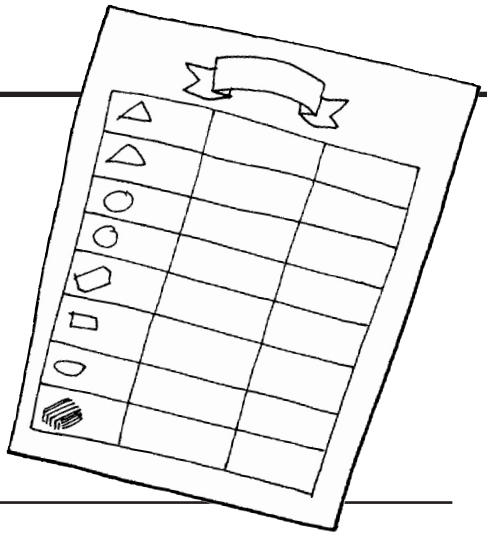
School trip



The big picture

Task

To design and make a range of finger food products that can be used to provide a lunch on a school trip or outing.

The story so far

Groups of students regularly go on school trips as part of their curriculum. Geography students visit areas to investigate land use and the local environment. Science students take measurements of weather conditions and investigate the biology of an area. The school has decided to provide a quick and easy-to-eat lunch so that time is not wasted. The students' task is to design and make food products that will make up this lunch and a system that will allow the students going on the trip to choose what they have for lunch.

Learning

Designing

Using traditional recipes, in this case picnic foods, from a wide range of cultures as a starting point for design ideas.

Making

Producing filled, wrapped food products.

Technical matters

Controlling the sensory qualities of a wide range of food materials.

Other matters

Working in a team to develop a range of food products.

Producing a menu card to enable students to choose their lunch.

Design decisions

The sort of product

The students can choose from a range of 'picnic' products – pasties, pies, flans, samosas, tacos, bhajees, pitta breads.

The point of sale

This has been decided by the teacher – food for the school trip selected via a take-home menu.

The customer

This has been decided by the teacher – students on a school trip.

The performance of the product

The students can choose the textures, flavours and aromas in the products.

The appearance of the product

The students can decide how to present the product in the take-home menu.

The materials

The students have to research recipes for picnic foods from a variety of cultures and adapt them to provide a lunch for students on a school trip. Each team will produce an ingredients list that enables the production of some of the following:

- pasties, pies, flans, samosas, filled pitta breads, filled chapattis, bhajees.

Products

In this school the teacher introduced the students to a range of pastry wrappings – filo pastry (bought in only), flaky pastry (bought in) and short crust pastry. The filo pastry was available as bought in, the flaky pastry was available as bought in and as ingredients to be made from a recipe, the short crust pastry was available as ingredients to be made from a recipe. The teacher organised resource tasks where the students could use and make the pastries and carry out tasting tests. The students also investigated a range of possible fillings and carried out tasting tests to decide which filling went best with which wrapping.

This group of students produced a range of finger foods including:

- closed pasties, open pasties, filo parcels and samosas (using filo pastry).

The fillings were both sweet and savoury.

The students organised a tasting session to find out the popularity of each type of food product and used the results from this to decide on how many of each type to produce for the school trip.

Values

Technical

Students should consider the importance of quality control linked to hygiene regulations when developing a system for food production.

Economic

Students should consider the costs of materials and processes in developing prices for their products.

Environmental

Students should consider the effect of the field trip, especially the catering arrangements.

Social

Students should consider the range of learning styles that can take place on a field trip.

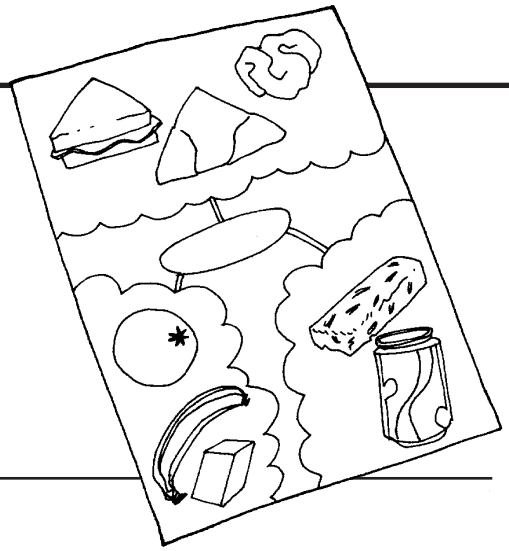
Moral

Students should consider the effect of organised expeditions and visits to wild places.

Aesthetic

Students should consider the beauty of much that can be observed on a field trip.

School trip



The detail

Sample brief

Design and make a range of picnic foods that can be used to provide a lunch on a school trip

Sample specification

What the product has to do:

- provide lunch for students on a school trip.

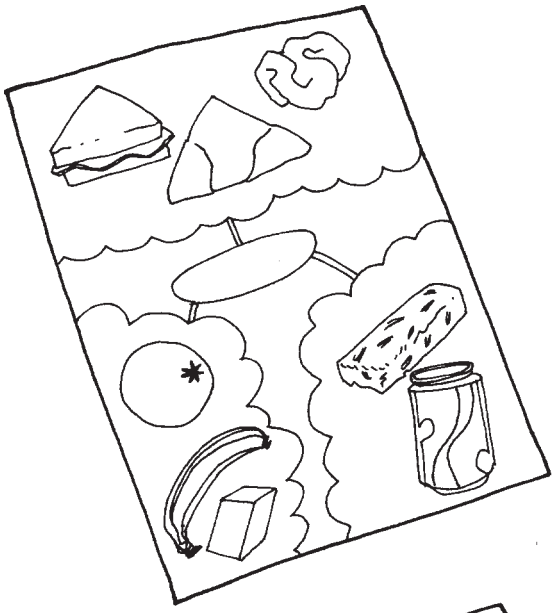
What the product should look like:

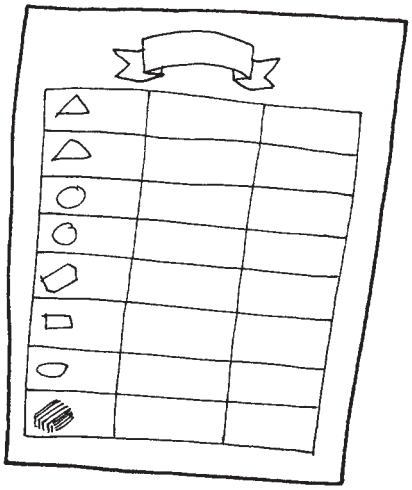
- be appealing to school students.

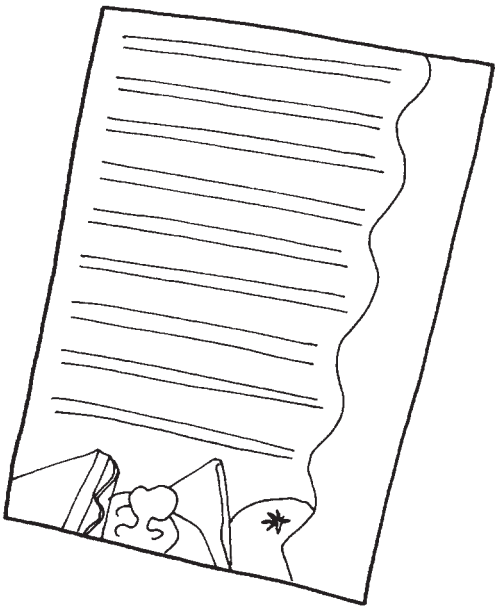
Other features:

- be suitable for eating without cutlery.

Starter sketches







Nuffield teacher talk

'So you think little fruit pies would be good for dessert. Like Mr Kipling, only better. OK, what are the parts of small pies? The outside casing: yes; the filling: yes; the lid to go on the top: yes. Now what do you make the casing and the lid from? Pastry. OK, what sort of pastry? You're not sure. Look in the Chooser Chart; shortcrust seems the best bet. You've never made shortcrust pastry? Now's your chance; get the recipe from our database. Before you go, let's think about what you can do to the lid to make it interesting. Can you add anything to it or can you take bits away? When you've got that sorted, we'll talk about the filling.'

'You fancy fruit samosas for dessert. Do you know how they cook samosas? No, well, they're deep fried. So, one, you have to be careful when you're doing it, I must be there with you, and, two, if the filling has too much liquid in it, it could boil and cause the samosa to burst. So we need to think carefully about the filling. The smart move might be to do some quick test cooking. What fruit did you have in mind? Will you cook them first or put them in raw? Will you add any sugar? Or spices? You need to do quite a lot of testing. Draw up a grid summarising all the tests and get back to me.'

'Let me get this straight. It's like a double-barrelled sausage roll. In one tube you have the sausage, only you're going for a vegetarian filling. That's the main course and you eat that first. In the second tube you have fruit, that's your afters and you eat that second. Unless you want real taste and you eat both at the same time! You've chosen flaky pastry for the outside. And stewed apple for the fruit. Just stewed apple on its own is a bit boring. What else could you add? You're not sure. Try looking up some recipes for apple pies and find out. 'What about the other tube? You're going to buy some vegetarian sausage meat. That seems a bit of a cop out, It's what everyone said they liked in the survey. OK, but see if you can find some extra herbs to perk it up a bit.

'You've got a list of all the things that the class can make for the picnic lunch – twenty different items. And you're designing the take-home menu. You're asking everyone to tick off four different things and to bring the menu back to school so that we can cook it all, and each student's lunch can be made up and put in their own little carrier. This sounds like a very personal but labour-intensive service. Have you got it organised? You think so. The class takes back the filled-in menus and uses a tally sheet to work out how much of each item to cook. The filled-in menus are put in the carriers so that the packers know what contents to put in. We cook the food the day before the school trip and leave the food in the fridge over night. We pack up the carriers the morning before the trip. Each class has a tray of carriers. Two things strike me. How do you know which carrier is for which student? What happens to students who don't fill in their menus?'

Resource Tasks

General design

For the first Capability Task in Year 9:

SRT 6 *Writing a fuller specification*

SRT 31 *Graphs*

SRT 39 *Evaluating outcomes – Is it appropriate?*

For the second Capability Task in Year 9:

SRT 7 *Research*

SRT 20 *Harmony and scale*

SRT 27 *Modelling with CAD*

Focus area design

None

Communication

CRT 11 *Presenting food product designs* (unless tackled in Year 7 or 8)

Making

(See FRT 13, FRT 14, FRT 15, FRT 16)

Technical

FRT 13 *Simple flour-based mixtures*

FRT 14 *Investigating pastry*

FRT 15 *Raising agents*

FRT 16 *Investigating the effects of liquids*

FRT 17 *Investigating batters and fillings*

Commercial

FRT 11 *Shelf life and preservation*

Case Studies

Food products from across the world, downloadable from the website www.secondarydandt.org

ICT opportunities

Use the Internet to find out about picnic foods from a range of cultures. Try putting 'picnic +food' in the search engine. Look directly at http://www.straitscafe.com/recipes/picnic.htm and http://internet.epicurean.com/latest/may/picnic.himl.

Use a DTP package to produce the take-home menu. Use a digital still camera to record the food products and use these images in the take home menu. Use a digital video camera to record food processing clips. Use food analysis software to calculate the nutritional value of the lunch.