BILSTON CHURCH OF ENGLAND PRIMARY

MEDIUM TERM PLANNING

Subject	Topic/Key Question	Year Group	Term	Time Allocation
Geography	Why does it matter where our food comes from?	2	Spring 2	10 hours

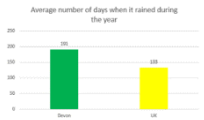
What knowledge and skills will children have gained by the end of this unit?

- To know where milk comes from.
- To know what food items are dairy.
- To know how milk is transformed for consumption.
- To know how cheese is made.
- To explain the process of cheese making.
- To recognise physical features of farms and places in the UK.
- Use an atlas to locate Devon on a map.
- Plot Devon on a map.
- Create a bar graph showing the differences in rainfall and climate in the UK.
- Plot the route of a ship from the UK to Australia.

Lesson Sequence	Time Allocation	Key Question/WALT	Teaching Activities	Resources	Vocabulary
Lesson 1	1 hour	How is dairy used?	Without giving the pupils any idea about what they are going to investigate, lay out a wide range of dairy food products on a display table – fresh milk, cheese, butter, yoghurt, ice	Collins Teacher Notes	Food Dairy

		By the end of this lesson children will be able to: • Say which animal dairy comes from. • Explain what dairy is. • List products that are made with dairy.	cream, chocolate or other flavoured milk, cream cheese, custard etc. Ask the pupils to examine each product and ask them what each is and whether any of them have eaten one or more recently? Next ask the pupils to speculate as to what each of the food products on the table have in common? What does each contain as a very important ingredient – milk. So where does milk come from then? Some of the pupils may very well say 'from a shop' and that's fine as a starting point. Yes, many people will buy milk and dairy products from a shop such as a supermarket (Resource 1) but from where does the shop get the milk – from farms and farmers. So what is a farm then? What happens there? A farm is an area of land and its buildings, which are used for growing crops and raising animals. Explain that a dairy farm is a farm that keeps herds of cows in order to produce milk that is either then sold fresh or used as an ingredient in dairy products such as those on the table. Then watch a youtube video of where milk comes from. Children in their book all have an insert and a picture of their group work and how they sorted the pictures in their groups. Some may sort into healthy/unhealthy, breakfast etc. This is a very discussion based and group work based starter lesson.	Collins Resources 1 and 2	Product Ingredients Farm Shop Farmers Herd
Lesson 2	1 hour	What is the process of making butter? By the end of this lesson children will be able to:	Re cap on last lessons work and what our topic is. What is dairy? What are dairy products made from? Milk! We are going to make our own diary product today. Get 2 empty milk bottle (4pints are best) Then pour some double cream into both bottles and make sure the lid is back on the milk bottle well. The whole class sits in a large circle, you give them the 2 bottles, and the children shake the bottles. Keep	Empty 4 pint milk bottles Double cream	Pint Liquid Separate Butter Handmade

		• Make butter from milk. • Explain the process of making butter from milk using the correct vocabulary. • Write instructions on how to make butter.	shaking until the solids separate from the liquids and that as easy as it is to make butter. Then allow the children to try their own handmade butter on some bread. Children then in their books write a set of instructions on how we made the butter and what they thought of it. You could stick a picture of the children trying their butter in here too.	Bread	
Lesson 3	1 hour	Where does our food come from? By the end of this lesson children will be able to: • Explain the process of cheese making using the correct vocabulary.	Recap with the children where does milk come from? And how it might get to the shops. What is a farm? We are looking at another dairy product today! Cheese. How is cheese made? What is it made from? Watch this video: https://www.youtube.com/watch?v=wxm8jTzU_8o Children then create a non-fiction – instruction writing on the process of making cheese. Purple mash recipe template to use during this lesson, then print out the children's work to go into their books.	Purple mash	Farm Dairy Cheese Curds Proteins Raw Fermentation Bacteria

Lesson 4	1 hour	What does weather data show? By the end of this lesson children will be able to: • Read data. • Interpret data. • Compare data collected from rain and climate in Devon.	Show the children a variety of pictures of Devon and see what physical and human features they can identify such as hill, bride, river, wall, coast, house, cliff etc Children can then have smaller different pictures in their books and annotate the human and physical features. Then show them data charts of Devon showing: • Rainfall each year • Temperature each year • Number of hours of sunshine • Months warm enough for grass growth • Average number of days of rainfall Children need to have charts in their books and write what they can see. Then explain why Devon is the best place for grass growth so why Devon has so many dairy farms.	Collins Teacher notes Collins Resources 3-8 	Data Bar Graph Difference Compare Comparison Plot River Hill Coast Cliff Physical feature
Lesson 5	1 hour	How is dairy transported? By the end of this lesson children will be able to: • Know where Australia is in relation to the UK. • Plot the UK and Australia on a map.	Remind the pupils that milk from cows is either sold fresh in cartons or used as a raw material to make many other dairy products. One of the most important of these dairy products is cheese. Show the children the sections of film from 00.42–2.08 and 2.44–5.12 of the East Devon Food for Thought Project at www.youtube.com/watch?v=CpwWNjj9IbM Ask the pupils to listen out for: •How many years is it before calves produce milk? •How much milk on average does an adult milking cow produce per day? •What happens to the cheese that this company makes from the milk? Which country in particular is it sent to? How does it get there? Take time to discuss with the pupils important things such as the fact that the cheese is sold in order to make	Collins Teacher notes Collins Resources 3-8	Country Farm Average Profit Australia Transport World Map Journey Kilometres Devon

		• Map a ships journey from the UK to Australia.	a profit because Quicke's Farm is a business – they don't give it away for free! The pupils will pick up that Australia is one of the countries that the cheese is sold and sent to. Using a world wall map, approximately how far will this journey be in Kilometres? Can the pupils plot a route for the ship to follow from the UK to Australia? Where would it stop to refuel and take on fresh supplies? Then look at what we could make with cheese. While children are completing their map work with a route from Australia to UK groups of children can work with an adult to make cheese straws.		
Lesson 6	1 hour	Which fruits are located across the world? By the end of this lesson children will be able to: • Name 10 fruits and discuss where they come from. • Explain why fruits come from different places, comparing climate and humidity.	Gather the pupils around and tell them that in your shopping bags there are 10 fruits (yet unseen by the pupils). As you pull them out of the bag one by one ask the pupils if they can name them – plum, apple, grape, pear, banana, orange, mango, tomato, pineapple and peach. The tomato may cause some confusion amongst the pupils but it is defined as a fruit since it contains the seeds of the plant. Explain to the pupils that these 10 fruits are the most popular in Britain – the top 10 most enjoyed by people (according to a survey by the Health Food Manufacturer's Association in 2013). As you go through these extend the children learning showing them a country where they are grown. Children to all have a sheet in their book as you discuss one fruit what it is and where its from, children go back to their tables and write this information into their chart. Once this is completed, they then have atlases and a map each. They then have to match the country where the food is from to the countries flag using the atlas to give the this information, they then need to find where the country is on	Collins Teacher notes	Survey Country Origin Atlas Map Flag Country

		• Identify flags and place them on a map.	their blank map. Again using the atlas to help them and colour code these countries.		
Lesson 7	1 hour	How are bananas imported and exported?. By the end of this lesson children will be able to: • Explain how weather affects how food grows. • Locate Costa Rica using an atlas and plot on a map. • Talk about the process of importing bananas.	Recap on last lesson at the fact we look at the top 10 favourite fruits of the UK. Which fruits were on there? Why are bananas, oranges, pineapples, peaches and mangos not grown on farms in Britain? Encourage the pupils to think about the weather in particular – what do these fruits need that perhaps the weather in Britain can't provide? If they are grown in other countries around the world how do they end up in Britain? We buy them from other countries and ship them to Britain and this is called trade. Take the example of bananas – Britain's most popular fruit, with on average each person in the UK eating the equivalent of 100 a year, which is five billion (5 000 000 000) every 12 months! So where do we get them from if we can't grow them in the UK? Give out copies of the map in Resource 9 and then ask the pupils to locate the country of Costa Rica. Costa Rica grows a lot of bananas that are sold in shops in the UK. Ask the pupils to consider, from the evidence of the map only, why they think that Costa Rica is able to grow bananas when farmers in the UK are not able to? Let them compare the map in Resource 9 with the map of hot and cold places of the world in Resource 10. The answer is that Costa Rica has a climate that is hot and wet (check the key) – ideal for growing bananas and it's much warmer than the UK because it's closer to the Equator. We are now going to look at the process of growing an exporting bananas. Use this link: https://corporate.asda.com/article/from-farm-to-store-how-	Collins Teacher notes Collins resources 8-12	Export Import Weather Country Britain Costa Rica Climate Equator Growing Harvesting Quality Control Shipping

			we-grow-and-harvest-our-bananas (as the Collins one doesn't work now!) Go through each part of this process breaking it down into: growing, harvesting, quality control, washing labelling an packing, shipping, buying and eating. Children have pictures for each part of this process and write up in their own words after modelling on the IWB.		
Lesson 8	1 hour	How is sugar used?. By the end of this lesson children will be able to: • Explain what sugar is and where it is from/ how it is grown.	Show the pupils a kilo bag of granulated sugar, open it and pour it all out into a bowl. Ask the pupils what it is? Encourage discussion and speculation about where sugar comes from? A kilo bag of sugar will contain about five million sugar crystals! Have they ever seen a sugar plant? Explain that because sugar is not a plant it can't be considered a vegetable. It doesn't grow on trees or bushes either so where does it come from? Over half of the two million tonnes of sugar which people eat each year in the UK comes from plants that we grow in our own country – the sugar beet plant Resource 13. Now show the pupils the film at www.youtube.com/watch?v=0QRmJQol-xU. Encourage the pupils to observe how the natural sugar in the big root of the beet plant is extracted and is made into sugar crystals. Britain grows seven million tonnes of sugar beet a year and this is processed down into one million tonnes of crystallised sugar (50 per cent of the sugar we eat as a country in one year). Ask the pupils who eats sugar? How do they eat it? Do they add it to their cereal at breakfast in the morning or in cups of tea or coffee? What about adding it to puddings and on tops of cakes? What else do they add sugar to each day? Make a list on the board of all the ways of adding sugar to their diet that the pupils think of. Now take one teaspoon of	Collins Teacher notes Collins resources 13 Variety of foods and sugar cubes.	Process Predict Sugar Sugar beet Tonne Kilo

			sugar out of the bowl and hold it up. How many teaspoons of sugar do the pupils think children of their age add to their diet during an average day, every day of the year? Encourage speculation and discussion. Now transfer 21 teaspoons of sugar from the bowl into a smaller cup or mug. Explain that this is how many teaspoons of sugar, children aged between 4 and 8 years, add to what they eat on average every day. Are the pupils surprised by this? It is very important to stress at this point that it is essential to have some sugar in our diet because cells of the body would die without it and we can get this amount from sugars found naturally in fresh fruit, vegetables or milk. So, where does the remainder of this added sugar come from? Place a selection of chocolate bars, soft drinks, cereals and cakes from the list below on the table. Divide the pupils into pairs and encourage them to estimate how many teaspoons of added sugar there is in each food product. Children to have a sheet each to predict how many sugar cubes per item there is in each product. Then another column to show the actual amount.		
Lesson 9	1 hour	What is a fruit and what is a vegetable?. By the end of this lesson children will be able to: • Describe the difference between	Show the pupils the photograph of John in Resource 14. He is standing outside his shop in the town of Exmouth in Devon (photograph also in Resource 14). What is his shop called? What does he sell? John's shop is a greengrocers so he sells fruit and vegetables. John has many happy customers each day because people know he tries hard to sell fruit and vegetables produced by local farmers in Devon and from other farms in the UK – as close to his shop as possible. Divide the pupils into pairs giving each pair a set of the photographs of the inside of John's greengrocer shop (The	Collins Teacher notes Collins resources 14-17	Exmouth, Devon Farm UK Local Locality Flag

		fruits and vegetables. • Talk about fruits and vegetables that are grown locally and why they are able to.	Farm Shop) where they will see Merle working (Resource 15). Remind the pupils that a vegetable is a plant or part of a plant (leaves, roots or stem) that we eat and a fruit is the edible part of the plant that contains the seeds. In Resource 16 there are photographs of 48 fruits and vegetables. Ask each pair of pupils to find just two or three in the photographs so that all the produce is covered amongst the group. Encourage the pupils to look carefully at their allocated fruit and vegetables in the photographs and then fill in the relevant rows in the table in Resource 17: • Is it a fruit – 'yes' or 'no' • Is it a vegetable which grows above ground – 'yes' or 'no' • Is it a vegetable which grows below ground – 'yes' or 'no' • How much will it cost? (important here for the pupils to write in the quantity or weight for the price) • Has the fruit or vegetable been grown locally, either in Devon or somewhere else in the UK (look for the Devon flag – white cross on green background, the UK flag, labels or packaging) – 'yes' or 'no' Children to complete a chart on their book about what they have learnt picking different fruit and vegetables, drawing them, filling in if they are fruit or vegetables, where its grown etc.		
Lesson 10	1 hour	What is meant by 'free range'?	There are other shops on the street in the photograph in Resource 14. One is a butcher's. Ask the pupils which animals the meats they eat come from. Explain that some butchers are	Collins Teacher notes	Free-range Compare

		By the end of this lesson children will be able to: • Explain what is meant by; 'free-range'. • Explain why it is best to consume foods that are free range.	very particular about the farms from which they buy their meat and that this is an important reason why those butchers are very popular with their customers. Project the photograph of the free-range sign Resource 18. What do the pupils think it means if sheep, geese, chickens and ducks and eggs are all 'free-range'? Show the pupils the images in Resource 19 to focus thinking. Encourage discussion and consolidate ideas. Free-range means that for at least part of the day the animals are allowed to roam over a large area rather than being in a barn or other building for 24 hours a day. How do the pupils think this will be better for both the animals and also produce better quality meat for people to buy in the butchers? Why might customers be happier to buy meat that they know has come from 'free-range' animals and birds? If desired the pupils could write a short paragraph describing what 'free-range' means with a drawing and include at least two reasons to explain why people think it's a good thing for farmers to do. This final ancillary question can be carried out in along with local fieldwork in a nearby town or at a supermarket so the pupils can see first-hand, meat, fruit and vegetables being prepared and presented for sale. A visit to a local farm would be a perfect accompaniment at any point in this enquiry. Support for teachers to set up farm visits as well as other learning and teaching resources is available from Farming & Countryside Education at www.face-online.org.uk/	Collins resources 14-17	Contrast Fieldwork

Links to the National Curriculum:

Human and Physical Geography:

- Identify seasonal and daily weather patterns in the United Kingdom.
- Use basic geographical vocabulary to refer to:

- key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather
- key human features, including: city, town, village, factory, farm, house, office, port, harbour and shop

Geographical skills and fieldwork:

- Use world maps, atlases and globes to identify the United Kingdom and its countries.

Place Knowledge:

- Understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom.