be designing, making and evaluating and who the products will be for. • Ask children to generate a range of ideas encouraging innovative responses. Agree on design criteria that can be used to guide the |

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| | <ul style="list-style-type: none">• Children carry out sensory evaluations of a variety of existing food products and ingredients relating to the project. The ingredients could include those that could be added to a basic recipe such as herbs, spices, vegetables or cheese. These could be locally sourced, seasonal, Fair Trade or organic. Present results in e.g. tables/graphs/charts and by using evaluative writing.• Use a range of questions to support children's ability to evaluate food ingredients and products e.g. <i>What ingredients help to make the product spicy/crisp/crunchy etc? What is the impact of added ingredients/finishes/shapes on the finished product?</i>• Research key chefs and how they have promoted seasonality, local produce and healthy eating. | <ul style="list-style-type: none">• When using a basic dough recipe, explore making different shapes to change the appearance of the food product e.g. <i>Which shape is most appealing and why?</i> | <p>development and evaluation of the children's product.</p> <ul style="list-style-type: none">• Using annotated sketches, discussion and information and communication technology if appropriate, ask children to develop and communicate their ideas.• Ask children to record the steps, equipment, utensils and ingredients for making the food product drawing on the knowledge, understanding and skills learnt through IEAs and FTs.• Evaluate the work as it progresses and the final product against the intended purpose and user reflecting on the design specification previously agreed. |
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