

Design and Technology Year 1: What's in your lunchbox?

Introduction

This activity is based around children finding out what foods the body needs to stay healthy. Children will investigate different food groups, carry out a popularity survey and display the results. The children will then suggest designs for the contents of a healthy lunchbox that takes into account their findings.

Skills involved

What will the children learn?

- They will learn that information can be obtained from a range of sources
- They will learn how to take personal preferences into account when proposing design solutions
- They will learn how to label their displays.

What prior experience do the children need?

Familiarity with using the mouse and a feel for screen navigation are all that is needed. Children will need to know that information can be displayed graphically.

Equipment

- Access to the internet, a printer, a tally graph or pictogram software and a word processor (a large-screen monitor or interactive whiteboard would be useful)
- A range of different foods or pictures of foods for the children to display in their lunchboxes
- A prepared blank survey form on preferred foods.

The Lesson

Go to

http://www.bbc.co.uk/northernireland/schools/4_11/uptoyou/healthy/foodfuel.shtml.



Ask the children why our bodies need food to eat and list some of their responses.

Explain that you are going to use the internet to learn about different kinds of foods.

Introduce the word 'nutrients' and explain that these are the fuel that make our bodies work and that different foods provide different nutrients. Click on the 'more food facts' button.

Explain that the diagram will show the different kinds of foods. Click on each section of the plate in turn and invite the children to name the foods shown in each section. Ask questions such as: 'Why do you think some foods take up more of the plate than others?', 'Do we eat these mostly at breakfast/lunch/dinner?'

Click on 'more food facts' to see the healthy food pyramid. Explain that we should eat more of the foods at the bottom of the pyramid and less of those higher up. Ask the children if they can suggest why.

Click on the 'find the nutrients' button to learn the names of the nutrients each group of food contains. Discuss them in turn, and encourage the children to repeat the names after you.

Explain to the children that they are going to design a 'healthy lunchbox' meal using the information they have learned about different foods. Emphasise that their design should be based on personal preferences and remind the children how they can carry out a simple survey using a tally graph or pictogram program.

If you do not have these programs in school you can find online evaluation programs at <http://www.interactive-resources.co.uk/indexmp2.html>.

Carry out a simple survey with your class, identifying their preferences for the different food groups. Ask question such as: 'Do we like a range of different foods?', 'Are our preferences good for us?' 'Why?'



Using some of the information from the class survey, ask the children to work in small groups to design a 'healthy lunchbox'. They can either fill a real lunchbox with the different foods or paste pictures of their foods onto a picture of a lunchbox.

As the children are working, encourage the groups to take turns to use the prepared word bank to make labels for their lunchboxes.

Display the children's designs and encourage them to explain their choices.



Why are we using ICT?

ICT supports a range of tasks in this activity. Pupils use the Internet to find out about food groups and food facts and, having carried out a survey with a simple tally chart or pictogram software, they find out the most popular food items. ICT

also helps them create labels for the contents of the healthy lunchboxes using a word bank.

References

QCA Schemes of Work ICT Unit 1B: Using a word bank; Unit 1C: The information around us; Unit 1D: Labelling and classifying

<http://www.standards.dfes.gov.uk/schemes2/it/?view=get>

QCA Schemes of Work D & T Unit 1C: Eat more fruit and vegetables

<http://www.standards.dfes.gov.uk/schemes2/designtech/?view=get>

Where do we go next?

The more able pupils could use what they have found out about different foods to prepare a simple report on what our bodies need to keep them healthy. They could make a poster of which foods form each food group.

Differentiating the activity

- Some pupils might just concentrate on building their healthy lunchboxes
- The more able pupils might put together a suggestion of a 'week of healthy lunches' menus aimed at parents.

Reflecting on their work

- Pupils should look back on the activity and review what they understand by the terms 'nutrients' and 'healthy eating'
- Use this game to help them reflect on what they have learnt http://www.bbc.co.uk/northernireland/schools/4_11/uptoyou/healthy/fuelbox.shtml Can they place the foods on the right plate?
- What happens if they ignore the 'healthy eating' message?
- Pupils should be encouraged to discuss the value of using ICT to find out about foods and to design and label their lunchboxes.

Examples of words for your word bank:

nutrients	Carbohydrates	vitamins	fruit	vegetables
proteins	Fats	sugar	bread	potatoes
cereals	Dairy	meat	fish	calcium
sandwiches	Cake	pasta	biscuit	crisps