




Year 4 Design and Technology: Food and Nutrition – Block F

Is cheap food always worse for you?

- This block is set in the context of the CUSP Science unit ‘Animals, including humans’.
- The outline and structure of the block is as follows:

Lesson 1	Lesson 2	Lesson 3	At the end of this block, pupils will ...	
Explicit teaching of culinary techniques	Explicit teaching of culinary techniques	Explicit teaching of culinary techniques	Know:	Be able to:
Evaluating outcomes	Evaluating outcomes	Evaluating outcomes	That cheap processed food often contains additives, salt and sugar, which makes it less healthy than unprocessed food	Peel, grate and chop vegetables to make economical, tasty and healthy food

		
<i>Root vegetable rosti</i>	<i>Mexican pasties</i>	<i>Chickpea curry</i>

<p>In this block, pupils will learn how to make healthy food from low-cost ingredients. They will start to consider how cheap processed foods will affect their diet and health in later life .</p>	
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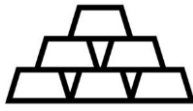
CUSP Design & Technology Long term sequence	Block A	Block B	Block C	Block D	Block E	Block F
Year 1	Mechanisms	Structures	Food and Nutrition	Understanding Materials	Textiles	Food and Nutrition
Year 2	Textiles	Food and Nutrition	Mechanisms	Understanding Materials	Food and Nutrition	Structures
Year 3	Textiles	Food and Nutrition	Mechanisms	Food and Nutrition	Systems	Structures
Year 4	Food and Nutrition	Mechanisms	Textiles	Structures	Electrical Systems	Food and Nutrition
Year 5	Food and Nutrition	Systems	Textiles	Mechanisms	Structures	Food and Nutrition
Year 6	Food and Nutrition	Mechanisms	Food and Nutrition	Structures	Electrical Systems	Textiles

Point of reference:

Y4 Food and Nutrition – Block F

Pupils will be able to:

- recognise that good nutrition keeps the body healthy, provides energy and helps the body to repair



Prior Learning

- use the claw and bridge methods to cut food safely
- explain why ultra-processed food is unhealthy

Nutrition Focus:

Up to 60% of the UK diet is now made up of highly processed foods and the aim of the block is for pupils to learn how to make foods from scratch that are increasingly bought ready made. These types of food contain added sugars, salts and food additives, and lose much of their nutritional content during manufacture and storage. Many of these foods are also low in price, and for many low-income families this has meant it has become increasingly difficult to justify not buying them. Many ready-made foods and processed meats are now cheaper than fresh foods. They can be stored for longer and require minimal cooking skills. This block uses low-cost ingredients to make delicious savoury foods.

Links to Literature:

Which Food Will You Choose? by Claire Potter

Health and Safety:

This block requires pupils to use peelers, knives and hobs. Teachers should ensure that they follow their own school's risk assessments and policies for using the necessary materials and equipment. Pupils should be taught about how to use equipment and materials safely and responsibly as part of these lessons.

Food Hygiene:

Please ensure all foods when bought are correctly stored and at the appropriate temperature. All food made should be cooled before being refrigerated. All food should be taken home or consumed within three days. All the recipes are suitable to be eaten hot or cold. Please refer to your school's allergy register before starting this block.

Environmental Factors	Cultural Links
Most of the ingredients used are grown in the UK and have a low carbon footprint. The root vegetables are available for most of the year and the recipes make use of tinned foods which can often be better for the environment.	Pasties migrated to other countries when British miners plied their trade overseas. Spices were once treasured goods and fetched a huge price during the Age of Discovery. In fact, wars were fought over ingredients like nutmeg, such were their value at the time.

Point of explanation:






Y4 Food and Nutrition – Block F

Core Knowledge	Explanation
cheap	Cheap means to cost little money or to cost less than expected.
fusion	Fusion cooking is cooking that is a mixture of different styles.
texture	Texture is the way a surface, substance or piece of cloth feels when you touch it – for example, how rough, smooth, hard or soft it is.






Technical Vocabulary	Definition
shallow-fry	to cook in a small amount of oil or fat
shortening	butter, lard or fat used to make pastry or shortbread, resulting in a crumbly texture
fragrant	to have a pleasant or sweet smell

Link to video: https://vimeo.com/682865957/88aa9b2858
<ul style="list-style-type: none"> • Explanation and demonstration of taught content • Lesson by lesson guidance • Exemplification of techniques and outcomes






Supporting Recipe 1: Y4 Food and Nutrition – Block F

	Lesson 1
Dish 	Root vegetable rosti
Equipment 	Graters Chopping boards Vegetable knives Mixing bowls Grater Tea towels
Ingredients 	<p><i>Quantities for two pupils:</i></p> <ul style="list-style-type: none"> • 1 medium potato • ½ carrot • Small piece of celeriac • Small piece of sweet potato • Any other root vegetables
Method 	<ol style="list-style-type: none"> 1. Peel and then grate the root vegetables into a mixing bowl. 2. Place the grated vegetables in a clean tea towel and pull the corners together to make a parcel. 3. Twist the tea towel with both hands and squeeze out as much water as possible. 4. Season the grated vegetables. 5. Squeeze the grated vegetables together and shape into a pattie. 6. Cook in a hot frying pan with a little olive oil for 2 – 3 minutes each side.

Supporting Recipe 2: Y4 Food and Nutrition – Block F





	Lesson 2
Dish 	Mexican pasties
Equipment 	Chopping boards Vegetable knives Small mixing bowls Graters Table knife Scales Oven trays Pastry brush Measuring jugs
Ingredients 	<p><i>Quantities for two pupils:</i></p> <ul style="list-style-type: none"> • 150g cold butter or vegetarian block • 300g plain flour • ½ tin sweetcorn • ½ tin chickpeas • 1 tomato • 20g cheese • Any other suitable vegetables
Method 	<ol style="list-style-type: none"> 1. Cut the butter into cubes and place in a mixing bowl. 2. Add the flour and, using your fingertips, rub the butter into the flour. 3. Continue rubbing in until the mixture resembles breadcrumbs and shake the bowl occasionally to enable lumps to come to the top. 4. Add a little cold water at a time and mix with a table knife. 5. If the mixture is too wet, add a little flour. If it is really wet, start again. 6. If the mixture is too dry, add a little water. 7. Push the mixture together to form a dough, leaving the bowl clean. 8. Wrap the dough in plastic wrap and refrigerate for at least 30 minutes. 9. Whilst the mixture is chilling, make the filling and pre-heat the oven to 200°C. 10. Place the pastry in between sheets of baking paper and roll out until the mixture is as thick as a pound coin. 11. Using a small plate as a template, cut a circle from the pastry and fill one half with the mixture. 12. Fold over the other half and seal. 13. Crimp along the join and glaze the top with beaten egg. 14. Place on a lined tray and bake for 15 – 20 minutes until golden brown and the bottom is cooked.

Supporting Recipe 3: Y4 Food and Nutrition – Block F

	Lesson 3
Dish 	Chickpea curry
Equipment 	Chopping boards Vegetable knives Small mixing bowls Graters Saucepans
Ingredients 	<p><i>Quantities for two pupils:</i></p> <ul style="list-style-type: none"> • ½ onion • 1 clove garlic • Thumb-sized piece of ginger • ½ tin of chopped tomatoes • ½ tin of chickpeas • Handful of green beans • 1 tsp tomato puree • 1 tsp garam masala • ½ tsp cumin • ½ tsp coriander • ½ tsp turmeric • ½ tsp chilli powder • 1 tsp cumin seeds
Method 	<ol style="list-style-type: none"> 1. Slice the onion and finely chop the ginger and garlic. 2. Measure out the spice mix and other ingredients. 3. Fry the onion in a saucepan in 1 tbsp of oil until caramelised. 4. Add cumin seeds, garlic and ginger. 5. Cook until fragrant and then add the spices. 6. Add 2 tsp water and then 1 tsp tomato puree. 7. Cook for 1 minute, stirring often. 8. Add the tinned tomatoes, chickpeas and any other vegetables. 9. Cover and simmer for 15 – 20 minutes. 10. Season and taste.

Point of delivery:

Y4 Food and Nutrition – Block F

Revisiting prior learning 	Taught content 	Point of practice 	Point of reflection 
<p>1. Recognise that good nutrition keeps the body healthy, provides energy and helps the body to repair</p> <p>Chop, slice and grate vegetables</p> <p>Some types of food that are processed or ultra-processed are unhealthy because of the inclusion of additives, sugars and salt</p>	<p>Compare the advantages of processed food with its disadvantages</p> <p>Explore ways of using low-cost fresh ingredients to make simple and appetising meals</p> <p>Evaluate outcomes</p>	<p>Introduce pupils to the key question for this block: Is cheap food always worse for you? Share and explain the key vocabulary from the Knowledge Note. Through questioning and discussion, elicit pupils' recall and understanding of the terms <i>processed</i> and <i>ultra-processed</i> (introduced in Year 2). Can pupils explain why processed food tends to be less healthy? Discuss some of the advantages of processed food: low cost, longer shelf life, easy and quick to prepare or cook. For these reasons, processed food is a popular and necessary choice for many families. Explain to pupils that, as an alternative to processed food, they will be exploring how low-cost ingredients can be used to make simple but nutritious and appetising meals.</p> <p>Show pupils a variety of root vegetables. Can pupils name them? Why are they called root vegetables? Explain the benefits of using root vegetables: they can be stored for long periods, the majority are grown in this country, and they contain nutrients such as vitamins. Point out, however, that potatoes have fewer vitamins than the other examples.</p> <p>Remind pupils how to peel and grate the vegetables safely and demonstrate how to squeeze out the excess water, explaining why it is important to do so.</p> <p>After forming the grated vegetables into patties, support pupils to pan fry them for a few minutes on each side. Prompt pupils to describe how the consistency and appearance of the patties change after cooking. Can pupils remember what the term caramelisation means?</p> <p>Encourage pupils to record the processes and their evaluations in their portfolios. Prompt pupils to suggest ways in which this basic recipe could be enhanced or adapted.</p>	<p>Can recall and explain previous learning</p> <p>Can identify a variety of root vegetables</p> <p>Can peel and grate vegetables safely</p> <p>Can describe how the consistency and appearance of food changes as a result of cooking</p> <p>Can state preferences about flavours and textures</p> <p>Can suggest ways in which a basic recipe could be enhanced or adapted using herbs, cheese or by changing the vegetables used</p>

Questions for assessment

What is a root vegetable?

How does the appearance and consistency of the vegetables change as a result of cooking?





Why is processed food likely to be unhealthy?

How could this basic recipe be adapted or improved?

What are the advantages of including root vegetables in your diet?

Point of delivery:

Y4 Food and Nutrition – Block F

Revisiting prior learning 	Taught content 	Point of practice 	Point of reflection 
<p>2. Compare the advantages of processed food with its disadvantages</p> <p>Explore ways of using low-cost fresh ingredients to make simple and appetising meals</p>	<p>Discover the origins of the pasty and how this traditional snack has been adapted in many other countries</p> <p>Compare the cost and nutritional content of pre-prepared and homemade food</p> <p>Make shortcrust pastry</p> <p>Define the term fusion</p> <p>Suggest ways in which a recipe could be adapted to reflect the cuisine of other countries</p> <p>Evaluate outcomes</p>	<p>Introduce this lesson by showing an image of a pasty. Can pupils identify this? Explain the origins of the pasty and how this is now popular worldwide due to the spread of Cornish miners and sailors from across Cornwall, and that variations can be found in Australia, Mexico, the United States, and elsewhere.</p> <p>Show some examples of pre-prepared and packaged pasties and explore the ingredients. Compare with the ingredients required to make the pasty themselves. Which version do pupils think might be healthier? Which might be cheaper?</p> <p>Demonstrate how to make shortcrust pastry, explaining the term shortening. Show pupils the ingredients for the filling, which have a Mexican influence, and define the word fusion, giving some examples.</p> <p>Support pupils as necessary to roll and shape the pastry once cooled and to fill with the vegetable mix. Coat the pasties with an egg wash and bake.</p> <p>Once cooked, pupils evaluate the outcomes. Encourage pupils to think about what they like or dislike about the pasty, what changes they would make if they made them again and what adaptations they could make to reflect the cuisine of other cultures. Pupils record the processes for making the pastry, along with their evaluative comments in their portfolios, and then complete Vocabulary Task 1.</p>	<p>Can explain what a pasty is and its origins</p> <p>Can identify some advantages and disadvantages of eating pre-prepared food</p> <p>Can follow a step by step process to make shortcrust pastry</p> <p>Can explain what fusion means</p> <p>Can identify ways in which a recipe could be changed to reflect the cuisine of other countries</p> <p>Can identify strengths and areas for development in their cooking</p>

Questions for assessment



Where does the pasty originate from?

What would happen if you did not add water to the pastry mix a little at a time?

How did pasties become popular around the world?

What different ingredients could you use for the filling?

Why is it important to keep ingredients cool when making pastry?





Which ingredients would you use to reflect different countries and cultures? (Chinese, Indian etc.)

What is shortening?

What would you change about your pasty?

Point of delivery:

Y4 Food and Nutrition – Block F

Revisiting prior learning 	Taught content 	Point of practice 	Point of reflection 
<p>3. Compare the cost and nutritional content of pre-prepared and homemade food</p> <p>Explore ways of using low-cost fresh ingredients to make simple and appetising meals</p> <p>Some types of food that are processed or ultra-processed are unhealthy because of the inclusion of additives, sugars and salt</p>	<p>Explore reasons why meat consumption is high in this country and the advantages of reducing this consumption</p> <p>Identify ingredients that provide protein which can serve as a suitable alternative to meat</p> <p>Evaluate outcomes and suggest ways in which a curry could be adapted</p>	<p>Recap the learning from the previous two lessons and revisit the key question for the block: Is cheap food always worse for you? Explain that there are many types of food which are bought pre-prepared that are not only quite expensive, but are also less healthy due to the additives, sugars and extra salt they often contain. Identify curry as a good example of this. Explain to pupils that chicken tikka masala is the nation's favourite curry. Can pupils identify where this meal originates from? Do they eat curry? Do pupils know how much one pre-prepared curry meal costs? How much does it cost to have a curry in a restaurant?</p> <p>Explain to pupils that they will be making a chickpea curry and show them the ingredients they will be using. Through discussion and questioning, establish the approximate cost of making this dish and compare this to the cost of buying a curry from a supermarket. Point out that chickpeas can be used as a suitable alternative to meat due to their high protein content and discuss the health, environmental and cost benefits of reducing consumption of meat.</p> <p>Demonstrate how to prepare the vegetables by slicing the onion, dicing or grating the garlic and ginger, and halving the beans. Introduce the range of spices. Are pupils familiar with any of these? Allow pupils to smell the spices and prompt them to describe their aroma.</p> <p>Model the processes involved in making the curry and then support pupils as appropriate to follow each step, explaining the importance of caramelising the onions and cooking the spices before adding the remaining ingredients.</p> <p>Once cooked, allow pupils to sample and evaluate the outcome. Do they like the curry? What adaptations would they make? How could they make it less / more spicy? Could they add different vegetables next time? Prompt pupils to record their evaluative comments in their portfolios and then complete Vocabulary Task 2.</p>	<p>Can explain the advantages of making a curry rather than buying a pre-prepared one</p> <p>Can explain the benefits of reducing meat consumption</p> <p>Can use a range of techniques to prepare and cook vegetables with accuracy and confidence</p> <p>Can use appropriate vocabulary to explain processes and describe aromas, flavours and textures</p> <p>Can suggest ways in which their curry could be adapted, such as by using different vegetables, increasing the quantities of specific spices or using natural yoghurt for its cooling effect</p>

Questions for assessment

Why is reducing our meat consumption a good idea?

How could you make your curry less spicy?

Why are chickpeas a good alternative to meat?

What adaptations could you make to your curry? What different vegetables could you use?

What do you like / dislike about your curry?

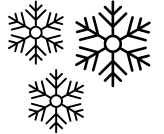
What are the advantages of making a homemade curry compared to buying a pre-prepared one from a shop?

Oracy and Vocabulary: Y4 Food and Nutrition – Block F

Task 1:

The key to good pastry is to keep the ingredients cold.
Order these adjectives according to their strength of meaning.

glacial cool chilly freezing arctic frosty



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Exploration:



Why must you use your fingertips to rub the fat into the flour when making pastry?



What happens if you use too much or too little pressure when rolling and shaping pastry?



Task 2:

Work with a partner to answer these questions about the food you have made.



Explain the processes involved in making a chickpea curry.



Which of the meals you have made do you prefer and why?



What would you do differently if you made the curry again? Give reasons for your answer.



Explain to your partner what you have learnt in these lessons and answer the key question, giving reasons for your answer. **Is cheap food always worse for you?**



Vocabulary: Y4 Food and Nutrition – Block F

OWN-it	Analyse
<p>Change the word <i>fragrant</i> to a noun.</p> <p style="text-align: center; margin-top: 20px;">fragrant - _____</p>	
<p>Underline the root word.</p> <p style="text-align: center; margin-top: 20px;">infusion</p>	
<p>Underline the root word.</p> <p style="text-align: center; margin-top: 20px;">shortening</p>	

KNOW-it	Define
<p>Tick true or false.</p> <p style="text-align: center; margin-top: 10px;"><i>Shortening</i> is used to make pastry pliable.</p> <div style="display: flex; justify-content: center; gap: 20px; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px 15px; border-radius: 5px;">true</div> <div style="border: 1px solid black; padding: 5px 15px; border-radius: 5px;">false</div> </div>	
<p>Tick the most accurate definition of <i>fragrant</i>.</p> <ul style="list-style-type: none"> <input type="checkbox"/> foul-smelling <input type="checkbox"/> sweet-smelling <input type="checkbox"/> odourless 	
<p>Write a definition of the word <i>texture</i>.</p> <div style="border: 1px solid black; height: 80px; margin-top: 10px;"></div>	

LINK-it	Connect				
<p>Write a word that means the opposite of <i>textured</i>.</p> <div style="border: 1px solid black; height: 40px; margin-top: 10px; width: 80%;"></div>					
<p>Write two different words that mean the opposite of <i>shallow</i>.</p> <p>1. _____</p> <p>2. _____</p>					
<p>Write one synonym and one antonym of the word <i>cheap</i>.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width: 20%; padding: 5px;">antonym</td> <td style="width: 80%;"></td> </tr> <tr> <td style="padding: 5px;">synonym</td> <td></td> </tr> </table>		antonym		synonym	
antonym					
synonym					

USE-it	Use in context
<p>Tick the box if the word <i>cheap</i> has been used correctly in this sentence.</p> <p style="margin-top: 10px;">The coat was so cheap, he had to save up for months to be able to afford it.</p> <div style="text-align: right; margin-top: 10px;"> <input style="width: 40px; height: 30px; border: 1px solid black;" type="checkbox"/> </div>	
<p>Write a sentence including these words: <i>fusion combine different</i></p> <p>_____</p> <p>_____</p>	
<p>Use the word <i>fragrant</i> in a sentence.</p> <p>_____</p> <p>_____</p>	

Knowledge Note:

Y4 Food and Nutrition – Block F

Year 4: Food and Nutrition
Is cheap food always worse for you?



Core content:

Learn how to make healthy food from low-cost ingredients.
Consider how cheap processed foods will affect health in later life.

Technical vocabulary:

Cheap – to cost little money or to cost less than expected.



Fusion – cooking that is a mixture of different styles.



Texture – the way a surface, substance or piece of cloth feels when you touch it.



Shallow-fry – to cook in a small amount of oil or fat.



Shortening – butter, lard or fat used to make pastry or shortbread, resulting in a crumbly texture.



Fragrant – to have a pleasant or sweet smell.



Connections:



rubbing in



rolling and shaping



slicing

Year 4: Food and Nutrition
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Exemplification: Y4 Food and Nutrition – Block F

Is cheap food always worse for you?

Pose questions to pupils:

What can you remember about processed food from the work you did in Year 2?

What does processed mean?

Why are many ready-made meals so popular and what makes them unhealthy?

Food and NUTRITION

Is cheap food always worse for you?

Many ready-made meals are now cheaper than fresh food.

We can use low-cost ingredients to make delicious food.



Root vegetable rosti is an example of a recipe which uses low-cost and readily available ingredients. The recipe is easy to follow and can be adapted by adding herbs or cheese.

Root vegetables are nutritious. They can be stored for long periods and most are grown in this country, which means eating them is good for the environment.

Once you have chosen which root vegetables you want to use, you simply grate them, squeeze out the water, form them into patties and fry them.

Introduce pupils to a range of low-cost ingredients and explore the nutritional, environmental and cost benefits of cooking with such ingredients

Steps to make shortcrust pastry

- 1 Place cubed cold butter into a bowl.
- 2 Add flour.
- 3 Rub the fat into the flour using your fingertips.



Your fingertips are the coldest part of your hand.

- 4 When the mixture resembles breadcrumbs, add cold water, a little at a time.
- 5 Combine the water and mixture using a knife.

- 6 Once the pastry dough has been chilled, roll it out and use a small plate to cut a circle.

- 7 Place the filling in half the circle of pastry.

- 8 Fold the pastry over and crimp to seal the join.

- 9 Add an egg wash to glaze and bake in the oven.

My pastry came out very well; it was well cooked and had a crumbly texture. I would make a version with Indian spices next time.



Chickpea Curry

Chickpeas can be used as a substitute for meat. They are high in protein.

Chickpea curry was my favourite because I liked the combination of spices. I would add more chilli next time.

Encourage pupils to state their preferences regarding the flavours and textures of the food they have prepared

Prompt them to suggest ways in which each recipe could be adapted or improved

Encourage pupils to write some key nutritional facts about the ingredients they have used and record the processes they have completed

Remind pupils to use relevant technical vocabulary

Use questioning to assess pupils' understanding