



Year 1

Medium Term Plan Subject: DT
Year Group: 1
Term: Autumn
Topic: Food
Unit: Fruit and Vegetables

National Curriculum links:

Cooking and nutrition

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from

Design

- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

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 wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

- evaluate their ideas and products against design criteria

Science

KS1 Programme of Study – Years 1 and 2

Working scientifically:

- Identifying and classifying
- Using their observations and ideas to suggest answers to questions

New learning vocabulary:

Lesson: Learning Objective	Suggested Activities	Suggested Outcomes
Lesson 1	<u>Starter</u>	Pupils with secure understanding indicated by: Their ability to



<p>LO: To identify if a food is a fruit or a vegetable</p> <p>Success criteria:</p> <ul style="list-style-type: none"> • I can name a number of fruits and vegetables • I know how to determine if something is a fruit or a vegetable • I understand that some foods we call vegetables are actually fruits 	<p>Show pupils a selection of the cards from the <i>Activity: Fruit and vegetable picture cards</i>. As you hold each one up, ask the children what the picture is of (for example, a banana, potato, tomato).</p> <p>Accept one word answers such as 'banana' initially, but then push the children to add one additional fact or adjective: for example, 'a banana, it is a fruit' or 'a banana, it is yellow/soft/curved'.</p> <p>What am I?</p> <p>When the children have recapped the names of common fruit and vegetables and their features, play the game 'What am I?'</p> <p>Tell children you are thinking of a fruit or vegetable and that they have to ask questions that can only be answered with 'yes' or 'no'. Once at least three questions have been asked, the children can take a guess.</p> <p>*Avoid choosing a fruit or vegetable that you might refer to later in the lesson as an example of something not having the fruit/vegetable classification that the children might expect (for example cucumber and tomato).</p> <p>Encourage the first question to be "Is it a fruit or vegetable?" so that children are conscious of the differentiation that will be explored during the rest of the lesson. It might play out as follows:</p> <ul style="list-style-type: none"> - Is it a vegetable? (No) - Is it shaped like a circle? (No) - Is it green? (No) - Is it yellow? (Yes) - Is it a banana? (Yes!) <p>Let a pupil take the role of the teacher - but make sure they first tell you the fruit or vegetable they are thinking of so you can step in to correct any inaccurate answers!</p> <p style="text-align: center;"><u>Main Activity</u></p> <p>Quick Fire - fruit or vegetable? (5 minutes)</p> <p>Show children the cards from the <i>Activity: Fruit and vegetable picture cards</i> again, but this time ask them to classify each as either a 'fruit' or a 'vegetable'.</p> <p>Tell the children that some food items we might consider to be vegetables are actually fruits. Ask if they know how you can tell which is which and allow them time to talk and share their thoughts. You will probably find that their answers revolve around expectations of taste, for example, fruit is sweet tasting.</p>	<p>describe fruits and vegetables and explain why they are a fruit or a vegetable.</p> <p>Pupils working at greater depth indicated by: Their ability to describe fruits and vegetables and explain why they are a fruit or vegetable. Their ability to describe fruits and vegetables by their properties.</p>
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Explain that the fruit of a plant is the part that contains seeds.

Searching for seeds (10 minutes)

Using the pre-cut fruit and vegetables prepared prior to the lesson, give each table a selection and a large piece of sugar paper divided into two with the headings 'Fruits' and 'Vegetables'.

Tell children that the fruit and vegetables are not to be eaten but investigated!

Explain that the children must:

- Write the item's name on a post-it note
- Inspect each item and decide if the item has seeds or not.
- Put the post-it note under the heading Fruits or Vegetables on the sugar paper, depending on whether they think the item has seeds (and so is a fruit) or no seeds (and so is a vegetable).

Every child should get an opportunity to handle each fruit, looking for seeds.

*The food will be handled and not eaten, so to avoid wasting too much, make up as many different plates as there are tables, with different fruit and vegetables on each, and rotate the plates throughout the activity.

Below is a selection of fruit and vegetables and where they sit in the fruit and vegetable divide, based on whether or not they have seeds. Those highlighted are the ones that children might not know are fruits!

The ones in red should be included in your selection to go on tables as they are commonly mistaken for vegetables.

Fruit	Vegetables
pepper*	potato
avocado*	carrot
cucumber*	green bean
butternut squash*	lettuce
tomato*	onion



grape (with seeds)
apple
orange
kiwi
strawberry
banana
pineapple
mango

spinach
celery

When children have considered the category that each fruit or vegetable belongs to, cast your eye over each table's sheet of sugar paper to see if there are any misconceptions and then bring them back to the carpet.

Findings (5 minutes)

Sit children in a circle and place two sorting hoops in the middle. Show the class each different piece of fruit and vegetable that they investigated, and ask them in which hoop it should be placed: the fruit hoop or the vegetable hoop.

Leave the pieces of fruit that some children placed in the wrong category until last and discuss these in more depth.

Tasting (10 minutes)

Ask children if they were surprised by the findings that peppers, avocados, tomatoes and cucumbers are actually considered to be fruits.

Cut up small pieces of a fruit that is often considered to be a vegetable (such as cucumber, tomato, avocado, pepper), and also cut up small pieces of a fruit that is considered to be a fruit. Give the children a piece of each to taste and ask them why they think we consider a cucumber (for example) a vegetable, when it is actually a fruit.

Explain to children that fruits (for example, cucumber) may not taste sweet but they are still fruits if they have seeds in them.



	<p>Also explain that there are some fruits that we cannot eat because they are not edible and may be bad for us.</p> <p style="text-align: center;"><u>Plenary</u></p> <p>Play the 'What am I?' game again but this time test pupils' understanding of what they have learnt by choosing, for example, 'cucumber' but classifying it as a 'fruit' – who can get to the correct answer?</p>	
<p>Lesson 2</p> <p>LO: To identify where plants grow and which parts we eat</p> <p>Success criteria:</p> <ul style="list-style-type: none"> I can remember how to determine if a food is a fruit or a vegetable I know that fruits and vegetables grow in one of three places: <ul style="list-style-type: none"> on trees or vines above the ground below the ground 	<p style="text-align: center;"><u>Starter</u></p> <p>Ask the children how we classified the fruit and vegetables last week. How did we decide which was a fruit and which was a vegetable? (By looking at which has seeds.)</p> <p>Show children the cards from the <i>Activity: Fruit and vegetable picture cards</i> from Lesson 1. Ask the children to tell you as a class whether the card you are holding shows a fruit or a vegetable. Ask the children to whisper/sing/shout/laugh/roar the answer!</p> <p>Explain to pupils that the fruit and vegetables are all plants and grow in three possible places – can they think of where these places might be? Take children's answers and combine them into three categories:</p> <ul style="list-style-type: none"> Trees or vines Above the ground Below the ground <p>Explain to the children that knowing which is a fruit and which is a vegetable, based on whether they have seeds, can tell us where they grow too.</p> <ul style="list-style-type: none"> Fruit grows on trees or vines and is the part of the plant that has seeds. Vegetables grow on plants above or below the ground. <p>Show slide one of the <i>Presentation: Where fruit and vegetables grow</i>.</p> <p>Optional: watch <i>Safe YouTube SciShow Kids video 'What's the difference between fruits and vegetables?'</i></p> <p style="text-align: center;"><u>Main Activity</u></p> <p>Go through slides two to 12 of the <i>Presentation: Where fruit and vegetables grow</i></p> <p>The slides introduce which part of each plant we eat:</p>	<p>Pupils with secure understanding indicated by: Their ability to explain a range of places that fruits and vegetables grow.</p> <p>Pupils working at greater depth indicated by: Their ability to explain that vegetables primarily grow above or below ground whilst fruits primarily grow in trees, bushes or vines. Their ability to explain that we eat different parts of plants and to be able to give examples.</p>



- fruit
- leaves
- root
- stem

Now show the children a physical example of a selection of five to six fruits and vegetables that typically grow in your area. Discuss together where these fruit and vegetables must grow based on their characteristics. Avoid using the same fruit and vegetable examples as illustrated in the *Presentation: Where fruit and vegetables grow*, but you could use the examples highlighted below.

Now show children a physical example of five to six fruits and vegetables typical to where they grow. Discuss together where they must grow based on their characteristics (do not use the same examples as those in the Presentation – you could use the ones highlighted as examples below: tomatoes, apples, lettuce, celery, carrots).

Fruit

We eat the fruit of the plant so they must grow on a fruit or a vine. A tomato is an example of a fruit that grows on a vine, and an apple is an example of a fruit that grows on a tree.

- **Vine** – tomatoes – cut open a tomato to show the children the seeds of the fruit. Try and buy tomatoes that are still on the vine so children can understand what this means.
- **Tree** – apples – cut open an apple to show the children the pips – the seeds of the fruit.

Vegetables

- **Above the ground** – lettuce. Show the children the lettuce and explain we eat the leaves of the plant, even though it has roots that anchor it to the ground.
- **Above the ground** – celery. Show the children the celery, preferably choose celery that still has the leaves attached. Explain that the celery is the stem of the plant (technically it is the leaf stalk). The roots of the plant are under the ground and the leaves come off the celery stalks. We can also eat the leaves.
- **Underground** – carrots. Show the children the carrots, preferably choose carrots that still have their leaves attached so it is easier to show the children that the carrot is actually the root of the plant and grows underground, while the leaves are above ground. You can explain that carrots (and turnips, potatoes, radishes, swedes) are all roots and that is why we call them root vegetables.

Children can use the *Activity: Where our fruit and vegetables grow* to identify where familiar fruit and vegetables grow by cutting and pasting pictures of fruit and vegetables onto a landscape – either on a tree, vine, above ground or below ground.



	<p>Extension: Children can write next to the pasted image whether we eat the fruit, leaves, stem or root of each of these plants, and/or they can draw any additional fruit and vegetables they know and stick them in the correct place.</p> <p style="text-align: center;"><u>Plenary</u></p> <p>Go through the Staying Healthy food quiz - Food (Sources) to test children's general knowledge.</p> <p>This quiz addresses the requirements of the National Curriculum KS1 Science for children aged 5 and 6 in years 1 and 2. Specifically this quiz is aimed at the section dealing with staying healthy and the sources of our food.</p>	
<p>Lesson 3</p> <p>LO: To taste and compare fruit and vegetables</p> <p>Success criteria:</p> <ul style="list-style-type: none"> I can suggest what fruits and/or vegetables are in a drink I can taste fruits and vegetables and describe their: <ul style="list-style-type: none"> - Appearance/feel - Smell - Taste I can make a choice as to what smoothie I will make and why 	<p style="text-align: center;"><u>Starter</u></p> <p>Tell children that today they will be deciding on the ingredients they need to make a smoothie.</p> <p>Ask children what a smoothie is – what normally goes into a smoothie? Why is a smoothie such a good drink to have? Watch the The 'Five a Day' song that explains the importance of fruit and vegetables and food hygiene.</p> <p>Explain to children that although the thought of drinking blended spinach doesn't sound very tasty, a mixture of fruit and vegetables in fact tastes very nice and is really good for you.</p> <p>Let children taste the smoothie without telling them what the flavour is. Tell them to sip it so they can keep thinking about what flavours they can taste – encourage them to think about the colour too!</p> <p>Come up with a final decision as to what the smoothie flavour is and then reveal the actual ingredients!</p> <p>*For the remainder of this topic you can choose to do one of the following two activity options:</p> <p>1) Follow the lesson plans as they are written – children will be making one of three smoothie recipes</p> <p>2) Give children the opportunity to taste and combine ingredients to create their own smoothie recipe which must include one vegetable and a maximum of three fruits (all resources for this option can be edited as appropriate).</p> <p>Tell children that they will be making a smoothie of their own from one of three recipes but that before they make one, they need to test/taste which ingredients they like and which they don't.</p>	<p>Pupils with secure understanding indicated by: Their ability to describe basic characteristics of fruit and vegetables.</p> <p>Pupils working at greater depth indicated by: Their ability to describe basic characteristics of fruit and vegetables in detail, considering: how the ingredients work together, what other combinations would be better and what ingredient they would remove.</p>



Show children the *Smoothie Ingredient Taste Testing* they will be completing this lesson and let them wash their hands ready for the 'Main Event'.

Main Activity

Children should taste the ingredients of the following smoothies:

Carrot, pineapple and mango smoothie	Spinach, banana, grape and apple smoothie	Cucumber, banana and strawberry smoothie
<ul style="list-style-type: none"> - Eight baby carrots, topped and tailed - Half a pineapple, in batons - One mango, prepared as fingers 	<ul style="list-style-type: none"> - Four handfuls of fresh spinach leaves - Two bananas - Half a punnet of green grapes - Two apples, cored and sliced into eighths 	<ul style="list-style-type: none"> - One cucumber chopped into batons - Two bananas - Half a punnet of strawberries

Each recipe makes four servings.

*To avoid a choking hazard, cut the grapes lengthways, not across the middle.

Before/after tasting each, the pupils need to write down what they think of them with regards to their: appearance, feel, smell and taste – they then put a tick or cross to say whether or not they like it.

The smoothie they choose will be whichever has the most amount of ingredients they like.

Plenary

Ask children what they thought of all of the separate ingredients – referring to their worksheets, ask them for the keywords they used to describe them.

Ask pupils which smoothies they will make and record this through a tally on the whiteboard (use this information to calculate the quantity of ingredients to buy for next lesson).

Lesson 4

Starter

Watch the BBC video: ['Following instructions - what could go wrong?'](#).

Pupils with secure understanding indicated by: Their ability to



<p>LO: To make a fruit and vegetable smoothie</p> <p>Success criteria:</p> <ul style="list-style-type: none"> • I know how to prepare fruit and vegetables • I can use a knife to cut safely • I know how to use a blender • I can make a smoothie 	<p>Go over the safety aspects of using a blender. Explain to the children that they must only ever touch the buttons when instructed to by the adult they are working with.</p> <p>Explain that while many fruits and vegetables don't need to be cooked before they can be eaten, we do still need to prepare them before we put them into our mouths. Ask: What might you need to do to a banana before you eat it? A Carrot?</p> <p>Fruits and vegetables often need to be peeled or sliced. Ask children what they think these words mean. Why do we need to peel some things? What might the hard skin that we peel off be for?</p> <p>Ask children: Who has peeled a fruit before? If so, what? Hopefully many children will have peeled a banana or small clementine. Explain that some fruits and vegetables are harder to peel and we can't always use our fingers.</p> <p>Carrots (which don't have to be peeled but which we often do) require a peeler – show children how to use this (talk about how to hold it, which direction to pull and how to avoid cutting ourselves).</p> <p>Be explicit about washing your hands before you touch any food stuff (drying them on a paper towel or hand towel).</p> <p>Ask children: What must we consider before cutting a fruit or vegetable? Safety procedures. Show children the equipment they will be using (chopping board, knives, blender). Show them how to hold food in a bridge position with the knife under the bridge (well away from your fingers).</p> <p>Show children the range of fruit and veg from the smoothies they will be making and ask what they would need to do to prepare them: bananas, apples, cucumbers, carrots, spinach, strawberries, etc – tell children that we will remove the skin of the apples and cucumber.</p> <p style="text-align: center;"><u>Main Activity</u></p> <p>Make: (20 minutes)</p> <p>The number of smoothies you can make will depend on the number of blenders you have and adults helping. While some children are making, the rest will be designing – see 'Design' below!</p> <p>*The smoothie recipes include some fruits that will be hard for the children to chop with just a butter knife. It's advisable to pre-cut some ingredients (listed below) using a sharp knife. The children can then chop them safely with the knives they are using.</p>	<p>prepare fruits and vegetables to make a smoothie.</p> <p>Pupils working at greater depth indicated by: Their ability to prepare carefully selected fruits and vegetables to make a smoothie that they consider will have good flavour combinations.</p>
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*Alternatively, you could use frozen or chilled ready-cut fruit but this may minimise the amount of food preparation children are exposed to during the smoothie making process.

- Carrots – top and tail these by chopping off both ends
- Pineapple – remove the skin, de-core and cut into quite small batons
- Mango – remove the skin, cut the flesh into fingers
- Apples – de-core and cut into eighths
- Cucumber – cut into thirds lengthways and then slice each segment into sixths to make batons

Using the ‘bridge’ method of cutting as demonstrated in the teacher video, *Smoothie Making*, the children should then be able to safely chop the fruit and vegetables.

Carrot, pineapple and mango smoothie	Spinach, banana, grape and apple smoothie	Cucumber, banana and strawberry smoothie
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Recap rules about hygiene – the need to wash hands, tie hair back, roll up sleeves, clean counters (I always talk about keeping bums and arms off of the counters by highlighting where they have been sitting/playing and asking if they would eat from the floor).

Arrange children on tables by the smoothie recipes they have chosen to make it so that only one group of fruit and veg is prepared at each table – with adults manning as appropriate.

Give children the appropriate *Smoothie Recipes and Instructions* page to follow so they can make their smoothies. Children should only make their smoothies and take part in any chopping and operating of the blender under adult supervision.

If the smoothies are too thick, they can be thinned down with water or orange juice and then blended again.

Design (20 minutes)



Children use the necessary *Smoothie Carton Design Templates* to design their smoothie carton based on the ingredients of their recipe. They can include a name, a great opportunity to use some alliteration – ‘Banana Blitz’ or ‘Strawberry, Spinach Surprise’, images and a list of ingredients.

Plenary

You should take a picture of each child with their smoothie and ask them to discuss and then fill in the two thought bubbles in the *Smoothie Evaluation* (‘What I found hard was....’ ‘What I learned was....’).

Using the second cups of smoothies, give children a sample of a smoothie that they didn’t make and ask them to comment on the colour, texture and taste. If you were not able to make lots, you can do this in pairs – you may or may not choose to record this.