

Enterprising Technology

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A cross-curricular approach to work in primary schools makes survival easier. To enable technology to have a dynamic role and allow its influence to permeate both maths, english and other subjects requires a fair amount of planning. There are times when technology supports other subjects and other times when it leads an activity.

The following is an account of such influence which we mixed and matched as and when necessary with a group of Year 4 pupils.

In January of this year I obtained from the National Westminster Bank, a £40 grant to use for enterprise education. My teaching group was made aware of this and told to be attentive to any opportunity or occasion which may present itself where the money might be used in a business venture of any kind.

The observation was very soon made by a group of children that their weighing experiences, usually using marbles or plasticine in the maths scheme, was rather boring and did not relate to everyday life.

After a class discussion, it was decided that we should use the grant to start a business that would include the use of weighing skills. It was unanimous that some aspect of food be included in the business venture. The children

decided through group discussions that they would like to make small items and sell them within their own class. Only one child had a parent who was directly involved in running a business, so they had little background knowledge of what running a business entailed. This meant that quite a lot of initial class discussion had to take place in our English lessons before our business venture could 'take off'.

We used the Usborne Introduction to Business book, from which the more able readers were able to research a considerable amount of knowledge. Being reasonably articulate, they were able to report to their groups the different areas of business that would need further research and discussion before beginning their business project.

Many different aspects of business were covered in the four groups in the class — loans/grants needed to set up a business, consumer rights, market research, production techniques, health and safety, quality control, sell-by dates and so on...

Through the group discussions, it was fascinating and surprising to find that although the children did not have direct experience through their parents of business, that they had many encounters and stories to relate to the many areas of business mentioned above.

■ Organisation

The project took place over a two-week period. We were fortunate in having access to the home economics area in the Middle School, equipped with two electric cookers and a microwave oven. During this period for one hour on a Monday and Friday morning, the class was divided into four groups of mixed ability and gender. One group worked with myself in the home economics area on the 'production line', while another group set up a class shop to practise their money skills. This group brought into school empty packages of goods bought in shops and supermarkets and compared the weights and prices of various comparable brands. They displayed the packages with prices, having a *Best Buy* and *Two for the price of One* promotions. Each child took turns to role play a customer with a shopping list, working on the till and issuing a receipt and stocktaking at the beginning and end of each session. After looking at various carrier-bag designs, one girl decided to design her own, using the shop title of *The Stop and*

The Stop and Shop Brakes Broughton

Till Receipt

Goods	£
gateau	0.13
2 cookies at 4p	0.08
2 fruit loaves at 11p	0.22

BAL. DUE £ 0.43

CASH 0.50
CHANGE 0.07

DATE: 23rd January 1992

Thankyou for shopping with us. Please keep this receipt in case of any problem.

WE HOPE TO SEE YOU AGAIN

The Stop and Shop.

Shopping List

1 gateau at 13p	13p
2 cookies at 4p	8p
2 fruit loaves at 11p	22p
	<u>43p</u>

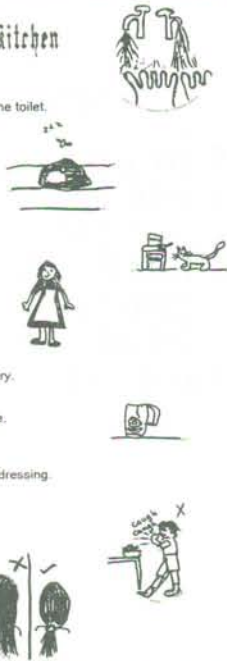
Dominique Throuer.



True Soft Scanning, Colour Printing

Hygiene in the Kitchen

- 1) Always wash your hands after using the toilet.
- 2) Keep food covered covered and cool.
- 3) Keep pets out of the kitchen.
- 4) Don't sneeze or cough on food.
- 5) Tie long hair back.
- 6) Always wear a clean apron.
- 7) Never use chipped or cracked crockery.
- 8) Prepare food on a clean work surface.
- 9) Always cover cuts with a waterproof dressing.
- 10) Use a clean spoon to taste food.



Safety in the Kitchen

- 1) Always make sure that the floor is dry in case you slip.
- 2) Never leave anything lying about on the floor in case you trip over.
- 3) Never leave the cooker, while things are cooking on it.
- 4) Saucepan handles should be turned inwards incase they are knocked.
- 5) Take extra care when cooking with hot fat.
- 6) Always use oven gloves or a cloth when putting things into or getting things out of an oven.
- 7) Make sure that flex on electric kettles do not hang over the edge of work tops.
- 8) Keep young children and pets out of the kitchen when food is being cooked.



Shop, as a logo. The name of the class shop was chosen by a vote from all the choices put forward by members of the class.

Prior to working on the production line, each group looked at a range of goods to decide what they would like to make and sell — the decision was left to them whether they did any market research with the other members of the class. Two of the four groups chose to do this. Each group made a decision on what to make and what ingredients were needed. The children discussed within their group personal skills they felt they could offer on the production line. They had a double lesson of approximately one hour, to cook, clear away and present their product for selling. This factor had to be taken into account by the children when they made their final decisions as to what goods to produce.

An English class lesson was used to discuss safety and hygiene in the kitchen and codes of practice for Food Trade workers which led to the pupils producing their own charts on hygiene and safety for their own production team.

After producing their goods, each group organised themselves to sell to the rest of the class, displaying the posters

they had designed in the classroom, to hopefully generate an interest.

The first group had the problem of the children who were in the front of the queue buying all the goods, with the result that the other children in the class were disappointed when there were none left for them to purchase. After a class discussion, the children devised a system by which the children put in an order to the 'production team' and a till receipt was issued after purchase. This solved the problem and both the shopping list and till receipt were used by the group running the class shop on

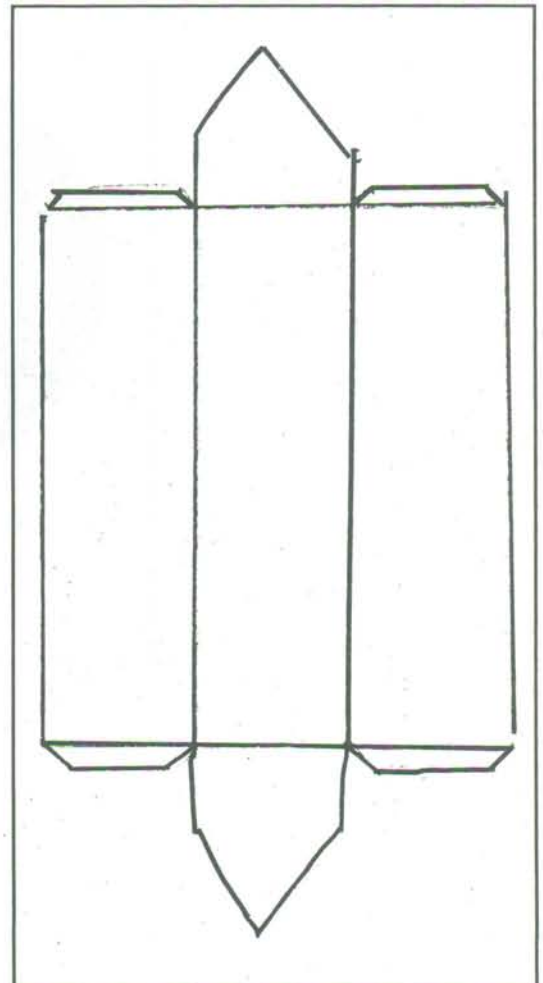
that day. Following the first selling session, there was a class appraisal of the situation.

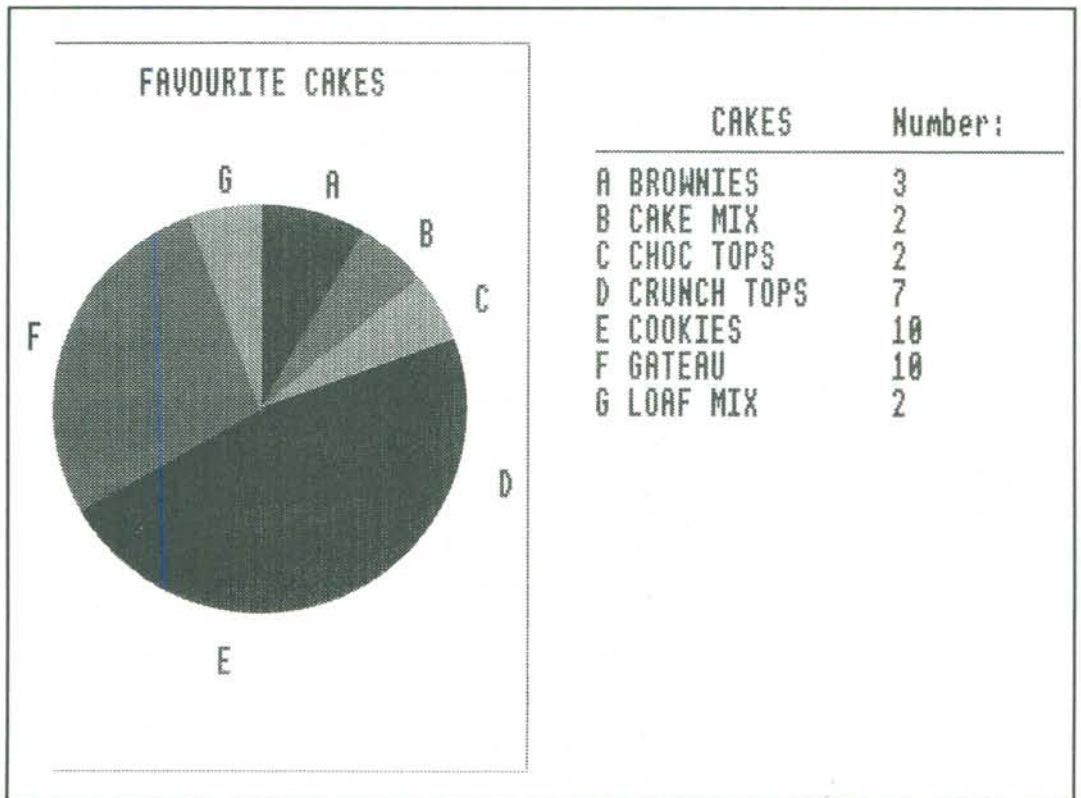
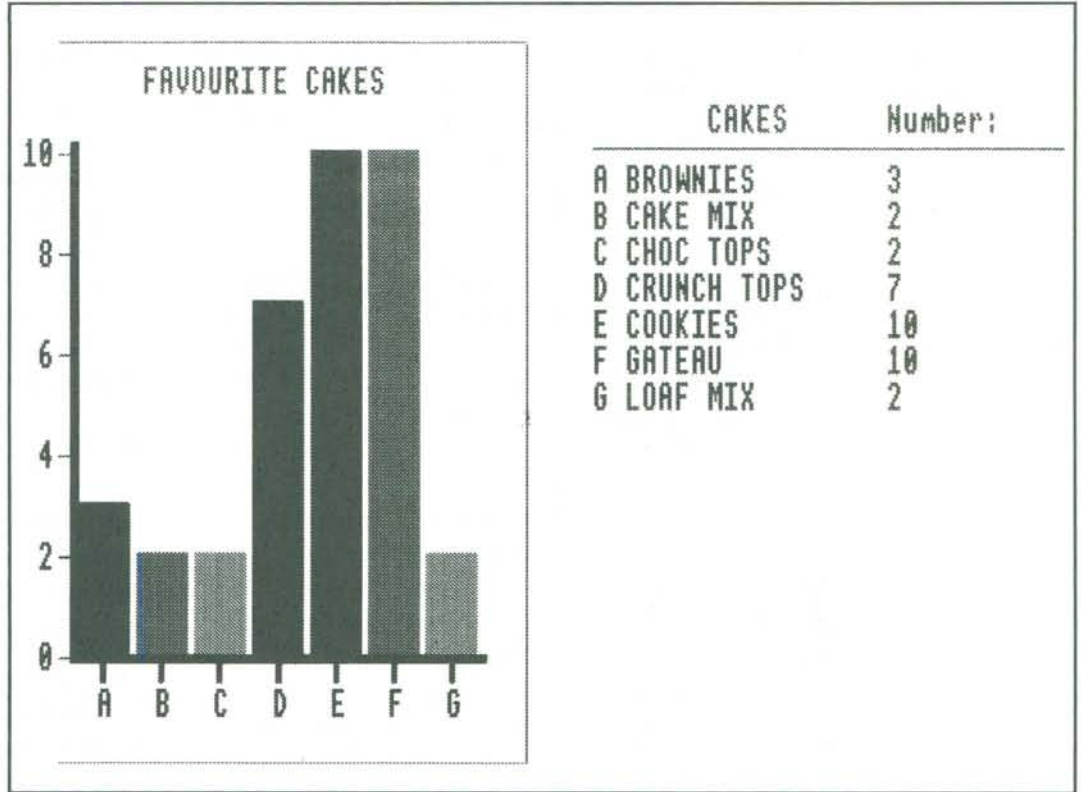
Most children were of the opinion that the food would look better presented if it was in containers rather than on plates and trays. This led to a class maths lesson on solids and nets (which fitted in quite well with the packaging on display in the class shop). The children worked in groups, using the knowledge that they had gained from this lesson, to make their display containers.

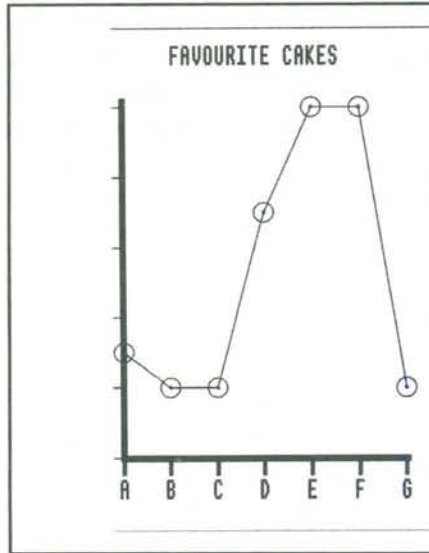
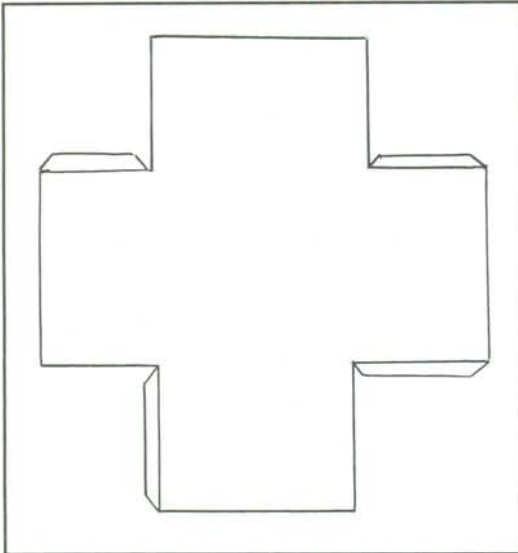
Keeping the books

This was achieved as a class and in the four production groups. Each group worked out the approximate cost of their finished product from the price of the ingredients, preferring to give value for money rather than make large profits.

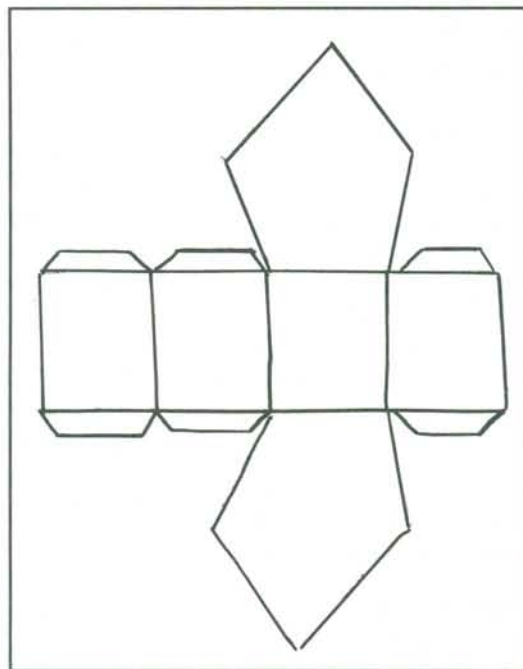
It was soon realised by the children, following a discussion, that in *real life* the building would have to be bought or rented; electricity etc paid, equipment bought and advertising paid for, before the cost of the final product could be worked out. Also the ingredients would have been bought in bulk from a wholesaler. To offset these factors it was decided to have all







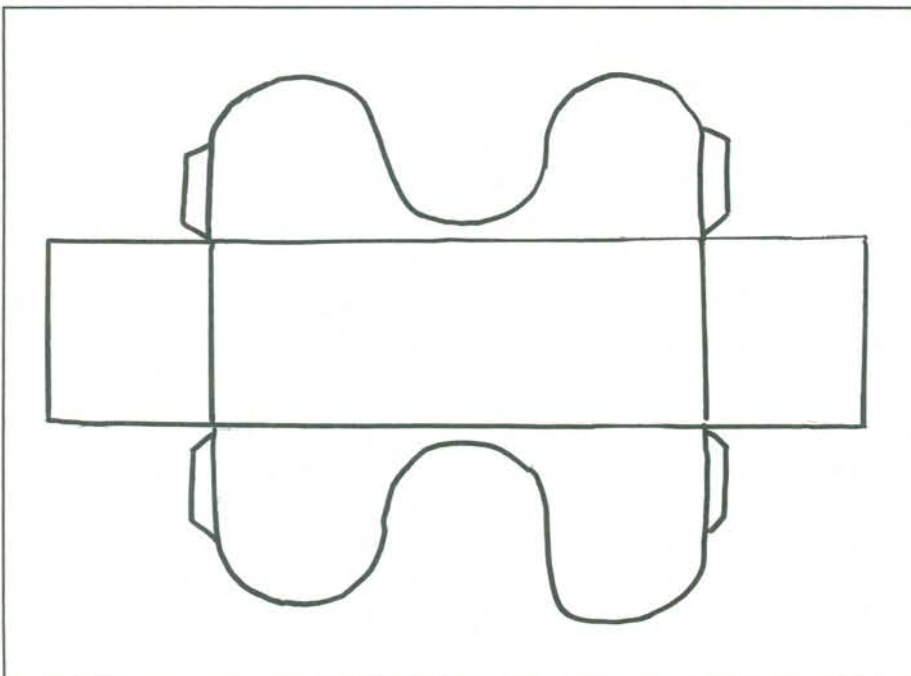
CAKES	Number:
A BROWNIES	3
B CAKE MIX	2
C CHOC TOPS	2
D CRUNCH TOPS	7
E COOKIES	10
F GATEAU	10
G LOAF MIX	2



our equipment, electricity and 'factory' (home economics room) subsidised 100%.

The four groups worked out their own outgoings (ingredients); incomings (money from the sale of goods) and their respective profit or loss. When the last group had worked out their accounts, they were presented to the rest of the class. It was found that by the end of the fourth selling session, a profit of 75p had been made. It was put to a class ballot whether they should have 2p each in wages or the equivalent in sweets. All the children chose sweets!

An evaluation of the project was written up by the children and a group decided to follow-up work in a maths lesson two weeks later. They interviewed the class about the taste of the various products made, producing bar, line and pie charts on the A3000 computer using the Data Sweet program.



When we looked back at the project it was realised that many aspects of maths, English, art and design had been experienced, and that our business awareness had both enriched and supported these subjects. The children's enterprise and ability to work as a member of a team contributed to the success of the activity, acquiring skills that would be used later on in life and encouraging them to be flexible and open-minded in their thinking. It had been a valuable and worthwhile experience which had brought out a lot of personal qualities in the children that had not been recognised before either by themselves or myself.