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Food, teeth and eating

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- go back to previous page
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Curriculum Visions

A CVP Teacher's Resources
Interactive PDF

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Contents

Section 1: Resources

Welcome to the Teacher's Resources for *Food, teeth and eating*. The resources we provide are in a number of media:

1 The Food, teeth and eating pupil book is the full-colour paperback book that carefully and logically builds up the basic concepts of diet and the application of the teeth in the digestive process – all in simple, easy-to-follow units which make it accessible to a very wide range of abilities.

3 You can buy various Science @School sets, for example Year 3 set, KS2 class book set, KS2 TG set or the complete Book Box set.

2 Our Learning Centre at

www.curriculumvisions.com

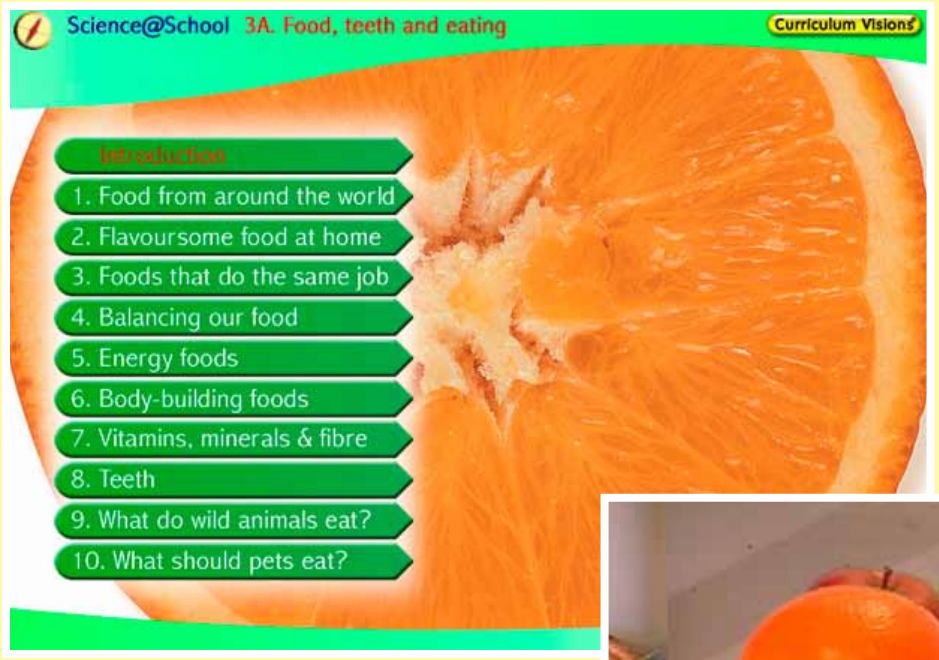
has almost everything you need to teach your primary curriculum in one convenient Virtual Learning Environment.

You can use support videos, e-books, picture and video galleries, plus additional Creative Topic books, graphic books called Storyboards, and workbooks. Together they cover all major curriculum areas.

All topics are easily accessible, and there is a built-in context search across all media.

You can also use our printed student books online as part of your subscription to the Learning Centre. There page-turning versions of every printed Curriculum Visions book for use on your whiteboard.

▼ The Food, teeth and eating home screen



▲ 'Classroom cinema' video

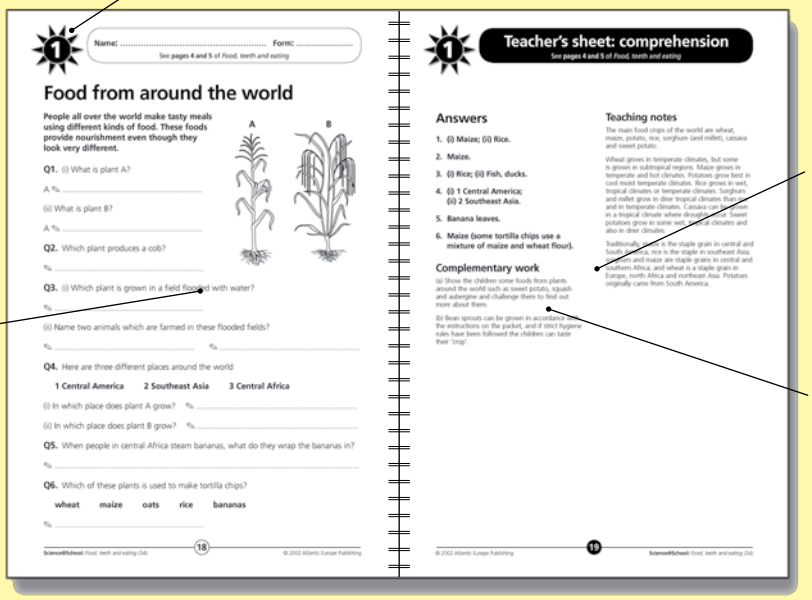
▲ Web site page

▶ Web site caption

▼ ***Each unit has one comprehension worksheet and one activity worksheet, each with a teacher's sheet.***

▶ ***The photocopiable comprehension worksheet and supporting teacher's sheet.***

Unit number.

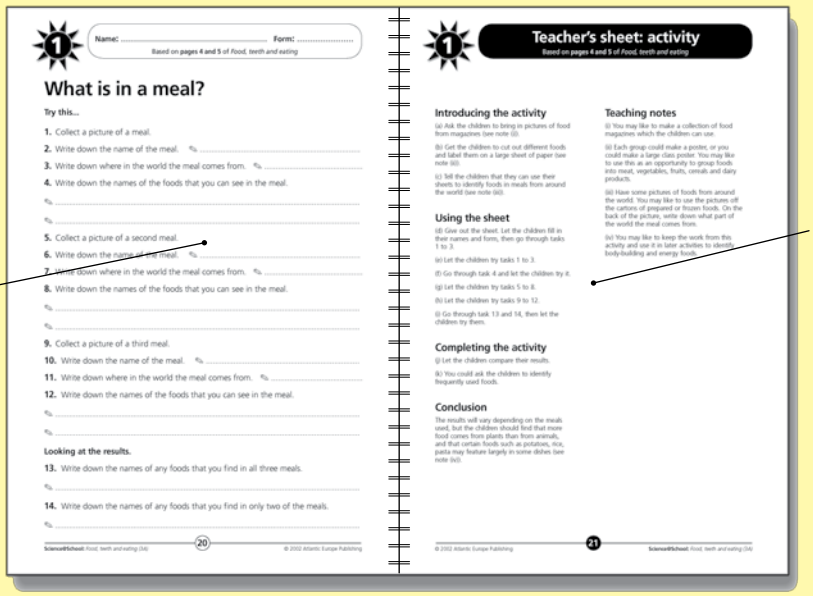


Left hand page is to photocopy and hand out to pupils.

Right hand page is the teacher's sheet and provides answers, suggestions for complementary work and teaching notes.

Resources needed to support the complementary work are shown in List 2 on page 15 of this Teacher's Guide.

▶ ***The photocopiable activity worksheet and supporting teacher's sheet.***



Left hand page is to photocopy and hand out to pupils. For some activities, pupils will also require additional sheets of paper.

Right hand page is the teacher's sheet and provides a detailed activity plan, conclusion and teaching notes. *Resources needed to support the activity worksheet are shown in List 3 on page 15 of this Teacher's Guide.*

Matching the curriculum

This book covers the teeth and eating component of the curriculum in a way that is highly relevant to work in the lower junior classes at primary school. It builds on the work done in key stage 1, and supports the work in *3B Helping plants grow well.*

While covering the subject matter of the curriculum, *Food, teeth and eating* also facilitates the development of investigative skills both in the pupil book and the *Teacher's Guide*.

The pack is fundamentally built around the idea that there is a wide range of foods that can be eaten, but they need to be chosen with care to provide a balanced diet for good health. In addition, the structure and action of the teeth is examined in their role as 'food processors' not just in human mouths but in the mouths of a range of mammals, both wild and domesticated. The establishment of a healthy diet for ourselves is reinforced by showing that we need to give our pets a healthy diet, too.

Section 2: The pupil book explained unit by unit

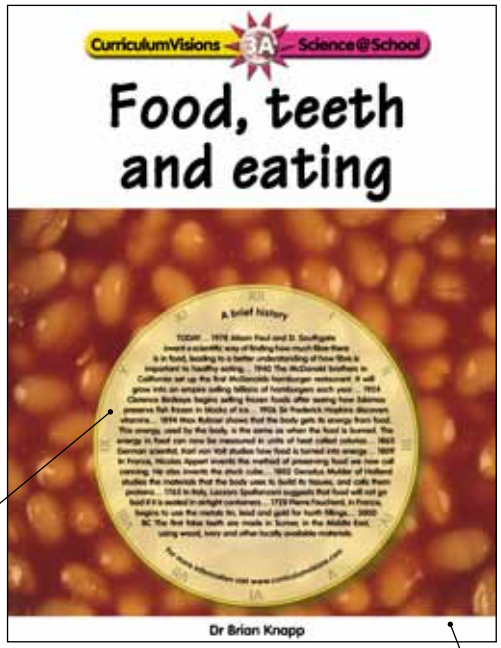
Although the pupil book – *Food, teeth and eating* – is clear and simple, a great deal of care and thought has been given to the structure and the content of each double page spread or unit. The worksheets and activities in this *Teacher's Guide* also link directly to the pages in *Food, teeth and eating*.

It is possible to use *Food, teeth and eating,* and the worksheets and activities, without reading this section, but we would strongly recommend that you take a short time to familiarise yourself with the construction of the pupil book.

The units are arranged in sequence, to help you with your lesson planning. In this section, a brief description of the content of each unit is given, together with hints on how to start or support it. List 1 (Starting a unit with a demonstration) on page 15 sets out the resources that you could use to do the demonstrations where suggested. The activity associated with each unit is also briefly described to help you see how the unit and activity work together.

Title page

The book begins on the title page (page 1). Here you will find information about science and technology in the form of a clock. You may want to use this to set the scene for the study of the book's contents. You may choose to focus on an event which ties in with your work in history, before moving onto the rest of the book. Alternatively, you may wish to skip over this page and return to it later. It is not a core part of the book, but helps the children see how the work they are doing now fits in with the work of scientists and engineers in the past. It may also be used to stimulate more able pupils to research the people and events that are described here.



A time clock giving additional historical information about the topic.

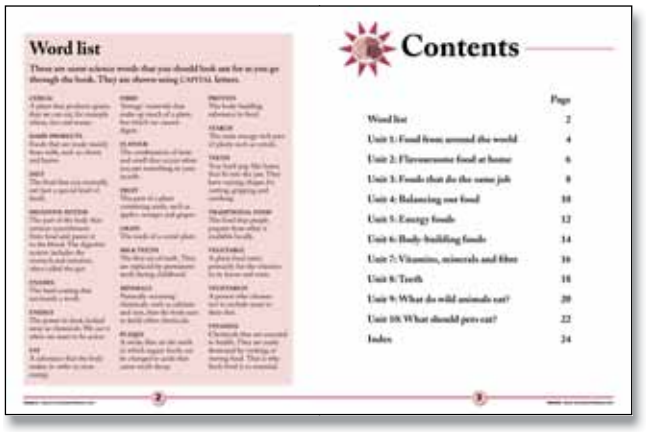
Baked beans are high in fibre.

Word list and contents

The core content of the book begins with a word list on page 2. This is a glossary, brought to the front for the pupils' attention. Pupils could be encouraged to look at the list and see how many of the words they already recognise.

One of the important things about science is the precision with which words are used. However, many scientific words are also common words, often used in a slightly different way from how they would be used in science. The word list presents the opportunity for pupils to consider the words they already know, and the meanings they are familiar with.

When your teaching unit has been completed, you may want to invite pupils to revisit this list and see if their understanding of the words has been enhanced or changed in any way. A visual dictionary is also given on the CD.



The entire contents are shown on page 3. It shows that the book is organised into double page spreads. Each double page spread covers one unit.

The units

Heading and introduction

Each unit has a heading, below which is an introductory sentence that sets the scene and draws out the most important theme of the unit.

Body

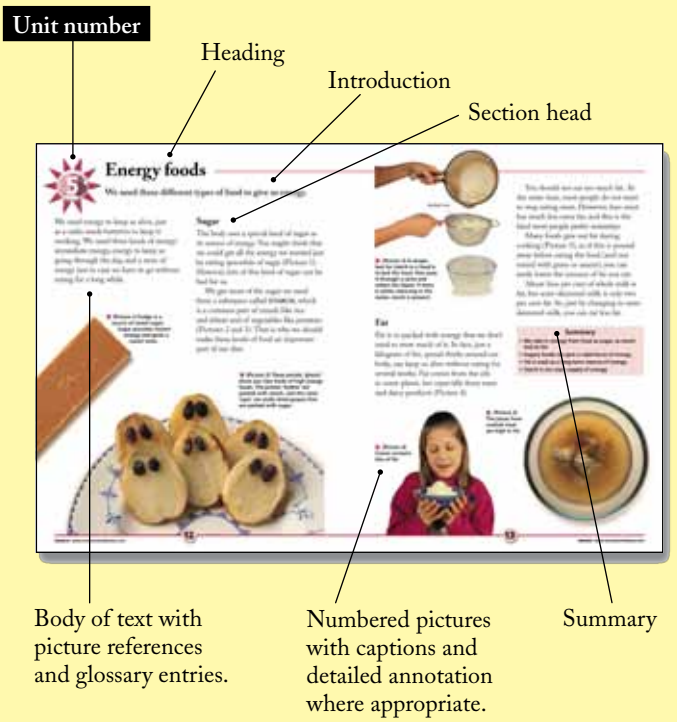
The main text of the page then follows in a straightforward, easy-to-follow, double column format.

Words highlighted in bold capitals in the pupil book are defined in the word list on page 2. A visual dictionary is also given on the CD.

The glossary words are highlighted on the first page on which they occur. They may be highlighted again on subsequent pages if they are regarded as particularly important to that unit.

Summary

Each unit concludes with a summary, highlighting and reinforcing the main teaching objectives of the unit.



1 Food from around the world

Begin by setting out some meat, shellfish, fish, honey, mushrooms, seeds, berries and nuts (check for allergies first) and tell the children this was the diet of the first people. Tell them that at first they ate their food raw but then discovered that it tasted better and was easier to digest if it was cooked on a fire. You could invite the children to work out a meal they would like from this ancient list of ingredients. Move on to say that as people spread out around the world, they ate the local plants and animals they found and eventually learned to farm.

The unit opens by explaining that the different places around the world where people live have different conditions, and these conditions affect the food that can be grown there. Over time, people have developed traditional dishes based on locally grown food. Today these meals are available around the world. The text then considers a central American dish based on maize, a southeast Asian dish based on rice and a central African dish based on bananas. A picture of each dish is supported by an illustration of the food plant.

In the complementary work, the children can examine a range of exotic foods and vegetables, and grow bean sprouts. In the activity, the children look at a range of commercially prepared meals from round the world and identify the foods in them.

2 Flavoursome food at home

If you can ensure hygienic conditions, you may like one or more children to take part in a simple demonstration which the rest can try at home. Let the children make their tongues dry, then place a piece of sugar (or small sugar lump) on the tip of their tongue. The children should not be able to taste it. Now tell the children to moisten their tongues and they should sense the sugary taste. You may tell the children that the smells and flavours of food help the body to produce juices, like those in the mouth, to aid in the digestion of food.

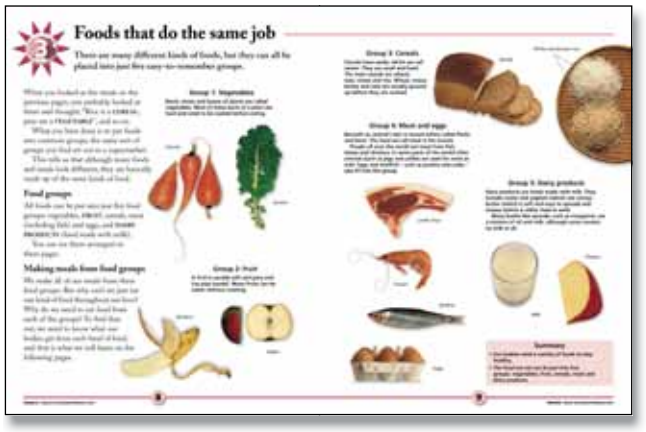
The unit opens by following on from issues developed in Unit 1. The text states that the foods we eat in this country are a result of the plants and animals that we can farm here, and are also due to our close proximity to the sea. A traditional meal of lamb, potatoes and peas is described, and is compared with a hamburger as an example of a modern way of presenting food for a meal. A taste map of the tongue is clearly shown and is supported by text which explains why we like to flavour our foods.

In the complementary work, the children can test how the sense of smell and taste work together when they chew a piece of pickled onion. In the activity, the children discover if they can accurately detect a food by its smell.

3 Foods that do the same job

You may like to begin by presenting the children with two shopping bags full of food. Ask some of the children to help you empty the bags and to arrange the foods into groups. If there seem to be anomalies in the way the children are grouping the food, ask other members of the class for their opinions. During the grouping process ask the children how they could tell a fruit from a vegetable, or to describe how cereals are similar. Suitable foods for this exercise are: apples, oranges, onions, cabbage, carrots, potatoes, oats, wholemeal flour, rice, a piece of fish, a piece of meat, a selection of cheeses, butter. When the children have worked out a system of grouping the food, let them work on the unit and compare their work with the information in the pupil book.

The unit builds on the work of the previous two units by introducing the concept of grouping food. Five food groups are introduced and colourfully illustrated. These are vegetables, fruit, cereals, meat and eggs, and dairy products. The caption to each food group provides more detailed information, which helps the children differentiate one group



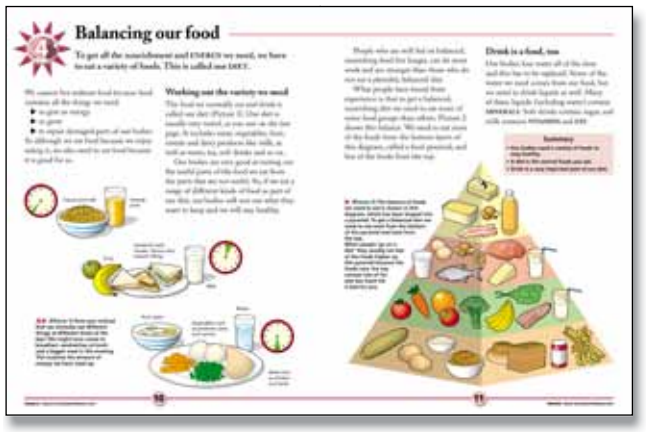
from another. The unit ends by asking the question, "Why can't we just eat one food?" This paves the way for the work in the next four units.

In the complementary work, the children can use work on their favourite foods from year 2 as the data for finding which food group their favourite foods belonged to. In the activity, the children think about the food they have recently eaten and classify it according to the five group system.

4 Balancing our food

You may like to begin by showing the children a balanced meal and a very unbalanced one. For example, a meal of two sausages, a portion of chips and peas may be compared with a meal of eight sausages a few chips and even fewer peas. Ask the children which looks right (but be prepared for keen sausage eaters), then ask children about the portions of food they receive in fish and chips, a curry or a pasta meal.

This unit builds on the previous unit by showing how the food groups can be arranged to provide the basis of a healthy diet. The unit begins by stating the three reasons why our bodies need food. It then moves on to establish the concept of the diet, and illustrates this with examples of meals that people eat throughout the day. The text moves on to remind the children of the food groups in the previous unit, then explains in simple terms that the body needs a balanced diet for good health. This is supported by a large, clear diagram of a food pyramid. The unit ends by reminding children that drinks are a part of the diet, too.



In the complementary work, the children can use the meal plan in the unit as a model for recording the food they eat in a day. In the activity, the children make a survey of lunches in a class to see how many meals are balanced.

5 Energy foods

You could begin by setting up a simple electrical circuit with a light bulb in it. Hold up a battery and tell the children that it is packed with energy. Ask them to predict what will happen when the battery is added to the circuit then show that it lights up the bulb. Tell the children that the stored energy in the battery has changed into electrical energy which moved round the circuit, and that some of this energy changed into heat and light in the bulb. Now hold up a loaf of bread. Tell the children that this is like a battery for the body because it contains a store of energy. This store of energy cannot make a light bulb shine but when we digest it, the energy is used to keep us alive. Show the children other 'body batteries' such as potatoes, strands of pasta and grains of rice.

The unit begins by relating energy in food with energy in a battery to establish the concept that food is needed to keep us working. Three kinds of energy are identified. They are immediate, working and long term energy. Sugar is identified as a source of energy, and an activity is illustrated which demonstrates the presence of starch in rice. The

unit ends by considering fat as a very rich source of energy that is only needed in small amounts, and ways of keeping down the amount of fat in the diet are described.

In the complementary work, the children can examine a piece of sugar cane and use secondary sources to find out how it is processed. The grinding and sieving of flour, and the extraction of starch from rice, can be demonstrated. In the activity, the children assess the energy they use in a range of activities.

6 Body-building foods

You could begin by taking a pair of lightweight dumb bells into the class and doing some arm exercises with them. These could include raising and lowering your forearm, and pumping the air above your head with them. While you perform these exercises ask the children what is the purpose of the exercises, and look for the answer that they are building up muscle. You may then rest and tell the children that even as they are sitting in class they too are building up their bodies and they have been doing it simply by eating the right kinds of foods.

The unit begins by stating that materials are needed for building up the body and repairing it. Proteins are identified as the substance needed to provide these materials. Meat is described as a protein-rich food, and this fact is used to explain why only small amounts of meat need to be eaten in a meal. It is also shown that proteins are not just restricted to meat but are also found in a range of plants. This idea is consolidated by introducing the concept of a vegetarian diet. This is illustrated by

a mouthwatering vegetarian meal from south Asia which provides a healthy amount of protein.

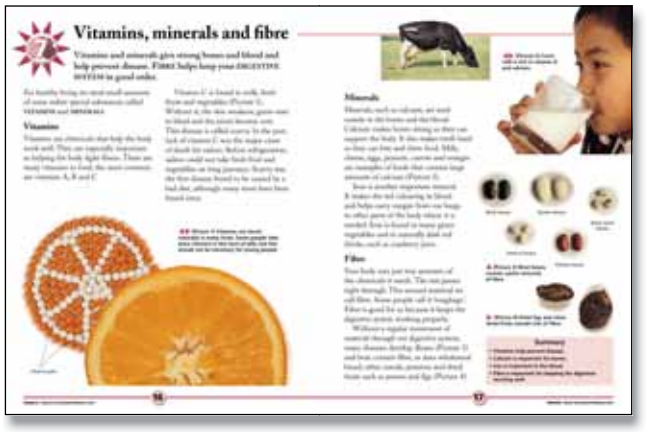
In the complementary work, the children can use secondary sources to find out about milk, cheese and eggs. In the activity, the children extract data from a growth chart and use it to identify patterns and make predictions.

7 Vitamins, minerals and fibre

If you can find a small piece of machinery (such as a padlock), which is rusty but works with difficulty, show it to the children and say that the machine is similar to a body which is surviving on a diet which is low in vitamins and minerals. Show the children how the machine only works with difficulty. Now oil the machinery and show the children how it works much more easily. Tell the children that the effect of the oil on the machine is similar to the effect of vitamins and minerals on the body. They make the body work more easily.

The unit begins by reminding the children of the need for energy and body building substances in our food, then moves on to state that vitamins and minerals are needed, too. Vitamins are introduced as substances that makes the body work well and fight disease. The link between the lack of vitamin C and scurvy is established, then the text moves on to show how vitamins can be lost in the preparation of food.

In the section on minerals, the role of calcium and iron in the body are described, and their sources in food are identified. The unit ends by explaining



that fibre is needed to help the digestive system and that it can be found in foods such as cereals, beans and dried fruits.

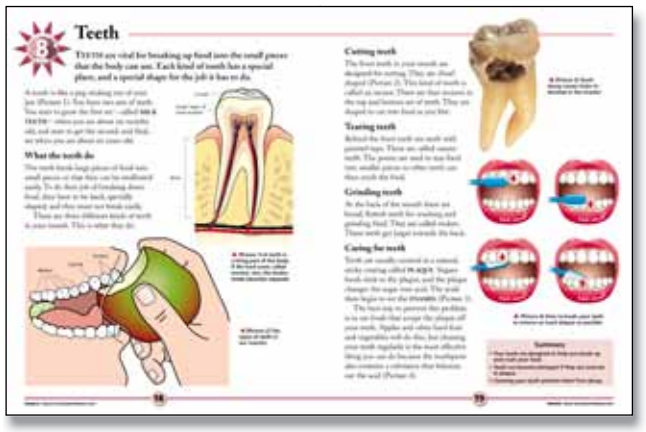
In the complementary work, the children can examine food packets to find the vitamin and mineral contents of the foods. In the activity, the children perform an investigation on Plasticine legs in a scientific modelling exercise related to vitamin D.

8 Teeth

Ask the children to smile and show their teeth. Draw a picture on the board of the incisors and canines in both jaws and tell the children these are the teeth you can see. Now ask the children to open their mouths as if they were saying "Ah" for a doctor. Draw in some molars (only six in each jaw) and say this is what you would see before a person began to get their second set of teeth. Ask the children about how their teeth are changing and be prepared for many stories.

The unit begins by explaining that people start getting their first set of teeth when they are about six months old, and start getting their second set of teeth when they are about six years old. The structure of the tooth is clearly illustrated, and the arrangement of the teeth in the mouth is shown. The structure and functions of the three types of teeth – incisors, canines and molars are described.

The text moves on to introduce enamel and a striking photograph of a decayed tooth stimulates an interest in the last section, which is on caring for teeth. In this section, the role of plaque in tooth



decay is explained, and the text ends by describing ways in which tooth decay can be prevented.

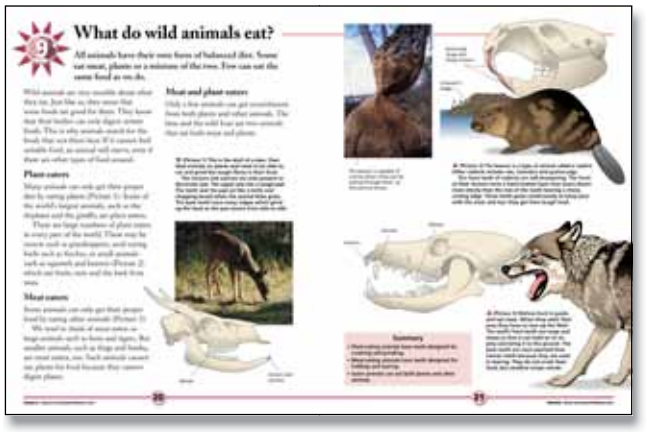
In the complementary work, the children examine sterilised human teeth, or model teeth, and look at their own teeth with a mirror. In the activity, the children use a tooth substitute (eggshell) to find out about the corrosive power of drinks.

9 What do wild animals eat?

Ask the children for the name of an animal that lives in a tree in this country. Look for an answer such as squirrel, but birds may also be mentioned. Move on to ask about animals that live in the grass and in a pond. It is important for the children to realise that wild animals are not just large animals, but small ones too and include mini-beasts. Move on to ask about the food of some of the animals and ask the children about their observations of seeing wild animals feeding.

The unit begins by stating that animals have particular diets. The text moves on to describe a wide range of plant-eating animals, and is supported by illustrations of a deer and deer skull to show the special arrangement of the teeth. An extended caption and three illustrations show how the unusual, ever-growing incisor teeth of the beaver allow it to cut through tree trunks without becoming blunt.

In the section on meat eaters, the point is emphasised that not only large animals like lions and tigers are meat eaters but smaller ones, like the frog,



are meat eaters, too. This section is supported by illustrations of the wolf showing its skull and jaws ready for action. The unit ends by mentioning that a few animals eat both plants and animals.

In the complementary work, the children can watch a video on the different ways that animals feed. In the activity, the children make Plasticine teeth and find out how deep they can stab into flour.

10 What should pets eat?

Ask the children what pet they would most like to keep. This question brings in children who do not have a pet, yet allows children who have them to talk about their own pets. In the discussion, bring out general points on housing, exercise and time needed to care for the animal, then ask about the food the animal would need.

The unit begins by explaining that today's pets developed from wild animals, and that they were tamed because people used them for certain jobs. The text stresses that pets cannot survive on the foods humans eat and that pets need their own special diet. To support this, the section on the dog's diet states that even some forms of chocolate that humans eat can make dogs very ill.

The text moves on to explain that even when a cat is well fed it still senses the need for meat and kills birds and mice. In the section on rabbits and rodents, the diet of the animals is shown to include fibre in the form of hay to aid digestion. The unit

ends with a very important reminder – to make sure that a constant supply of water is always available to every pet.

In the complementary work, the children can use the data in tables on the sides of dog food tins to construct bar charts. In the activity, the children make a survey of pets to discover the foods they eat and look for patterns in their data.

Index

There is an index on page 24.

Section 3: Using the pupil book and photocopiable worksheets

Introduction

There is a wealth of material to support the topic of food, teeth and eating in the pupil book and in the *Teacher's Guide*. On this and the following three pages, suggestions are made on how to use the worksheets and their associated teacher's sheets on pages 18 to 57, and how to integrate them for lesson planning. On the page opposite you will find the resource lists for introductory demonstrations, the complementary work and the activity worksheets. The learning objectives are shown on pages 16 and 17.

Starting a unit

Each unit in the pupil book forms the basis for a lesson. You may like to start by reading it with the class, or begin with a demonstration (see pages 7 to 13 and List 1 on page 15). Always begin the unit by reading the introductory sentences in bold type. This helps focus the class on the content of the unit and to prepare them for the work.

The first part of the main text introduces the content, which is then developed in the headed sections. The illustrations are closely keyed to the main text, and the captions of the illustrations develop the main text content (*see* 'The units' at the bottom of page 8).

With less skilled readers, you may prefer to keep to the main text and discuss the illustrations when they are mentioned. With more skilled readers, you may want to let them read the captions for themselves. Each unit ends with a summary. The children can use this for revision work. They can also use it to test their understanding by trying to explain the points made in the summary.

You can find the learning objectives for each unit on pages 16 and 17 of this *Teacher's Guide*.

The style and content of the unit also make it suitable for use in literacy work, where the needs of both English and science are met. You may wish to use the unit as a topic study in literacy work, or you may want to perform an activity in science time and follow it up with a study of the unit during literacy work.

Using the comprehension worksheets

Each unit in the pupil book has one photocopiable comprehension worksheet in this *Teacher's Guide* to provide a test. The learning objectives on page 16 are for these comprehension worksheets and relate directly to the knowledge and understanding component of the science curriculum.

The comprehension worksheets begin with simple questions and have harder questions towards the end.

The worksheets may be used singly, after each unit has been studied, or they may be used along with other worksheets to extend the study.

The teacher's sheet, which is opposite the comprehension worksheet, shows the answers and background information to the unit. This teacher's sheet also carries a section on work complementary to the study topic. This work may feature research using other sources. It may also have value in literacy work.

Using the activity worksheets

The activities are designed to develop skills in scientific enquiry. The learning objectives for practical skills associated with each unit are given on page 17. The activities may be small experiments, may focus on data handling or comprise a whole investigation.

Each activity section is a double page spread in this *Teacher's Guide*. On the left hand page is a photocopiable activity worksheet to help the children in practical work, or it may contain data for the children to use or interpret. The page opposite the worksheet is a teacher's sheet providing a step-by-step activity plan to help you organise your work. Each plan has a set of notes which provide hints on teaching or on the use of resources. The activity plan ends with a conclusion, which you may like to read first, to help you focus on the activity in your lesson planning.

Planning to use a unit

The materials in this pack are very flexible and can be used in a variety of ways. First, look at the unit and activity objectives on pages 16 and 17. Next, read the unit in the pupil book, and the associated worksheet and activity units in this *Teacher's Guide*. Finally, plan how you will integrate the material to make one or more lessons. You may wish to add more objectives, or replace some of the activity objectives with some of your own.

Safety

The practical activities feature equipment made from everyday materials or available from educational suppliers. However, make sure you carry out a risk assessment, following the guidelines of your employer, before you do any of the practical activities in either the pupil's book or the *Teacher's Guide*.

Resources

The three lists below show the resources needed to support the photocopiable worksheets.

- List 1 shows resources for demonstrations suggested for starting a unit.
- List 2 gives resources needed for the complementary work featured on the teacher's sheet associated with each comprehension worksheet.
- List 3 details those resources needed for the 10 activity worksheets.

List 1 (Starting a unit with a demonstration)

▼ UNIT

1. Meat, shellfish, fish, honey, seeds, berries, nuts (check class for allergies first), mushrooms.
2. Sugar lumps, clean paper towels.
3. Apples, oranges, onions, cabbage, carrots, potatoes, oats, wholemeal flour, rice, a piece of fish, a piece of meat, a selection of cheeses, butter.
4. A meal of two sausages, a portion of chips and peas may be compared with a meal of eight sausages, a few chips and even fewer peas.
5. Battery, three wires, light bulb, switch, loaf of bread.
6. A pair of lightweight dumb bells.
7. Small rusting piece of machinery (for example, padlock or larger), oil.
8. –
9. –
10. –

List 2 (Complementary work)

Each group will need the following items:

▼ UNIT

1. (a) Sweet potato, squash, aubergine; (b) bean sprouts, jar, muslin, access to water, safe place to keep jar.
2. Pickled onions.
3. Bar graphs on year 2 work on favourite foods.
4. Pupil book.
5. (a) Sugar cane; (b) wheat grains, mortar and pestle, sieve; (c) boiled rice in water, sieve, two bowls.
6. Secondary sources about (a) how milk is collected and distributed; (b) how cheese is made; (c) how chickens are farmed for egg production.
7. Empty packets of breakfast cereal. Empty packets of other processed foods.
8. (a) Sterilised human teeth or plastic models of teeth; (b) mirrors without sharp edges.
9. Video of different animals feeding.
10. Labels from canned dog food showing tables of the recommended amounts for dogs of different sizes.

List 3 (Activity worksheets)

Each group will need the following items:

▼ UNIT

1. Magazines containing pictures of different foods, scissors, glue, large sheets of paper. Pictures of meals such as paella, curries and pasta dishes from magazines or packets of prepared foods.
2. Yoghurt pots, muslin, elastic bands, pieces of food (onion, garlic, cheese, orange, banana, apple, celery).
3. –
4. Another class or classes to provide information about lunches from lunch boxes and/or school canteen.
5. –
6. –
7. Plasticine, matchbox tray, ten coins (for example, 2p), ruler.
8. Jars or beakers, string (you will need time to make the string slings), fruit drinks, fizzy drinks, cola, measuring cylinder, magnifying glass.
9. Plasticine, plain flour, pot or cup, ruler.
10. Pet owners.

Learning objectives

Comprehension worksheets

The table below shows the learning objectives for knowledge and understanding associated with each unit in the pupil book, using the comprehension worksheets in this *Teacher's Guide*:

Unit 1

- People in different parts of the world eat different food.
- The meals that are frequently eaten in a particular region are called traditional meals.
- Traditional meals are based on the foods that are grown and reared locally.

Unit 2

- Our region has its own traditional meals.
- A person can sense different flavours on different parts of their tongue.
- The flavours of food make the food attractive to us.

Unit 3

- Food can be arranged into five groups.
- The five groups are based on the origins of the food.

Unit 4

- The food we normally eat or drink is called our diet.
- The different foods in our diet have to be balanced for good health.
- We can eat meals of different sizes and still get all the nourishment we need.

Unit 5

- Energy for the body is provided by sugar, starch and fat.
- Starch is a source of sugar for the body.
- The body uses the different energy sources in different ways.

Unit 6

- The body requires materials it can use for growth.
- The body requires materials for the repair of damaged parts.
- Body-building materials can be supplied by foods from plants and animals.

Unit 7

- Vitamins help the body work well and prevent disease.
- Minerals are needed for making parts of the body.
- Fibre is needed to keep the digestive system efficient and healthy.

Unit 8

- The teeth break down food in the digestive process.
- Teeth can be damaged by acids.
- Cleaning teeth helps to keep them healthy.

Unit 9

- Wild animals have special diets.
- Wild animals can be divided into three groups according to their diets.
- The teeth and jaws of wild animals are specially shaped to help the animals feed.

Unit 10

- Pets cannot eat the same food as their owners.
- Each kind of pet has its own special diet.
- Pets should have water available to them at all times.

Learning objectives

Activity worksheets

The table below shows the learning objectives for practical skills associated with each unit in the pupil book, using the activity worksheets in this *Teacher's Guide*:

Unit 1

- Make careful observations.
- Make comparisons.
- Record observations in written form.

Unit 2

- Use simple equipment and materials safely.
- Follow instructions.
- Extract information from a table.

Unit 3

- Fill in a table.
- Extract information from a table.

Unit 4

- Find out information by making a survey.
- Extract information from a table.
- Perform a simple calculation.

Unit 5

- Record information in a complex table.
- Extract data from a complex table.
- Make comparisons.

Unit 6

- Extract information from a table.
- Make a prediction based on data.
- Identify a pattern in data.

Unit 7

- Use simple materials safely.
- Make careful observations.
- Draw conclusions from results.

Unit 8

- Set up a fair test.
- Make careful observations.
- Draw conclusions from observations.

Unit 9

- Perform a fair test.
- Compare a prediction with the results.
- Make an explanation based on data.

Unit 10

- Formulate a question to investigate.
- Plan an investigation.
- Carry out and complete an investigation.

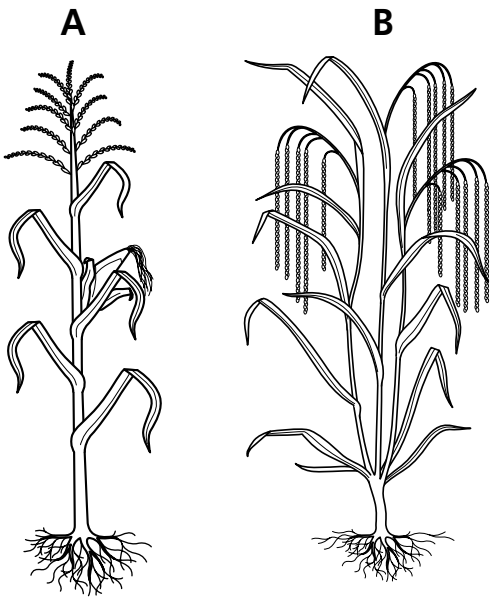
C 1

Name: ..... Form: .....

See **pages 4 and 5** of *Food, teeth and eating*

Food from around the world

People all over the world make tasty meals using different kinds of food. These foods provide nourishment even though they look very different.



Q1. (i) What is plant A?

A ✎.....

(ii) What is plant B?

A ✎.....

Q2. Which plant produces a cob?

✎.....

Q3. (i) Which plant is grown in a field flooded with water?

✎.....

(ii) Name two animals which are farmed in these flooded fields?

✎..... ✎.....

Q4. Here are three different places around the world

1 Central America **2 Southeast Asia** **3 Central Africa**

(i) In which place does plant A grow? ✎.....

(ii) In which place does plant B grow? ✎.....

Q5. When people in central Africa steam bananas, what do they wrap the bananas in?

✎.....

Q6. Which of these plants is used to make tortilla chips?

wheat **maize** **oats** **rice** **bananas**

✎.....

Teacher's sheet: comprehension

See **pages 4 and 5** of *Food, teeth and eating*

Answers

1. **(i) Maize; (ii) Rice.**
2. **Maize.**
3. **(i) Rice; (ii) Fish, ducks.**
4. **(i) 1 Central America;**
   (ii) 2 Southeast Asia.
5. **Banana leaves.**
6. **Maize (some tortilla chips use a mixture of maize and wheat flour).**

Complementary work

(a) Show the children some foods from plants around the world such as sweet potato, squash and aubergine and challenge them to find out more about them.

(b) Bean sprouts can be grown in accordance with the instructions on the packet, and if strict hygiene rules have been followed the children can taste their 'crop'.

Teaching notes

The main food crops of the world are wheat, maize, potato, rice, sorghum (and millet), cassava and sweet potato.

Wheat grows in temperate climates, but some is grown in subtropical regions. Maize grows in temperate and hot climates. Potatoes grow best in cool moist temperate climates. Rice grows in wet, tropical climates or temperate climates. Sorghum and millet grow in drier tropical climates than rice and in temperate climates. Cassava can be grown in a tropical climate where droughts occur. Sweet potatoes grow in some wet, tropical climates and also in drier climates.

Traditionally, maize is the staple grain in central and South America; rice is the staple in southeast Asia; sorghum and maize are staple grains in central and southern Africa; and wheat is a staple grain in Europe, north Africa and northeast Asia. Potatoes originally came from South America.

Name: ..... Form: .....

Based on **pages 4 and 5** of *Food, teeth and eating*

What is in a meal?

Try this...

1. Collect a picture of a meal.

2. Write down the name of the meal. ✎.....

3. Write down where in the world the meal comes from. ✎.....

4. Write down the names of the foods that you can see in the meal.

✎.....

✎.....

5. Collect a picture of a second meal.

6. Write down the name of the meal. ✎.....

7. Write down where in the world the meal comes from. ✎.....

8. Write down the names of the foods that you can see in the meal.

✎.....

✎.....

9. Collect a picture of a third meal.

10. Write down the name of the meal. ✎.....

11. Write down where in the world the meal comes from. ✎.....

12. Write down the names of the foods that you can see in the meal.

✎.....

✎.....

Looking at the results.

13. Write down the names of any foods that you find in all three meals.

✎.....

14. Write down the names of any foods that you find in only two of the meals.

✎.....

Teacher's sheet: activity

Based on **pages 4 and 5** of *Food, teeth and eating*

Introducing the activity

(a) Ask the children to bring in pictures of food from magazines (see note (i)).

(b) Get the children to cut out different foods and label them on a large sheet of paper (see note (ii)).

(c) Tell the children that they can use their sheets to identify foods in meals from around the world (see note (iii)).

Using the sheet

(d) Give out the sheet. Let the children fill in their names and form, then go through tasks 1 to 3.

(e) Let the children try tasks 1 to 3.

(f) Go through task 4 and let the children try it.

(g) Let the children try tasks 5 to 8.

(h) Let the children try tasks 9 to 12.

(i) Go through tasks 13 and 14, then let the children try them.

Completing the activity

(j) Let the children compare their results.

(k) You could ask the children to identify frequently used foods.

Conclusion

The results will vary depending on the meals used, but the children should find that more food comes from plants than from animals, and that certain foods such as potatoes, rice, pasta may feature largely in some dishes (see note (iv)).

Teaching notes

(i) You may like to make a collection of food magazines which the children can use.

(ii) Each group could make a poster, or you could make a large class poster. You may like to use this as an opportunity to group foods into meat, vegetables, fruits, cereals and dairy products.

(iii) Have some pictures of foods from around the world. You may like to use the pictures off the cartons of prepared or frozen foods. On the back of the picture, write down what part of the world the meal comes from.

(iv) You may like to keep the work from this activity and use it in later activities to identify body-building and energy foods.

Name: ..... Form: .....

See **pages 6 and 7** of *Food, teeth and eating*

Flavoursome food at home

We also have traditional foods which have tasty flavours and keep us healthy.

Diagram A

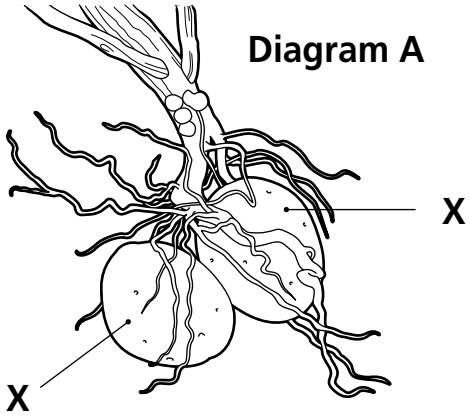
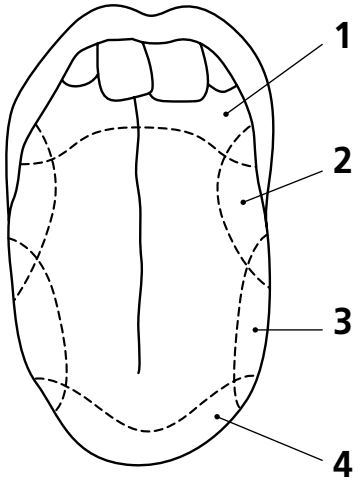


Diagram B



Q1. Look at diagram A.

(i) What are the foods labelled X? ✎.....

(ii) How may they be used in a meal?

✎.....

Q2. Why should people in the British Isles be likely to eat seafood quite often?

✎.....

Q3. Diagram B shows a tongue. Which flavour is tasted in

(i) Area 1? ✎..... (i) Area 2? ✎.....

(iii) Area 3? ✎..... (iv) Area 4? ✎.....

Q4. Name four foods in a hamburger.

✎..... ✎.....

✎..... ✎.....

Q5. Name three substances used in many sauces which give them flavour.

✎..... ✎..... ✎.....

Teacher's sheet: comprehension

See **pages 6 and 7** of *Food, teeth and eating*

Answers

1. **(i) Potatoes; (ii) In slices. If other forms, such as chips and mash, are included you could give them extra marks.**
2. **Because the sea is close by.**
3. **(i) Bitterness; (ii) Sourness; (iii) Saltiness; (iv) Sweetness.**
4. **Bread, meat, potato, lettuce, tomato.**
5. **Salt, sugar, vinegar.**

Complementary work

(a) The children could try the following activity to test the effect of the sense of smell on the sense of taste. The children should hold their noses, then chew a piece of pickled onion. After about half a minute the children should let go of their noses and report how the taste of the onion changes. It will now taste much stronger.

Teaching notes

The diagram shows the basic arrangement of the four taste areas on the tongue, but there are many variations. Some areas overlap, particularly the salty and sweet areas. The sourness and bitterness areas tend to be more clearly defined, but some people are unable to differentiate between the two tastes.

Taste and smell work together to help you assess if a food may be safe to eat. In the past, food that was spoiled or of poor quality had herbs or spices added to it to hide the 'off' taste.

In the grooved surface of the tongue are 9,000 taste buds. These are the places where a taste is sensed, and information about it is relayed to the brain by nerves in the tongue.

C

2

Name: ..... Form: .....

Based on **pages 6 and 7** of *Food, teeth and eating*

The food smell test

Try this...

1. Collect six yoghurt pots, six elastic bands, six pieces of muslin and six pieces of food.

2. Label each pot A to F with a pen.

3. Put one piece of food in each yoghurt pot.

4. Put a piece of muslin over each pot.

5. Put an elastic band around the top of the pot to hold the muslin in place.

6. Fill in the names of the people you are going to test in the table.

7. Test each person with all six pots in turn. Fill in the table by putting a tick if the person can tell what food is in the pot, and by putting a cross if they cannot tell what food is in the pot.

Name	A	B	C	D	E	F

Looking at the results.

8. Who could tell all the foods? ✎.....

9. Who could tell five foods? ✎.....

10. Who could tell four foods? ✎.....

11. Who could tell the least number of foods? ✎.....

Teacher's sheet: activity

Based on **pages 6 and 7** of *Food, teeth and eating*

Introducing the activity

(a) Say that the sight and smell of food is important to making your mouth water.

(b) Ask the children about their favourite food smells.

(c) Ask the children if they think everyone can tell a food by its smell (see note (i)).

Using the sheet

(d) Give out the sheet. Let the children fill in their names and form, then go through tasks 1 to 5 (see note (ii)).

(e) Let the children try tasks 1 to 5.

(f) Go through tasks 6 and 7 (see note (iii)).

(g) Let the children try tasks 6 and 7.

(h) Let the children try tasks 8 to 11.

Completing the activity

(i) If the children have worked in groups, ask them to report to the whole class. In the report they do not need to mention names, just the numbers of people who identified certain foods.

(j) Say that data can be used in more than one way. Ask the children to work out which foods were most easily detected and which were the most difficult to detect (see note (iv)).

Conclusion

Foods produce smells to make them appetising, but the smells may not be detected by everybody.

Teaching notes

(i) You may like to use this in the context of making predictions.

(ii) Use foods such as celery, garlic, onion, orange, banana, apple, cheese (do not use nuts or any food which contains nuts).

(iii) You may wish to do this as a demonstration, or divide the class into groups giving each group a different combination of foods. The children in each group decide who will smell the food and who will present the food and record the data.

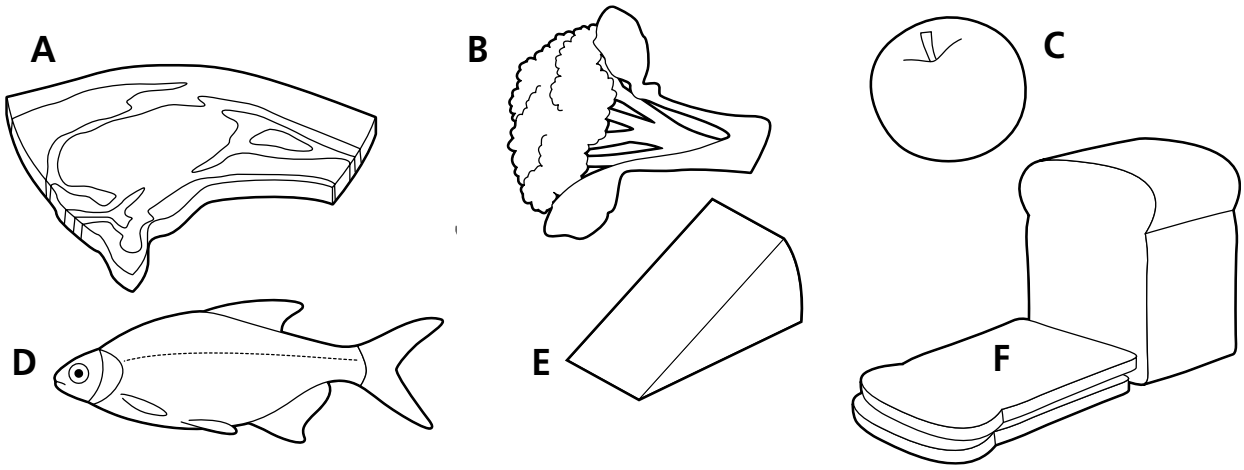
(iv) This is an example of how data from an investigation can provide information for other questions.

Name: ..... Form: .....

See **pages 8 and 9** of *Food, teeth and eating*

Foods that do the same job

There are many different kinds of foods, but they can all be placed into just five easy-to-remember groups.



Q1. Look at the foods in the diagram. Which group does each food belong to? Write the letter of each food in the correct place in the table.

Food group	Food
Vegetables	
Fruit	
Cereals	
Meat and eggs	
Dairy products	

Q2. Which part of a plant may form a vegetable? ✎.....

Q3. What are the pips in fruit? ✎.....

Q4. Name two cereals.

✎..... ✎.....

Q5. Name three farm animals that are reared for their meat.

✎..... ✎..... ✎.....

Q6. Why is yoghurt in the dairy group?

✎.....

✎.....

Teacher's sheet: comprehension

See **pages 8 and 9** of *Food, teeth and eating*

Answers

1. **Vegetables – B; Fruit – C; Cereals – F; Meat and eggs – A and D; Dairy products – E.**
2. **Root, stem, leaves.**
3. **Seeds.**
4. **Wheat, oats, rice and maize.**
5. **Sheep, cattle, pigs, chicken.**
6. **Yoghurt is made from milk, which is produced in a dairy.**

Complementary work

(a) The children may have done a survey about their favourite foods and produced a bar chart of their results in year 2. They could use the data again to find out which food groups contain their favourite foods.

Teaching notes

A potato may be called a root vegetable, but it is really a swollen part of an underground stem. The celery stalk is often called a stem at this level, but it really is a leaf stalk. The real stem forms the disc where the leaf stalks meet. Sweet corn is the same as maize, which is a cereal, but in supermarkets it is grouped with canned vegetables. The tomato is really a fruit, but is also described as a salad vegetable. Exotic vegetables might include bamboo shoots, water chestnuts and bean sprouts. Pasta and noodles are placed in the cereal group, since they are made from wheat and rice.

The children should know that water is an essential part of the diet. It may be addressed by drawing attention to the fact that water is lost through sweat and going to the toilet, and must be replaced by drinks.

.

3

Name: ..... Form: .....

Based on **pages 8 and 9** of *Food, teeth and eating*

Which groups does my food come from?

Try this...

1. Think about all the food you have eaten today.

2. Write the names of the foods in the food column of the table.

3. Think about the food you ate yesterday.

4. Write the names of the foods in the food column of the table, too.

5. Think what kind of food group each food came from, and tick one or more columns for each food.

Food	Vegetables	Fruit	Cereals	Meat and eggs	Dairy products

Looking at the results.

6. Which group does most of your food come from? ✎.....

7. Which food group do you eat least of? ✎.....

Teacher's sheet: activity

Based on **pages 8 and 9** of *Food, teeth and eating*

Introducing the activity

(a) When you have been through pages 8 and 9 in the pupil book, ask the children, "What was the last thing you ate?"

(b) Ask them to say which food group or groups it belonged to.

(c) Ask the children to guess what group most of their food belongs in (see note (i)).

Using the sheet

(d) Give out the sheet. Let the children fill in their names and form, then go through tasks 1 to 4 (see note (ii)).

(e) When each child has made a list of food, explain how they should perform task 5 (see note (iii)).

(f) Let the children try task 5.

(g) Go through tasks 6 and 7 with the children, then let them try them.

(h) Remind the children of their predictions at (c) above and let them match their results with their prediction.

Completing the activity

(i) Let the children compare their results.

(j) Tell the children to keep the results for later work.

Conclusion

The food in meals can be divided into five food groups.

Teaching notes

(i) The children may or may not be used to making a guess before their investigation. Introduce the word prediction for guess. Once the children have made their predictions, they should forget about them and get on with the investigation. Thinking about the prediction can make them be less objective in what they do.

(ii) You may wish the children to only use foods at this stage and not drinks. Drinks could be used later in connection with tooth care.

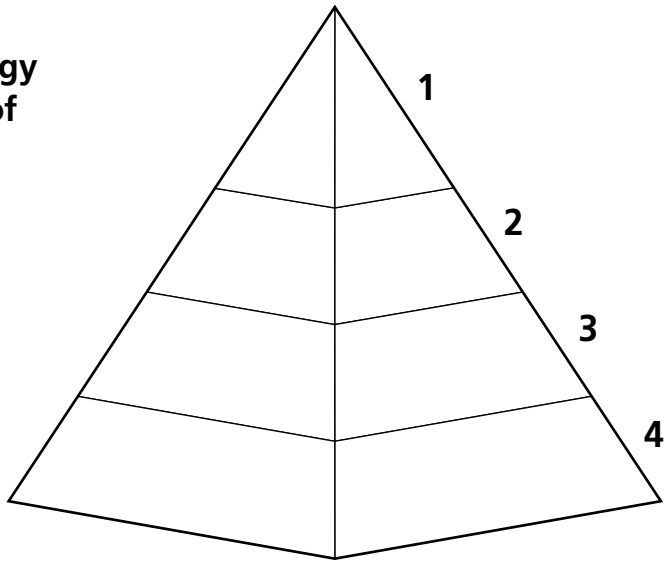
(iii) Some foods belong in a number of different groups. For example, apple pie contains fruit, cereal and dairy products. If the children have made biscuits, ask them about the ingredients to help them judge what food groups are used in confectionery.

Name: ..... Form: .....

See **pages 10 and 11** of *Food, teeth and eating*

Balancing our food

To get all the nourishment and energy we need, we have to eat a variety of foods. This is called our diet.



Q1. The diagram shows the four levels of the food pyramid. In which level would you find each of the following foods?

Bread ✎..... Butter ✎.....

Apple ✎..... Eggs ✎..... Fish ✎..... Carrot ✎.....

Q2. Give two reasons why we eat food.

1 ✎.....

2 ✎.....

Q3. When do most people have the largest meal of the day?

✎.....

Q4. Here are two diets:

Diet A has a large amount of fat and meat and a small amount of fruit and vegetables.

Diet B has a small amount of fat and meat and a large amount of fruit and vegetables.

Which is the healthier diet, A or B? ✎.....

Q5. When people go on a diet to lose weight, or to be healthier, what kinds of food do they eat less of?

✎.....

✎.....

Teacher's sheet: comprehension

See **pages 10 and 11** of *Food, teeth and eating*

Answers

1. **Bread – 4; Butter – 1; Apple – 3; Eggs – 2; Fish – 2; Carrot – 3.**
2. **To give us energy, for growth, for repair of the body.**
3. **In the evening.**
4. **Diet B.**
5. **Foods high up on the pyramid.**

Complementary work

(a) The children can use the meal plan for the day shown in the pupil book as a model for a record of all the food they eat in a day. They could record their data in a table or as a series of pictures. You may need to deal with this topic in a sensitive way as some children may not be able to enjoy a balanced diet due to socio-economic circumstances.

Teaching notes

In the previous unit, the children were introduced to five food groups. Here they are introduced to the four levels of the food pyramid. It is important for the children to see how the food groups fit into the food pyramid.

In the bottom layer of the pyramid are cereals, bread, pasta, rice, potatoes and beans. In the layer above that are fruits, vegetables and milk, and in the layer above that are eggs, meat, fish, nuts, pulses and dairy products. In the top layer are fats and sugars.

The children may ask where the foods in the top layer come from. They can be told that fats in butter come from dairy products while lard is animal fat. Oils are produced by plants. Sugar is produced from sugar cane or sugar beet, but because of its own special properties – being a very high energy source and little else – it is grouped on its own.

The children should see that grouping foods according to their origin helps make sense of the wide variety of food we eat, and also that grouping foods according to how they affect the body is essential for constructing healthy meals and a balanced diet.

C

4

Name: ..... Form: .....

Based on **pages 10 and 11** of *Food, teeth and eating*

How healthy is your lunch?

Try this...

1. Ask the people in a class to show you the food they are having for lunch.

2. Look at the different parts of each meal and put ticks for each part in the correct column in the table.

3. You may fill in the name of each person in the first column, or you can leave it blank and just use the number.

Name	Cereals Potatoes	Fruit Vegetables	Meat, eggs Dairy products	Fats Sugars
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Looking at the results.

4. Who ate healthy meals? Write the names or numbers here.

✎.....

5. Who ate unhealthy meals? Write the names or numbers here.

✎.....

6. How many meals were healthy out of the total?

✎.....

Teacher's sheet: activity

Based on **pages 10 and 11** of *Food, teeth and eating*

Introducing the activity

(a) You may like to begin by saying that it is sometimes in the news that children are not eating healthily (see note (i)). Tell the children that one way to check out this idea is to do a survey (see note (ii)).

Using the sheet

(b) Give out the sheet. Let the children fill in their names and form, then ask them to look at the table (see note (iii)).

(c) Explain how to fill in the table by giving an example. A meal of fish, peas and potatoes would have a tick in the first three columns (see note (iv)).

(d) Tell the class how the survey is to be made (see note (v)).

(e) Go though tasks 1 to 3 with the children, then let them try them.

Completing the activity

(f) Go through tasks 4 to 6 (see note (vi)), then let the children try them.

(g) Depending on how you have arranged the children's work you could pool their results on the board, or in a spreadsheet.

(h) If you have brought in a news item, you could compare the news item with the results of the survey. Ask the children to comment.

(i) You might want to have a poster competition to encourage more healthy eating.

Conclusion

A meal can be described as healthy or unhealthy by considering the foods in it.

Teaching notes

(i) If possible, pin up some newspaper items on the wall or show a video of a news item.

(ii) You could make a survey of the lunches of the class first, perhaps examining the meals brought to school in lunch boxes. You could then have groups of children from the class make surveys in other classes, and perhaps even survey the whole school.

(iii) Remind the children of how the foods were arranged in the food pyramid, and say that the headings correspond to the levels in the pyramid.

(iv) You should decide with the class the detail you wish to use before they make the survey. For example, potato crisps could have one tick in the first column and one tick in the fourth column for more able children, or just a tick in the first column for less able children.

(v) You may begin this by discussing various options, then steer the children towards how you would like the survey to take place. You may want each group in your class to survey a corresponding group in another class, for example.

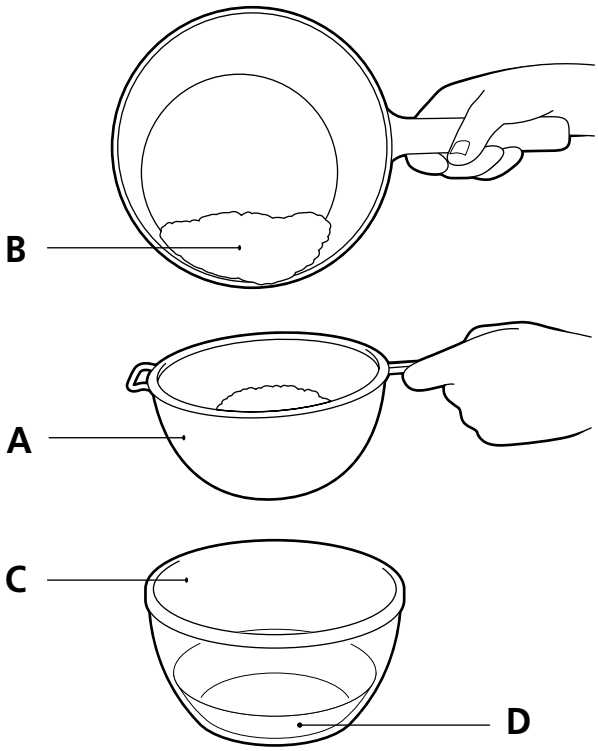
(vi) For task 6, you could ask the children to write the answer as a fraction.

Name: ..... Form: .....

See **pages 12 and 13** of *Food, teeth and eating*

Energy foods

Sugar is our main source of instant energy, but there is more energy in fat than in any other type of food.



Q1. Write in the names of the things labelled A, B, C and D in the diagram.

A ✎.....

B ✎.....

C ✎.....

D ✎.....

Q2. Which source of energy tastes sweet?

✎.....

Q3. What does starch change into when it is digested by the body?

✎.....

Q4. Which source of energy is found in meat?

✎.....

Q5. How could someone cut down on the amount of fat they eat in their diet?

✎.....

✎.....

✎.....

✎.....

Teacher's sheet: comprehension

See **pages 12 and 13** of *Food, teeth and eating*

Answers

1. **A = sieve; B = rice; C = bowl; D = starch or starch in water.**
2. **Sugar.**
3. **Sugar.**
4. **Fat.**
5. **They could eat lean meat, remove fat from the juice produced by cooking, do not add fat to gravy, change to semi-skimmed milk.**

Complementary work

(a) You may be able to get a piece of sugar cane from a supermarket to show the children. They could use secondary sources to find out how sugar cane is treated to release its sugar.

(b) You could get some wheat grains from a health food store and grind them in a mortar and pestle, then sieve the ground up material to collect the starch in the flour. This will support work in separating materials.

(c) You could demonstrate the boiled rice activity in Picture 3.

Teaching notes

The concept of energy is a difficult one for many children (and adults) to understand. In science it is often described as the ability to do work. In this definition, work can be a movement, so the linking of energy and movement can be a useful one.

The energy in food gives power to the heart to move and pump the blood; but it also gives power to the nerves to send electrical messages and gives power to all the building blocks of the body, the cells, to perform their functions and keep the body alive.

The body releases a certain amount of sugar into the blood, which is sent to the various parts of the body as the blood flows by. This is topped up with sugar stored in the liver, and by the ingestion of sugar and starch in meals.

In the body, starch is broken down to a sugar called glucose. This is the sugar that the body uses. Cane sugar is a type of sugar called sucrose, but can also be broken down to produce some glucose.

Fat can only be slowly changed into sugar for the body to use, but sugar that is not used up in supplying energy can be more easily converted to fat.

5

Name: ..... Form: .....

Based on **pages 12 and 13** of *Food, teeth and eating*

How active are you?

Try this...

1. Look at the activities in the table. For each activity, tick one of the columns for each body part.

Tick column 1 if you think the part moves a little.

Tick column 2 If you think the part moves more than a little.

Tick column 3 if you think the part moves a lot.

2. Add more activities. Choose activities that you do often and tick the columns.

Activity	Arms/hands			Trunk			Legs/feet		
	1	2	3	1	2	3	1	2	3
Using computer									
Walking									
Swimming									
Dancing									
Sleeping									

Looking at the results.

3. In which activities does the body move the most?

✎.....

4. In which activities does the body move the least?

✎.....

Teacher's sheet: activity

Based on **pages 12 and 13** of *Food, teeth and eating*

Introducing the activity

(a) In the unit the children learned that food provides energy for activity. Remind the children of this, and ask them to think about how active the body is at different times.

(b) Divide the body into three parts – the arms, legs and trunk, or torso. Make sure the children understand what the trunk, or torso, is. Ask the children about how the different parts of the body move when they walk (see note (i)). Say that in this investigation, they are going to find out how active they are.

Using the sheet

(c) Give out the sheet and let the children fill in their names and form, then go through task 1 (see note (ii)).

(d) Let the children try task 1.

(e) Go through task 2, then let the children try it.

(f) Let the children try tasks 3 and 4.

Completing the activity

(g) Relate the activities of the body to the energy needed from food by asking, "When is the body using large amounts of energy?" and, "When is it using small amounts of energy?"

(h) Extend the children's ideas about energy use by letting them think about how long they take part in each of the activities. What do they spend most of their free time doing – playing sports or watching TV?

(i) Ask the children to assess themselves as very energetic, energetic or not very energetic.

Conclusion

The body's activities can be analysed by examining the movements of the different parts of the body. This analysis can be used to assess the daily activity of a person.

Teaching notes

(i) This investigation leads to the concept of life style, which is important in health issues. This does not need to be mentioned now but can be referred to again when the balanced diet is being considered.

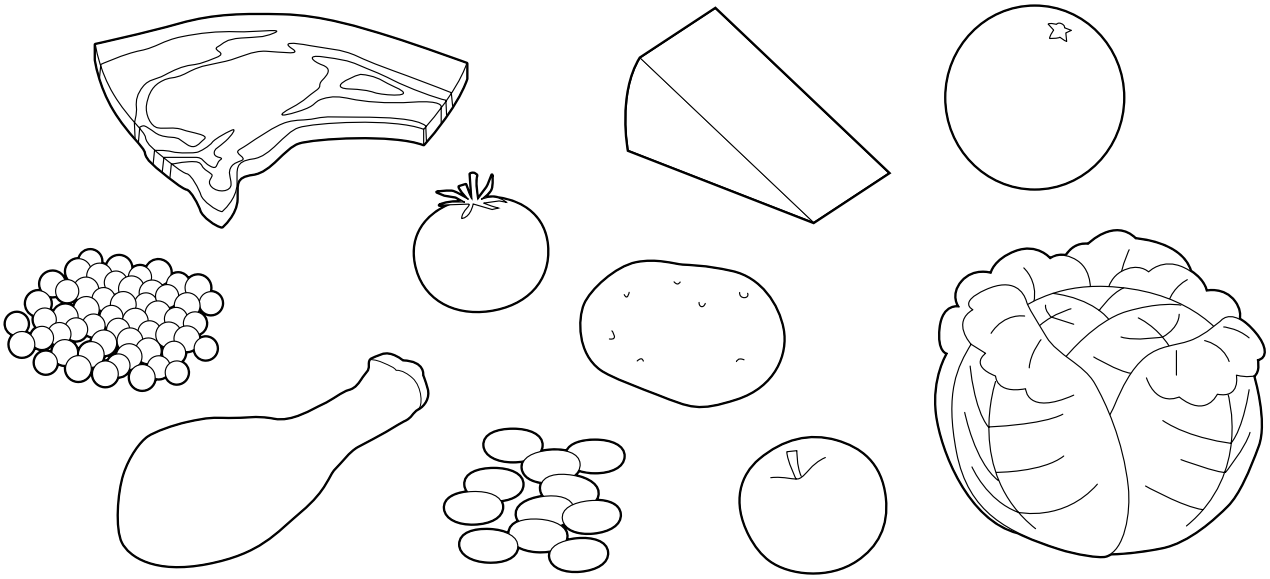
(ii) Explain how the table is arranged, with one column of activities and three columns related to the three parts of the body. Each of the body columns is itself divided into three columns. When the children look at an activity, they tick column 1 if they think the part moves a little, they tick column 2 if they think the part moves more than a little, and they tick column 3 if they think the part moves a lot. You may fill in the first one for them – which is a tick in 2, 1, 1.

Name: ..... Form: .....

See **pages 14 and 15** of *Food, teeth and eating*

Body-building foods

The body needs certain materials to make its various parts. These materials can be supplied by both animals and plants.



Q1. Look at the picture and shade in the foods that are rich in body-building materials.

Q2. Name two ways in which the body uses body-building materials.

✎.....

✎.....

Q3. What does the body break all food down into?

✎.....

Q4. Name two foods from plants which are particularly rich in body-building materials.

✎..... ✎.....

Q5. What is the main body-building substance called?

✎.....

Q6. What kind of food does a vegetarian eat?

✎.....

✎.....

Teacher's sheet: comprehension

See **pages 14 and 15** of *Food, teeth and eating*

Answers

1. **The shaded foods should be chicken, peas, beans, meat and cheese.**
2. **For growth, and to repair damaged or worn out parts.**
3. **Tiny building blocks.**
4. **Peanuts, lentils, soy beans.**
5. **Protein.**
6. **There is no meat in the diet, only food from plants. If you have extended the work you might like to award marks for milk, eggs and cheese.**

Complementary work

(a) The children can use secondary sources to find out how milk is collected and distributed.

(b) The children can use secondary sources to find out how cheese is made.

(c) The children can use secondary sources to find out how chickens are farmed for egg production.

Teaching notes

Body-building foods are called proteins. They are made of building blocks called amino acids. You can think of amino acids as joined together like beads in a necklace to make a molecule of protein. When protein is digested, it is broken down into its amino acids, which can then be used to build up other kinds of proteins the body needs. The reason for this breaking down and building up again is because the protein in one organism is not directly suitable for use by another organism.

If you have introduced the concept of the vegetarian diet, you may also wish to mention that a vegan does not eat meat or any animal products, but by carefully selecting food from plants can still get all the body-building materials that are needed.

6

Name: ..... Form: .....

Based on **pages 14 and 15** of *Food, teeth and eating*

How did they grow?

Try this…

1. Look at the table. It shows how three people grew from birth to four years of age.

Age	Arif (height cm)	Beth (height cm)	Clare (height cm)
Birth	50	50	51
1 year	75	73	76
2 years	87	85	89
3 years	96	93	97
4 years	103	99	102

2. Answer these questions by using the table.

(a) Who was the tallest at birth? ✎.....

(b) Who was the shortest at 1 year? ✎.....

(c) Who was the tallest at 2 years? ✎.....

(d) Who was the shortest at 3 years? ✎.....

(e) Who was the tallest at 4 years? ✎.....

(f) Who do you think will be the shortest 5 year old?

✎.....

(g) Say why you have picked this person. ✎.....

✎.....

(h) Who do you think will be the tallest 5 year old?

✎.....

(i) Say why you have picked this person. ✎.....

✎.....

Teacher's sheet: activity

Based on **pages 14 and 15** of *Food, teeth and eating*

Introducing the activity

(a) Children often measure their heights. Some may have a measuring chart in their bedrooms where height is recorded each year. You may wish to refer to this (see note (i)).

(b) You may wish to say that as the body uses body-building foods, its height and weight increase. Some people will naturally grow more than others, but all can be healthy.

Using the sheet

(c) Give out the sheet and let the children fill in their names and form, then go through task 1.

(d) Let the children answer the questions (see note (ii)).

(e) Go through the answers with the class. The answers are:

(a) Clare.
(b) Beth.
(c) Clare.
(d) Beth.
(e) Arif.
(f) Beth.
(g) Because she has been shortest in the other years, because she is not growing as fast as the others.
(h) Arif.
(i) He is growing faster than the others (see note (iii)).

Completing the activity

(f) Refer to pets and ask for anecdotes about the growth of pets. If any children have young pets, see if they can provide data about length or weight with the consent of the parent or carer. This data could then be examined, and predictions against average growth in height or weight for the animal could be made.

Conclusion

People grow at different rates.

Teaching notes

(i) The topic of growth is a sensitive one so your approach may vary with your class. This activity attempts to depersonalise the subject by clearly using made up data. The heights are around the averages for the age. The ages have been made remote from the ages of the class to prevent direct comparisons.

(ii) Some of the children may need help with some of the questions. Questions (f), (g), (h) and (i) call for the children to recognise a pattern in the data and make predictions based on it.

(iii) The explanations relate to the rate of growth and call for the children to look at the heights in years 3 and 4. They will find that Arif has grown 7cm, Beth 6cm and Clare 5cm.

C

7

Name: ..... Form: .....

See **pages 16 and 17** of *Food, teeth and eating*

Vitamins, minerals and fibre

Vitamins and minerals give strong bones and blood and help prevent disease. Fibre helps keep your digestive system in good order.

Food	Calcium	Iron	Vitamin C
Cheese	✓		
Coconut		✓	
Blackcurrant		✓	✓
Sultana		✓	
Orange			✓

If a food has a lot of calcium, iron or vitamin C there is a tick in the table.

Q1. Look at the table, then answer these questions:

(i) Which food has a lot of calcium? ✎.....

(ii) How many foods have a lot of iron? ✎.....

(iii) Which food has both iron and vitamin C? ✎.....

(iv) What does an orange have a lot of? ✎.....

Q2. What happens to gums if the diet lacks vitamin C?

✎.....

Q3. What disease is caused by a lack of vitamin C in the diet?

✎.....

Q4. Which mineral is used to make strong bones? ✎.....

Q5. Which mineral helps the blood carry oxygen? ✎.....

Q6. Name three foods rich in fibre.

✎..... ✎.....

✎.....

Teacher's sheet: comprehension

See **pages 16 and 17** of *Food, teeth and eating*

Answers

1. **(i) Cheese; (ii) Three; (iii) Blackcurrant; (iv) Vitamin C.**
2. **They bleed.**
3. **Scurvy.**
4. **Calcium.**
5. **Iron.**
6. **Beans, wholemeal bread, cereals, potatoes, dried prunes and figs.**

Complementary work

(a) The children could look on packets of food such as breakfast cereals to find what vitamins and minerals they contain.

Teaching notes

There are a number of vitamins but the ones the children may most easily recognise on food labels are vitamin A, B, C and D.

As each vitamin was discovered it was given a letter of the alphabet. After the discovery of vitamin B it was found that there are several B vitamins. They are grouped together as vitamin B complex, which includes: B1 (thiamin), B2 (riboflavin), B3 (niacin), B5 (pantothenic acid), B6 (pyridoxine), B12 (cobalamin), folic acid, biotin and lecithin.

Vitamin A (retinol) is considered to be an important health-giving vitamin, as it helps keep the moist linings of the nose and airways healthy, so they can form a first line of defence against infection. Vitamin A is found in milk, liver, carrots, tomatoes and fish liver oils. Vitamin A also aids in growth and is essential for vision in dim light.

There are twenty minerals needed by the body. Calcium and iron are two that are needed in relatively large amounts.

The children may note that the weights of vitamins and minerals are measured in milligrams (mg), and this should allow you to introduce the term milligram as one-thousandth of a gram, and say that only small amounts of vitamins and minerals are needed but they produce important effects on the body.

Name: ..... Form: .....

Based on **pages 16 and 17** of *Food, teeth and eating*

When vitamin D is missing

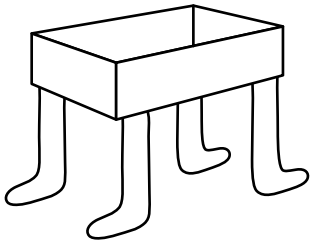
Try this…

1. Vitamin D helps bones grow strong. You can test the effect of vitamin D on leg bones by making the following models and testing them.

2. Make four cylinders of Plasticine. Each one should be half a centimetre thick and five centimetres long.

3. Bend each cylinder so that it makes a foot two centimetres long and a leg three centimetres long.

4. Arrange the legs as the diagram shows so that they can support a matchbox tray.



5. Put the matchbox tray on the legs. Place a coin in the tray and check the shape of the legs after each coin is added.

6. Repeat step 5 until there are ten coins in the matchbox tray.

7. Make four cylinders of Plasticine. This time each one should be three millimetres thick and five centimetres long.

8. Bend the cylinders to make feet and legs as in step 3.

9. Repeat steps 4 and 5.

10. Keep adding coins one at a time and check the shape of the legs after each coin is added.

Looking at the results.

11. Which set of legs are stronger? ✎.....

12. How can you tell they are the stronger legs?

✎.....

13. What happens to weak legs when they have to support a heavy weight?

✎.....

Teacher's sheet: activity

Based on **pages 16 and 17** of *Food, teeth and eating*

Introducing the activity

(a) Tell the children that scientists sometimes make models to help with their investigations. Remind the children of how vitamins help the body, and tell them that vitamin D makes the bones grow strong. Scientists can investigate the effect of having a diet without vitamin D by making model bones and testing their strength (see note (i)).

Using the sheet

(b) Give out the sheet and let the children fill in their names and form, then go through tasks 1 to 4.

(c) Let the children try tasks 2 to 4.

(d) Go through tasks 5 and 6, then let the children try them.

(e) Go through tasks 7 to 10, then let the children try them.

(f) Let the children try tasks 11 to 13.

Completing the activity

(g) Let the children compare their results.

(h) Ask the children how they would expect a child's legs to be shaped if their diet lacked vitamin D. When they have answered, show them a picture of a child suffering from rickets. Tell the children that the disease in children can be cured by eating more foods which contain vitamin D.

Conclusion

The thicker legs are the strongest. They support more weight than the thinner legs. Weak legs bend when they have to support a heavy weight.

Teaching notes

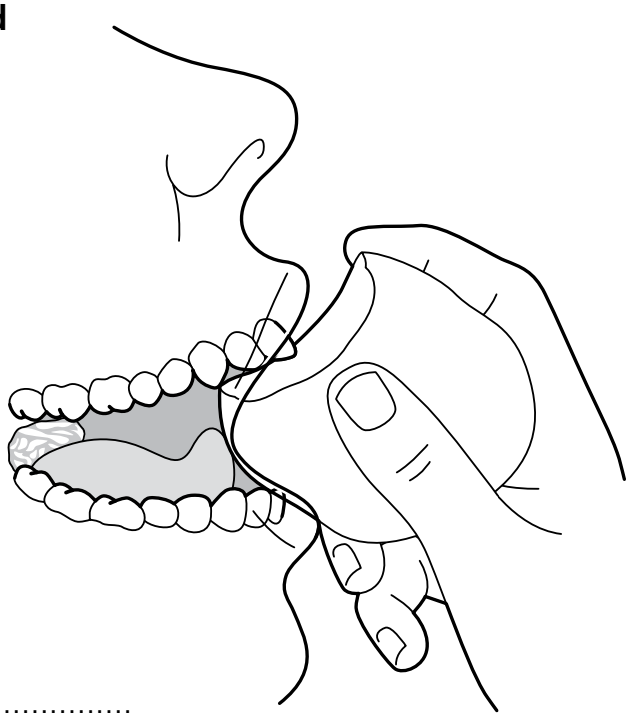
(i) Vitamin D helps the body take up calcium and pack it into bones to make them strong. In this activity, the concept of bone strength is simplified and strength is related to just thickness. The end result, however, is the same – weak bones bend. Once the children discover this information they can then use it to make a prediction.

Name: ..... Form: .....

See **pages 18 and 19** of *Food, teeth and eating*

Teeth

Teeth are vital for breaking up food into the small pieces that the body can use. Each kind of tooth has a special place, and a special shape for the job it has to do.



Q1. Look at the teeth in the upper jaw in the diagram.

(i) Label each incisor tooth with an I.

(ii) Label each canine tooth with a C.

(iii) Label each molar tooth with an M.

Q2. What is the first set of teeth called?

✎.....

Q3. Which teeth cut into food?

✎.....

Q4. Which teeth grind up food?

✎.....

Q5. (i) What is the hardest material in the body? ✎.....

(ii) Where is this material found?

✎.....

Q6. (i) What is the sticky coating found on teeth? ✎.....

How does the coating rot the teeth?

✎.....

✎.....

Teacher's sheet: comprehension

See **pages 18 and 19** of *Food, teeth and eating*

Answers

1. **(i) Two incisor teeth should be labelled; (ii) One canine next to them should be labelled; (iii) Five molar teeth next to the canine should be labelled.**
2. **Milk teeth.**
3. **Incisors.**
4. **Molars.**
5. **(i) Enamel; (ii) Forming the white surface of the teeth.**
6. **(i) Plaque; (ii) Sugar sticks to the plaque, the plaque turns the sugar into acid and the acid rots the enamel.**

Complementary work

(a) Look at sterilised human teeth or plastic models to see the crown and the root.

(b) The children could look at mirrors to identify their own teeth (and work out which teeth may have recently fallen out!). Make sure that any small mirrors the children use do not have sharp edges.

Teaching notes

When children describe anecdotes about their teeth they invariably talk about wobbly teeth and teeth falling out. You can build on this by saying that when the first set of teeth are due to be replaced by the second set, the body takes in, or absorbs, the roots of the first set of teeth. This makes the teeth wobble and eventually fall out. If sterilised human milk teeth are examined, they will be found to have hardly any roots.

We need two sets of teeth because the first set becomes too small for the mouth as the jaws grow. They are also too small to deal with the larger amounts of food we eat as we grow.

The first set of teeth contains 8 incisors, 4 canines and 8 molars (known as milk molars).

The second set of teeth contains 8 incisors, 4 canines, 8 premolars and 12 molars.

Between 6 and 7 years of age, the first molar erupts behind the last milk molar. Between 6 and 8 years, the lower incisors are replaced. Between 7 and 9 years, the lower canines are replaced. Much later, between the ages of 16 and 21, four wisdom teeth (two top and two bottom) grow in. Before modern dentistry, these teeth may have helped push together the remaining teeth to make chewing easier. This may be why they usually grow in at an angle.

8

Name: ..... Form: .....

Based on **pages 18 and 19** of *Food, teeth and eating*

Testing drinks

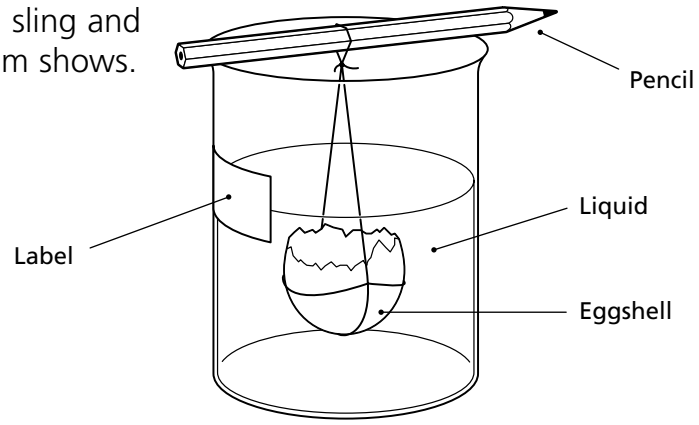
Try this…

1. Set up a number of beakers on your table.

2. Pour a different liquid into each beaker. Make sure you pour the same amount into each beaker.

3. Put a label on each beaker to show what drink is in the beaker.

4. Place an eggshell in a string sling and put it in a beaker as the diagram shows.



5. Put eggshells in the other beakers. Try to use the same size eggshell in each beaker.

6. Leave the beakers for a few days.

7. Look at the eggshells in each beaker.

8. Write down your observations.

✎.....

✎.....

✎.....

✎.....

Looking at the results.

9. What did your results show?

✎.....

Teacher's sheet: activity

Based on **pages 18 and 19** of *Food, teeth and eating*

Introducing the activity

(a) Begin by reminding the children of how acids attack teeth. Tell the children that some drinks contain acids, and show them a range of drinks (see note (i)).

(b) Say that we cannot test the drinks on real teeth but we can use a tooth substitute – eggshell (see note (ii)).

(c) Ask the children how they could set up a test, and direct them towards the need for the test to be fair – use the same volume of liquid in each beaker and the same size eggshell.

(d) Remind the children that they are testing the effect of acid. How could they be sure that acid made a difference? To check this, one beaker should be set up with water. This is called the control.

Using the sheet

(e) Give out the sheet. Let the children fill in their names and form, then go through tasks 1 to 3.

(f) Let the children try tasks 1 to 3.

(g) Go through tasks 4 to 6, then let the children try them.

(h) Let the children try tasks 7 and 8 (see note (iii)).

Completing the activity

(i) Let the children try task 9. If different groups have tested different drinks, ask each group to report to the class. If the whole class has studied the same set of drinks, discuss the results with them (see note (iv)).

(j) Ask the children how the results of the investigation may affect their drinking habits.

Conclusion

The corrosive properties of drinks can be investigated by suspending eggshells in them for a few days.

Teaching notes

(i) You should include fruit drinks, fizzy drinks and cola drinks.

(ii) This is an example of scientific modelling in which data from a model is related to the real thing. You will also need to prepare the eggshells in their string slings before the lesson.

(iii) The children may like to use magnifying glasses to look for signs of a pitted surface or crumbling edges.

(iv) The children should arrange the drinks in order, starting with the most damaging drink and ending with the least damaging drink.

C

9

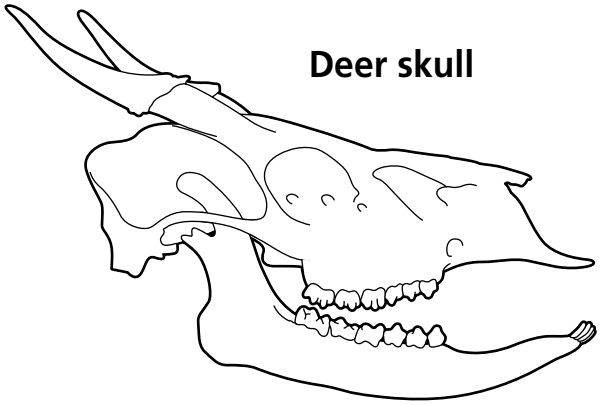
Name: ..... Form: .....

See **pages 20 and 21** of *Food, teeth and eating*

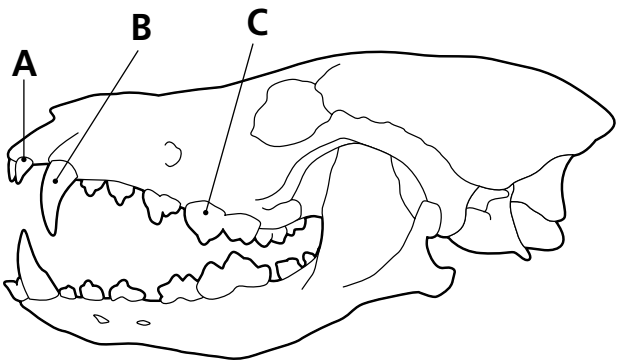
What do wild animals eat?

All animals have their own form of balanced diet. Some eat meat, plants or a mixture of the two. Few can eat the same food as us.

Deer skull



Wolf skull



Q1. On the deer's skull, label the place where incisors and canines are found.

Q2. On the wolf's skull, label teeth A, B and C.

Q3. Name a large, plant-eating animal. ✎.....

Q4. What do squirrels eat?

✎.....

Q5. Name two animals that eat both meat and plants.

✎..... ✎.....

Q6. (i) How do the teeth of rodents stay sharp?

✎.....

(ii) Why do a beaver's teeth never become worn down?

✎.....

Teacher's sheet: comprehension

See **pages 20 and 21** of *Food, teeth and eating*

Answers

1. **The teeth at the front of the lower jaw should be labelled.**
2. **A = incisor; B = canine; C = molar.**
3. **Elephant, giraffe.**
4. **Fruit, nuts, strips of bark.**
5. **Bear, wild boar.**
6. **(i) Their incisors have an enamel layer that wears down more slowly than the rest of the tooth – leaving a sharp edge.**
   (ii) Because they grow continuously.

Complementary work

(a) The children could be shown a video of a particular habitat in which the feeding of different animals are featured. Afterwards, they could be asked about the animals they have seen and the ways in which the animals fed. If there is enough information on the video they could classify the animals as plant eaters (herbivores), meat eaters (carnivores) and animals that eat both meat and plants (omnivores).

Teaching notes

Some children may still have difficulties with the concept of animal life, so you could use this unit to help them. Try to choose examples of animals feeding from all the major animal groups. These are the segmented worms (e.g. earthworms, ragworms, lug worms), Crustacea (e.g. crabs, lobsters, woodlice), insects (e.g. butterflies, ladybirds), spiders, molluscs (slugs, snails, octopus, squid), fish (e.g. goldfish), amphibian (e.g. frog), reptile (e.g. crocodile), birds (e.g. blackbird, eagle) and mammals.

If the children have studied plants and animals in their local environment in earlier years you could remind them of the animals they found.

Although not needed at this level, some children may ask about the following terms. A herbivore is any animal that eats plants (not just cattle and sheep), a carnivore is any animal that eats other animals (not just lions and wolves), an omnivore is an animal that eats both plants and animals. There are few omnivores. The best known are humans, bears and wild boar.

Name: ..... Form: .....

Based on **pages 20 and 21** of *Food, teeth and eating*

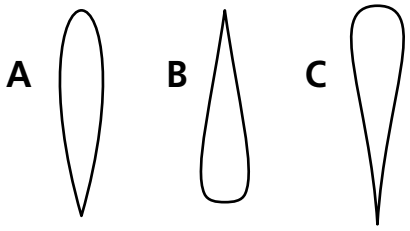
Testing stabbing teeth

Try this…

1. Many animals, such as lions and wolves, have teeth for stabbing their food.

The best stabbing shape can be found by making model teeth out of Plasticine and dropping them into flour.

2. Make the three shapes of teeth shown in the diagram. Each tooth should be about 4 centimetres long.



3. Roll each model tooth in a little plain flour. This will stop the models being sticky.

4. Fill a plastic cup with plain flour. Shake the cup to make a loose, flat surface.

5. Predict which tooth will stab the deepest, and which will make the shallowest hole.

The tooth which will stab the deepest will be ✎.....

The tooth which will make the shallowest hole will be ✎.....

6. Drop tooth A from a height of 2 centimetres above the surface of the flour.

7. Repeat step 6 four more times.

8. Examine the holes made by the tooth.

9. Repeat steps 6 to 8 with tooth B.

10. Repeat steps 6 to 8 with tooth C.

11. On a separate sheet of paper, write a report of your investigation.

Looking at the results.

12. How do your results compare with your predictions?

13. Which shape of tooth do you think is best for an animal like a lion or wolf? Explain your answer.

Teacher's sheet: activity

Based on **pages 20 and 21** of *Food, teeth and eating*

Introducing the activity

(a) Ask the children how an animal like a lion or wolf gets its food, and look for answers about stabbing their prey with their teeth (see note (i)).

Remind the children that scientists sometimes make models to use in investigations where studying the real thing could be dangerous or impractical.

Using the sheet

(b) Give out the sheet and let the children fill in their names and form, then go through task 1 with the children.

(c) Go through tasks 2 and 3, then let the children try them (see note (ii)).

(d) Go through tasks 4 and 5, then let the children try them.

(e) Go through tasks 6 to 8, then let the children try them.

(f) Let the children try tasks 9 and 10.

(g) Let the children try task 11.

(h) Let the children try tasks 12 and 13.

Completing the activity

(i) Let the children compare their results.

(j) The children should have discovered that tooth A frequently bends as it makes a hole and has to be straightened between drops. You may use this observation as an example of how an investigation can provide new information.

Conclusion

Tooth A bends when it is dropped. Tooth B is the best tooth for stabbing because it goes deepest and does not bend. Tooth C makes the shallowest hole.

Teaching notes

(i) Wildlife films abound on television so it is likely that the children will have seen some predators in action. You may wish to reassure more sensitive children that the stabbing teeth are intended to bring a quick death to the prey so that suffering is not prolonged. A quick death is really in a predator's favour, as it prevents undue loss of energy dealing with struggling prey.

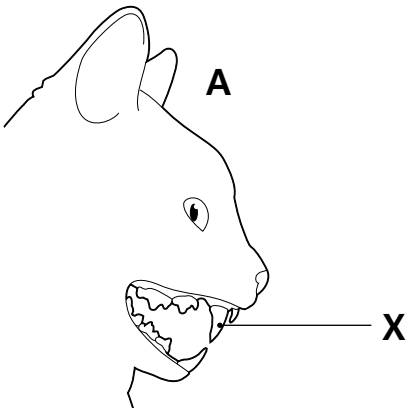
(ii) You may wish the children to begin task 11 at this stage. You may also ask them to write a plan first, or to write up their work as they go along.

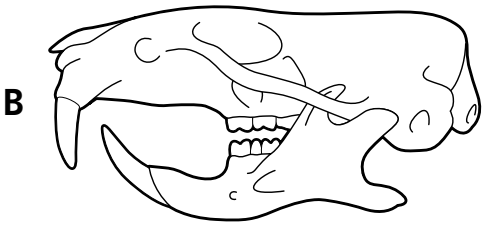
Name: ..... Form: .....

See **pages 22 and 23** of *Food, teeth and eating*

What should pets eat?

Pets should eat similar foods to their wild relatives if they are to stay healthy.





Q1. (i) What kind of pet has jaws like those in diagram A? ✎.....

(ii) What kind of tooth is the tooth labelled X? ✎.....

Q2. What kind of animal has a skull like the one shown in diagram B?

✎.....

Q3. What did people do to make wild animals into pets?

✎.....

Q4. What was probably the wild relative of the dog?

✎.....

Q5. (i) What are rabbits and rodents fed to give them fibre?

✎.....

(ii) Why do the animals need fibre?

✎.....

Q6. Why must you give pet rodents twigs if you feed them on soft food?

✎.....

✎.....

✎.....

Teacher's sheet: comprehension

See **pages 22 and 23** of *Food, teeth and eating*

Answers

1. **(i) Cat; (ii) Canine.**
2. **Hamster, rat.**
3. **Tame them.**
4. **The wolf.**
5. **(i) Hay, grass; (ii) It helps them digest their food.**
6. **Rodents have teeth which grow all the time and are worn down on hard foods. They are not worn down on soft foods, so the twigs are added to give them something hard to file their teeth on.**

Complementary work

(a) You may wish to extend the work and look at quantities of food related to the animal's size. This can be done by examining the labels from canned dog food. The children can convert a table of recommended amounts of foods for dogs into a chart. Try to get the children to express the relationship that the larger the dog, the more food it needs.

Teaching notes

You may like to make the children familiar with constructing tables and filling them in by asking them about their pets. You could make a table on the board and record the number of different types of pets. This would give the children an opportunity to see a table being used to collect data before they carry out their practical investigation in this unit.

You could also record the information on a database, or use it to prepare a bar chart about the number of pets in the table. The children could use your example to help them handle and present their data in a similar way.

C 10

Name: ..... Form: .....

Based on **pages 22 and 23** of *Food, teeth and eating*

Finding out what pets eat

Try this…

1. The question I want to investigate is:

✎.....

2. In the table, write down the names of five foods the pet might eat in the columns underneath the heading 'Pet food'. For example, you may put down foods such as canned food, dry food, meat, fish, bones, biscuits.

3. Record what each pet surveyed ate, using ticks for each type of food.

Name of pet	Pet food				

Looking at the results.

6. What do the results show?

✎.....

✎.....

Teacher's sheet: activity

Based on **pages 22 and 23** of *Food, teeth and eating*

Introducing the activity

(a) You may begin by asking the children about what their pets eat. From this discussion, invite ideas for an investigation such as, "Do all dogs eat the same food?"

Using the sheet

(b) Give out the sheet. Let the children fill in their names and form.

(c) Go through task 1, then let the children try it (see note (i)).

(d) Go through task 2, then let the children try it (see note (ii)).

(e) Let the children write down all the foods in a brainstorming session to address task 3.

(f) Let the children select five foods for task 4 (see note (iii)).

(g) Let the children complete task 4.

(h) Go through task 5, then let the children try it (see note (iv)).

(i) Let the children try task 6.

Completing the activity

(j) Have the class make a display of the charts and have a discussion about what all the results show (see note (v)).

Conclusion

The food pets eat can be investigated by making a survey of pet owners.

Teaching notes

(i) The whole class can be set the same question, but then groups could work separately to answer it.

(ii) This must be practical within the time scale of the investigation. It will be important not to have the same person being asked about their pet's food by several groups.

(iii) If there are a large number of foods, they can be split among different groups.

(iv) Care must be taken in working out a regime for collecting data from pet owners. Select pets which are owned by parents or carers of the children in the class, or in other classes in the school.

(v) Make sure the children realise that they need to have a large amount of data to see patterns.

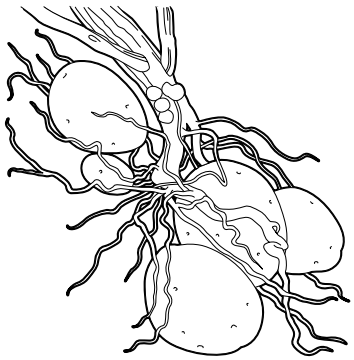
REVISION QUESTIONS

Name: ..... **Form:** .....

Q1. Which food grows in a tropical rainforest?

Tick one box: Potato ☐ Banana ☐ Maize ☐ Rice ☐

Q2.



What food is growing on this plant?

✎.....

Q3. Write these foods in the correct boxes in the table:

rice lamb cheese apple broccoli oats fish orange carrot

Cereal	Fruit	Vegetable	Meat	Dairy product

Q4. Paul has helped himself to food at the school canteen. On his plate he has six beef sausages, 35 chips and a teaspoon of peas. What should he do to make his meal more healthy?

✎.....

✎.....

✎.....

Name: ..... **Form:** .....

Q5. Here are three groups of food:

Group 1: Fruit, vegetables and cereals

Group 2: Meat and eggs

Group 3: Foods containing large amounts of fat

(i) Which group should you eat most of in a healthy diet?

Tick one box: Group 1 ☐ Group 2 ☐ Group 3 ☐

(ii) Which group should you eat least of in a healthy diet?

Tick one box: Group 1 ☐ Group 2 ☐ Group 3 ☐

Q6. Match each food to the energy source it contains by drawing a line between them.

Food	**Energy source**
grape	fat
potato	sugar
butter	starch

Q7. Which foods are body-building foods?

Tick two boxes: Chicken ☐ Apple ☐ Orange ☐ Peanut ☐

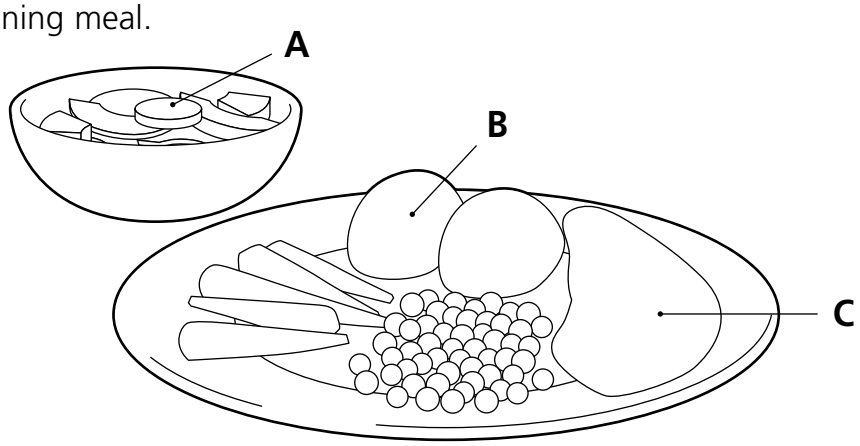
Q8. Which of these substances are found in milk?

Tick two boxes: Iron ☐ Vitamin D ☐ Calcium ☐ Fibre ☐

REVISION QUESTIONS

Name: ..... **Form:** .....

Q9. Here is an evening meal.



(i) Which food is a body-building food? ✎.....

(ii) Which food is a high-energy food? ✎.....

(iii) Which food is rich in vitamins and minerals? ✎.....

(iv) There is an essential part of the diet missing from this meal. What is it?

✎.....

Q10. The table shows three meals that Jane eats in a day.

Food	Vegetables	Fruit	Cereals	Meat	Dairy products
Bread and butter					
Sausage and beans					
Fish and chips					

(i) Show what each meal is made from by putting ticks in the table.

(ii) Why is Jane's diet not balanced?

✎.....

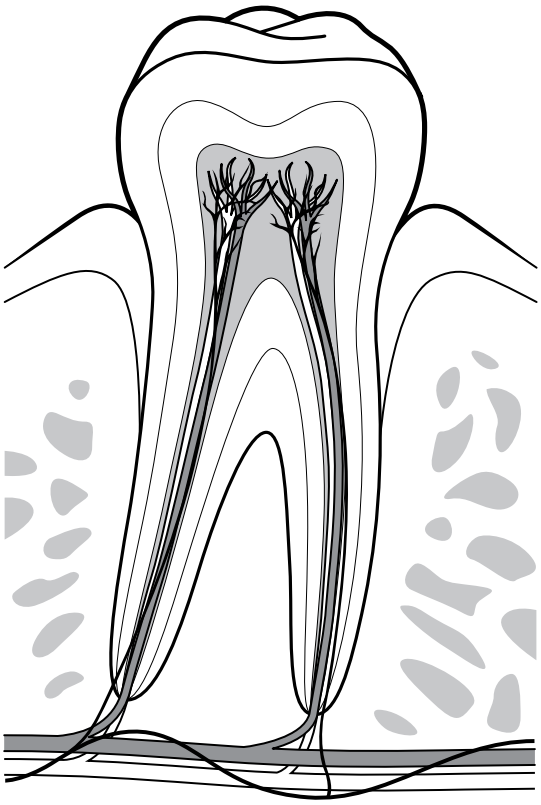
(iii) What must Jane do to balance her diet?

✎.....

REVISION QUESTIONS

Name: ..... **Form:** .....

Q11. Here is a picture of a tooth.



(i) Label the crown.

(ii) Label the root.

(iii) Label the enamel.

(iv) What kind of tooth is shown in the diagram?

Tick one box: Incisor ☐ Canine ☐ Molar ☐

(v) What does this tooth do to food?

✎.....

(vi) In which part of the mouth is this tooth found?

Tick one box: Front ☐ Middle ☐ Back ☐

Q12. Ben has a large amount of plaque on his teeth.

(i) Which food does plaque change into an acid? ✎.....

(ii) Which part of the tooth does the acid attack? ✎.....

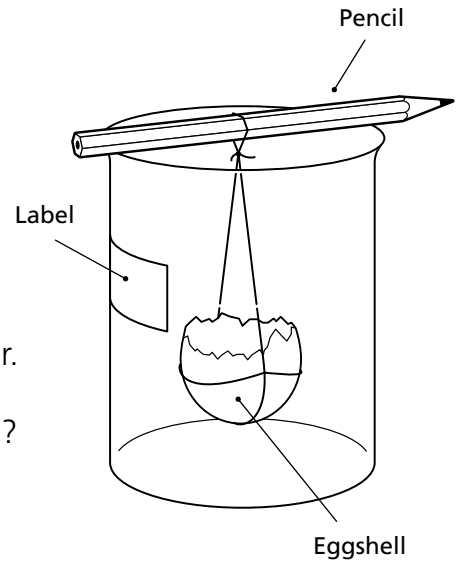
(iii) What food could Ben eat to help clear away the plaque?

✎.....

REVISION QUESTIONS

Name: ..... **Form:** .....

Q13. John and Sarah wanted to find out if a drink affected teeth. They could not use a real tooth so they set up the experiment in the diagram.



(i) What did they use instead of a tooth?

✎.....

(ii) Draw in the amount of drink they put in the beaker.

(iii) How long should they leave the experiment set up?

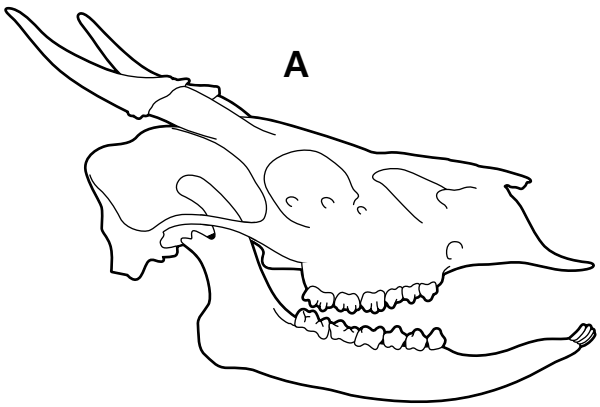
✎.....

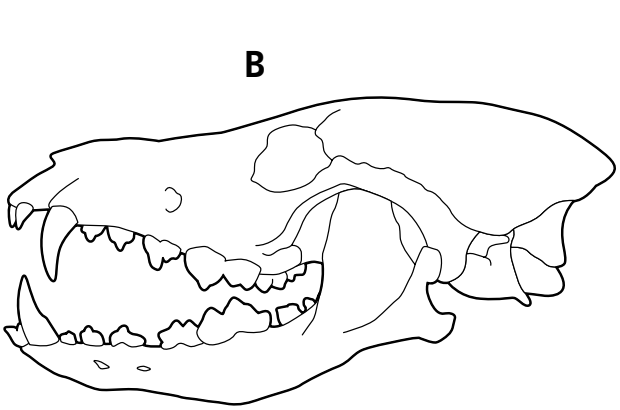
(iv) How could they tell if the drink damaged teeth?

✎.....

✎.....

Q14. Arif and Jane went to a museum and saw these two skulls.





(i) What kind of food did animal A eat? ✎.....

(ii) What kind of food did animal B eat? ✎.....

(iii) What was the animal that had skull B? ✎.....

Name: ..... Form: .....

Q15. Class 3 asked the owners of five dogs about the canned food their dogs ate. Here is the table of data they made:

Dog	Beef	Lamb	Chicken	Tuna	Tripe
Fido	✓	✓		✓	
Rover	✓	✓	✓	✓	
Toby	✓	✓			✓
Rex	✓	✓	✓		✓
Spot	✓		✓		✓

(i) What food did Fido eat?

✎.....

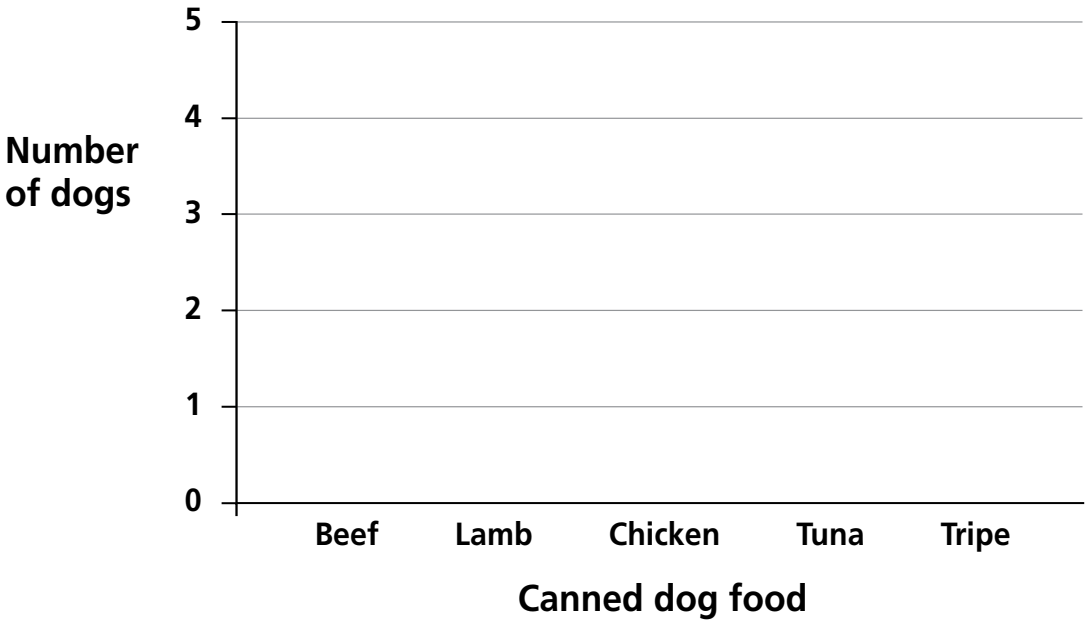
(ii) Which dogs ate chicken?

✎.....

(iii) Which food did Rover not eat? ✎.....

(iv) Which food was eaten by every dog? ✎.....

(v) Use the data in the table to make a bar chart.



(vi) Shade in the bar of the food that was eaten by the fewest dogs.

ANSWERS
REVISION QUESTIONS

1. Banana. *1 mark*

2. Potatoes. *1 mark*

3. Cereal – rice, oats; Fruit – apple, orange; Vegetable – broccoli, carrot; Meat – lamb, fish; Dairy product – cheese. *9 marks*

4. Take away some sausages, take away some chips and add some peas. *3 marks*

5. (i) Group 1. *1 mark*
(ii) Group 3. *1 mark*

6. Grape ➔ sugar; Potato ➔ starch; Butter ➔ fat. *3 marks*

7. Chicken, peanut. *2 marks*

8. Vitamin D, calcium. *2 marks*

9. (i) C. *1 mark*
(ii) B. *1 mark*
(iii) A. *1 mark*
(iv) Water or a drink. *1 mark*

10. (i) Bread and butter – cereals, dairy products; Sausage and beans – meat, vegetables; Fish and chips – meat, vegetables. *6 marks*
(ii) She does not eat fruit. *1 mark*
(iii) Eat more fruit. *1 mark*

11. (i) Crown labelled. *1 mark*
(ii) Root labelled. *1 mark*
(iii) Enamel labelled. *1 mark*
(iv) Molar. *1 mark*
(v) Grind it up. *1 mark*
(vi) Back. *1 mark*

12. (i) Sugar. *1 mark*
(ii) Enamel. *1 mark*
(iii) Apple, vegetables. *1 mark*

13. (i) Eggshell. *1 mark*
(ii) The whole eggshell should be covered. *1 mark*
(iii) A few days. *1 mark*
(iv) If there are pits in the eggshell or it is crumbly. *1 mark*

14. (i) Plants. *1 mark*
(ii) Animals, meat. *1 mark*
(iii) Wolf. *1 mark*

15. (i) Beef, lamb, tuna. *2 marks*
(ii) Rover, Rex, Spot. *2 marks*
(iii) Tripe. *1 mark*
(iv) Beef. *1 mark*
(v) Neatly drawn chart showing: Beef 5; Lamb 4; Chicken 3; Tuna 2; Tripe 3. *5 marks*
(vi) The tuna column to be shaded in. *1 mark*

Total marks: 63