Subject: DT Assessment Y 3/4 Design Technology

YEAR 4 —: Adapting a recipe

KS2 Programmes of Study

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

When designing and making, pupils should be taught to:

Design

- 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
- ♣ generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computeraided design

Make

- ♣ select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- 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

- investigate and analyse a range of existing products
- ♣ evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- understand how key events and individuals in design and technology have helped shape the world

Technical knowledge

- \clubsuit apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- * understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- A apply their understanding of computing to program, monitor and control their products.

Additional guidance

Purpose of study

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

Aims

The national curriculum for art and design aims to ensure that all pupils:

- A produce creative work, exploring their ideas and recording their experiences
- A become proficient in drawing, painting, sculpture and other art, craft and design techniques
- A evaluate and analyse creative works using the language of art, craft and design
- ♣ know about great artists, craft makers and designers, and understand the historical and cultural development of their art forms.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Cooking and nutrition

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

- 4 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.

Knowledge, skills and concepts	Key Questions
 Knowledge, skills and concepts In this unit, the children will: Skills Designing a biscuit within a given budget, drawing upon previous taste testing judgements. Following a baking recipe, from start to finish, including the preparation of ingredients. Cooking safely, following basic hygiene rules. Adapting a recipe to improve it or change it to meet new criteria (e.g. from savoury to sweet). Evaluating a recipe, considering: taste, smell, texture and appearance. Describing the impact of the budget on the selection of ingredients. Evaluating and comparing a range of food products. Suggesting modifications to a recipe (e.g. This biscuit has too many raisins, and it is falling apart, so next time I will use less raisins). 	 What does it taste like? What ingredients/flavours can you taste? How does it feel when you put it into your mouth? Does it crumble or crack? What is its texture like? What does it remind you of? What colours are used? How will that change the taste/smell/texture/appearance? Who would that appeal to? What would you like to change? How might that alter the biscuit? What will you include?
 Falling apart, so next time I will use less raisins). Knowledge To know that the amount of an ingredient in a recipe is known as the 'quantity.' To know that it is important to use oven gloves when removing hot food from an oven. To know the following cooking techniques: sieving, creaming, rubbing method, cooling. To understand the importance of budgeting while planning ingredients for biscuits 	 Will that add value? How much will it cost? How will it change your biscuit's taste/smell/appearance?
Key Vocabulary	
Adapt, Budget, Cooling rack, Creaming, Equipment, Evaluation, Flavour, Ingredients, Method Net Packaging prototype, Quantity, Recipe, Rubbing, Sieving, Target audience, Unit of measurement, Utilities	
Cultural Opportunities Capital	

Lesson 3/4 – application of skills and knowledge Final design / budget and biscuit bake

	NOTES on children
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versions, evaluating and comparing a range of biscuit	
prototypes	
to design a biscuit to a given budget, taking into	
consideration biscuits tasted and the successes of the	
prototypes made	
With support - Making a biscuit that meets a given	
design brief, working within the specified budget and	
creating suitable packaging for the product	
Progression Framework statement:	
 Evaluating a product, considering: taste, smell, texture, 	
following a recipe to make a biscuit	
Cooking a recipe safely, following basic hygiene rules and	
adapting the recipe to create new versions, evaluating	
and comparing a range of biscuit prototypes	
Working within a group to design a biscuit to a given	
budget, taking into consideration biscuits tasted and the	
successes of the prototypes made	
Making a biscuit that meets a given design brief, working	
within the specified budget and creating suitable	
packaging for the product	
Following a recipe with some support. Describing some	
of the features of a biscuit based on taste, smell, texture	
and appearance	
Adapting a recipe by adding extra ingredients to it	
Planning a biscuit within budget	
	 Working within a mixed ability group with lead learners to design a biscuit to a given budget, taking into consideration biscuits tasted and the successes of the prototypes made With support - Making a biscuit that meets a given design brief, working within the specified budget and creating suitable packaging for the product Working at Expectations Y3 Progression Framework statement: Evaluating a product, considering: taste, smell, texture, appearance, packaging and target audience and following a recipe to make a biscuit Cooking a recipe safely, following basic hygiene rules and adapting the recipe to create new versions, evaluating and comparing a range of biscuit prototypes Working within a group to design a biscuit to a given budget, taking into consideration biscuits tasted and the successes of the prototypes made Making a biscuit that meets a given design brief, working within the specified budget and creating suitable packaging for the product Working at greater depth Y3 Progression Framework statement: Following a recipe with some support. Describing some of the features of a biscuit based on taste, smell, texture and appearance Adapting a recipe by adding extra ingredients to it

Maltin a his out from an adout of material and the	
Making a biscuit from an adapted recipe and its and the size of the size	
packaging all within budget	
Working towards expectations Y4	
Progression Framework statement:	
 Evaluating a product, considering: taste, smell, texture, 	
appearance, packaging and target audience and	
following a recipe to make a biscuit	
Cooking a recipe safely, following basic hygiene rules and	
adapting the recipe to create new versions, evaluating	
and comparing a range of biscuit prototypes	
Working within a group to design a biscuit to a given	
budget, taking into consideration biscuits tasted and the	
successes of the prototypes made	
Making a biscuit that meets a given design brief, working	
within the specified budget and creating suitable	
packaging for the product	
Working at Expectations Y4	
Progression Framework statement:	
 Following a recipe with some support. Describing 	
some of the features of a biscuit based on taste,	
smell, texture and appearance	
 Adapting a recipe by adding extra ingredients to it 	
 Planning a biscuit within budget 	
 Making a biscuit from an adapted recipe and its 	
packaging all within budget	
Working at greater depth Y4	
Progression Framework statement:	
Following a recipe and measuring ingredients accurately	
with reference to scale intervals. Describing in depth the	
features of a biscuit based on taste, smell, texture and	
appearance. An understanding of who the biscuit might	
be aimed at based on these features	
Adapting a recipe and explaining the adaptations made Planning a well the make and biggith within budget with	
Planning a well thought out biscuit, within budget, with regine adaptations that reflect shales based on the	
recipe adaptations that reflect choices based on the	
sensory characteristics of the design, eg: chewy, sweet,	
etc.	<u>L</u>

	Making a biscuit that has a clear target audience and has been adapted to alter its sensory characteristics. Creating packaging that compliments the biscuit design
Assessment notes / evaluation – include SEN / PP next	step learning and areas that need more focus

Year 3	Working below expectations	Working within Expected Standard	Working above expected
Target	14 – 20% (no more than 2 children)	80 %- 86%	20%
Term 1			
Term 2			
Term 3			

Year 4	Working below expectations	Working within Expected Standard	Working above expected
Target	14 – 20% (no more than 2 children)	80 %- 86%	20%
Term 1			
Term 2			
Term 3			