

# **Adapting the QCA design & technology Unit 1C Eat more fruit and vegetables**



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# Adapting design & technology Unit 1C Eat more fruit and vegetables

## Details from a small-scale pilot

A small primary school in the North West of England piloted an adaptation of the Unit Eat more fruit and vegetables. The teacher was supported by a classroom assistant. The teaching of the unit was completed in a single day and was carried out by year 1 pupils.

	FRIDAY	SATURDAY	SUNDAY	MONDAY
FRUIT	PLUM	PLUM	Banana	PLUM
VEG	Carrots	Broccoli Onions Carrots	Carrots	MAST Potato

## Preparatory work

As preliminary work the children had been asked to record the fruit and vegetables that they ate at home over four days. Examples of the chart used, filled in, are shown in Figure 1. The teacher discussed the charts that the children brought to school and used them as an introduction to designing a fruit salad containing their favourite fruits.

	FRIDAY	SATURDAY	SUNDAY	MONDAY
FRUIT	apple	orange juice strawberry yoghurt		
VEG	potatoes	tomato	onion	potatoes

Figure 1 This simple grid allows children of different abilities to record the fruit and vegetables that they eat.

## A stimulating display

As time was short the teacher did not take pupils to visit the supermarket as suggested in the adapted unit but she and the classroom assistant arranged a display of a wide range of different fruit that could be used in a fruit salad, shown in Figure 2.



Figure 2 This display of fruit provided a powerful stimulus for the children.

## Using all you senses

To introduce the pupils to the different fruits the teacher played an 'eyes closed' questioning game. Individual pupils in turn came to the front of the class, closed their eyes, were given a fruit to handle and asked to identify it using their senses of touch and smell. The teacher asked the pupil questions to help, e.g. "What does it feel like?" "Is it smooth or rough?" And also of the class, e.g. "Can we say what colour it is?" The pupils were able to identify the following fruits quite easily – apple, grape, strawberry, kiwi, plum, lemon, orange but the pineapple, pomegranate and mango were new to them. (See Figure 3)



Figure 3 Can you tell what fruit it is without looking?

## Introducing hygienic practice

The teacher introduced the importance of washing hands before handling food and the class were able to explain why in terms of 'germs that caused us to be ill and were everywhere'. She noted that some fruits could be eaten without peeling but must be washed first. The children were able to tell her which ones – strawberries, apples, plums, pears etc. They were also able to say which fruit required peeling – oranges, lemons, kiwi etc. One child thought that dropping a pear would cause a grub to grow inside the pear but this was not followed up – perhaps wisely!

The teacher introduced the idea of tasting fruit in order to decide on 'your favourite three' for your fruit salad with the children recording their preferences in a pre-prepared smiley chart. (See Figure 4)



Figure 4 (above and to the left)  
Tasting things for the first time is fun

## A demonstration with questions

The teacher provided the samples for tasting by demonstrating to the children how the fruit could be cut up. There are interesting opportunities here to ask the class what they think will be revealed inside the fruit when it is cut in half. Simple questions like "What colour will it be?" "What will happen if we squeeze it?" "What else will your senses be able to detect?" "Will we be able to eat all the insides?"

## Filling in the smiley charts

Some of the children did not find it easy to fill in the chart and this confusion is evident from their attempts as shown in Figure 5.

chloe  
What does it taste like? 🍌

Name of Fruit	😊	😐	☹️
apple	😊	😊	
banana		😊	
mango	😊		
Strawberries	😊		
grape		😐	
Riwi	😊		
Pineapple		😐	
Pear	😊		
Lemon	😊	Apples juice	
Lime	😊	Tropical grapes	

Figure 5 Is there evidence here that the child is confused?

For some children the chart did not help discriminate, every fruit achieved a smiley face (Figure 6).

charlotte  
What does it taste like? 🍌

Name of Fruit	😊	😐	☹️
apples	😊		
bananas	😊		
mango	😊		
strawbry	😊		
grasgrbs	😊		
plums	😊		
keywd	😊		
pineapple	😊		
pear	😊		
lemonlime	😊😊		

😊 apples 😊  
😊 tropical I like it 😊 grapes 😊

Figure 6 It's difficult to use this chart to make a choice

One child developed an interesting way of using the form – writing the name of the fruit under the smiley face, which reflected how much he liked the taste; the listing of fruit in the left hand column being essentially irrelevant (Figure 7).

andrew  
What does it taste like? 🍌

Name of Fruit	😊	😐	☹️
appel	mango	apple	bananas
pineappel	strawberries	lime	grapefruit
pear	green grapes	pineapple	
lemon	red grapes	pear	
lime	plum	lemon	
apple juice	Apple Juice	lime	

tropical

Figure 7 Evidence of confusion or a novel way of using the chart?

## Confronting conservatism

It was possible for the teacher to challenge some of the children's conservative views "I'm not tasting that" with "You can't fill in your chart if you don't and you could be missing out on something really good". In one case it took four attempts to persuade a child to taste mango but the result was an instant conversion and a mother making a trip to the supermarket after school to buy one.

Once the tasting charts had been completed it was time for the children to practice cutting using plastic knives with 'fruit' made from playdough or plasticine. It was necessary to stress the use of two hands: one to hold the fruit and one to hold the knife, and the importance of holding near to where the cut will be made but not too near. This needs reinforcing throughout the practice session. (See Fig 8)



*Fig 8 (above and to the left) There is no doubting the concentration during the practice session.*

## Why put fruit in our diet?

The teacher led a short class discussion on why fruit should be part of our diet and groups of children working in groups responded by producing a brainstorm of 'Why fruit is good for us?'



*Figure 9 Starting the 'Why fruit is good for us?' brainstorm*

## Tasting juices

The teacher then gave the children the opportunity to taste fruit juices that could be added to their fruit salads. The children were able to describe their preferences by adding their views on the fruit juices to their smiley charts.

## Does drawing always help?

Now the class was instructed to use their smiley charts to identify their three favourite fruits (not easy if every fruit got a smile!) and to write down the names of the fruit and any extra juice. The children were then asked to draw the fruit salad. They did not find this easy; most simply drew the unpeeled fruit and then drew the unpeeled fruit in the bowl, a few drew pieces of prepared fruit in a bowl and line linked the names of the fruit to the fruit pieces. (See Figures 10 and 11)

The teacher now demonstrated how to cut fruit using a metal knife. She helped the children identify the hazards – knives have a sharp point and a sharp cutting edge. The children realised that the risk was cutting yourself and the teacher was able to help them realise what they could do to control this risk – “Don’t talk to you friend, look at what you are doing, hold the fruit near, but not too near, where you are going to cut” – reminding them of their experience in the practice session. It is important to explain to the children how to use the point of the knife to pierce the skin and the edge to extend the cut.

The children were now ready to collect the fruit and juice they needed. They had the information written down and the teacher encouraged them to use this as a ‘shopping’ list, asking them to read out to her what was on the list. This reinforced the importance of their planning.



Figure 10 Will this drawing help the child assemble the fruit salad?



Figure 11 Will this drawing help the child assemble the fruit salad?

## Using the cutting skills

The children found the cutting difficult at first but with help were able to master the skills. The practice session had obviously been useful and towards the end of the session they were cutting confidently, using both the point and edge of the blade. Pineapple is particularly difficult because of its fibrous nature. The children found that thin slices of pineapple prepared by the teacher were most easily cut using scissors!  
(See Figures 11, 12 and 13)



*Fig 11 Bananas are easy*



*Fig 12 A lot of concentration here*



*Figure 13 Careful co-ordination in evidence here*

The teacher expected the children to use the planning information when they were preparing the fruit salad. In all cases the children used the fruit they had listed but in one case only is there a clear correlation between the drawing of the fruit salad and that prepared with the fruit being cut to size and placed according to the drawing.

## A coherent design process?



Figure 13 A confused chart, a clear list, a drawing that perhaps isn't helpful but a fruit salad that matches the list

The three figures on this page show preference charts, planning sheets and final fruit salads for three different children.

It is clear that the smiley chart does not really help any of the children record the detail of their preferences but it does provide a focus for making a decision about which fruit and juice to use in the final salad. Listing the fruit and juice as a decision is important as it provides a reference point for choosing the ingredients. Drawing the fruit salad is daunting for many children but does reinforce the decision about ingredients. Most children deviated from the instruction to use just three favourite fruits plus a juice but did stick to their decisions. Drawing the fruit salad allows able children to show their detailed intentions and in some cases allows them to show that they can meet these intentions.



Figure 14 An unhelpful chart, a clear list, an unhelpful drawing but a fruit salad that matches the list

## The evaluation

The evaluation was, as might be expected, a little on the self-congratulatory side with all children saying that they really liked their fruit salad, that their parents would like them when they took them home and that they had enjoyed the experience. The remainder of the fruit was quickly assembled into a class fruit salad which they all shared. Judging by the speed with which it was eaten they really did like this one.



Figure 15 A useful chart, a clear list, a useful drawing and fruit salad that matches the list and the drawing.

