

# Health and growth

## Teacher's Guide CD

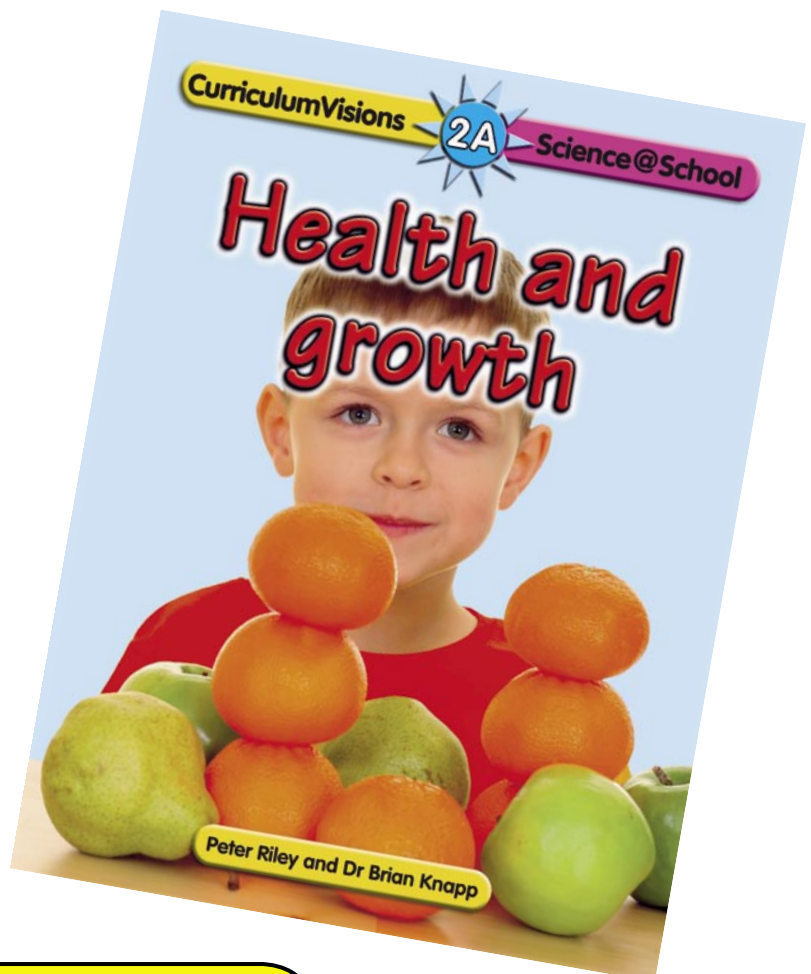
### Key to interactive features

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Peter Riley

# Curriculum Visions

## A CVP Teacher's Guide

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# Introduction



## The pupil's book

The Key stage 1 Science@School series is a series of twelve books. Each one addresses one of the QCA units in the Key Stage 1 science curriculum.

Each spread in the book addresses one or more objectives in a QCA unit by providing photographs, simple text and questions to stimulate discussion.

Each book has an illustrated glossary and a simple index for finding information.

## The teacher's guide

It may be that you already have a scheme of work and wish to use the books to support it. Alternatively you could use the books, this CD ROM and the **CurriculumVisions.com** web site, which provides support material in the form of extra text (with audio option), pictures, captions, activities and demonstration videos to build a new scheme. Whichever way you choose, the notes in this teacher's guide have been set out as if you were using each page or spread as the basis for a lesson. You may follow each set of notes in their entirety to build up your lesson or take parts of the notes to fit into your scheme.

The teacher's notes contain information about practical work. You should check your school policies on practical science work and only select activities for which you are confident to take responsibility.

The book *Be Safe!* published by the ASE (ISBN 978-0-86357-324-8) provides useful guidance on carrying out science activities.

## The structure of the notes

The notes for each page or spread follow the same structure, which is outlined here.

### Objectives

These may be linked to the QCA objectives or build on them to enrich the topic.

### Resources and preparation

Suggestions may be made for building on the visual display of the books with posters and models.

There are also pictures (aka flashcards) at the end of the notes to each lesson, which may be printed off and used as triggers to start the lesson or used in the plenary as revision. When the pictures have been used they could be displayed on a wall and others added as the subsequent lessons are completed. This will make a colourful summary of the work which could be used as a final revision resource when the book is completed.

If you are using the **CurriculumVisions.com** web site log in, go to Science, Year 2, Unit 2A Health and growth.

There may be some suggestions for building practical work into the use of the pages in the book and these include a list of requirements (simple, readily available materials) and advice on preparing the requirements for use in the lesson.

# Introduction



## Starting the lesson

Each lesson begins with a short activity, which helps settle the children and focus them on the work ahead.

## Activities with the page

These may be reading activities, observing and discussing the pictures or answering a question. There may also be practical activities which are designed to develop a range of practical science skills from making observations to carrying out fair tests.

## Differentiation

There are suggestions for providing help and activities for children of different abilities.

## Assessment

There are suggestions for assessing the children's work. There are three assessments for you to print off at the end of this guide. These are for use with lesson 1 (page 69), lesson 3 (page 71) and lesson 6 (page 73), or you could use all three together as an end of unit test. Guidance for the answers is given in the assessment section of the lesson notes.

## Plenary

The work done in the lesson is reviewed in this section and there may be a further activity to help secure the children's knowledge.

## Outcomes

These may be linked to the QCA objectives or build on them to enrich the topic.



## Food

### Objectives

- ▶ To know that we eat many different kinds of food.
- ▶ To know that foods can be divided into groups.

### Resources and preparation

A selection of food in a bag for starting the lesson – tomato, cauliflower, potato, carrot, orange, peach, grape, packet of rice, packet of pasta, packet of meat slices, packet containing mackerel or salmon, piece of cheese, carton of milk. Chopping board and knife. A packet of Quorn. A selection of cheeses – cheddar, red Leicester, Edam, Wensleydale, cheeses with additions such as Sage Derby. For less confident children – radishes, courgettes, garlic, cauliflower peppers, peaches, kiwi fruit, grape and a pepper. For the plenary – A turnip, a melon, porridge oats, a sausage, a picture of some prawns (to avoid allergy problems) and a tub of margarine.

### Starting the lesson

Tell the children that you have been shopping for food and empty the bag. As you take out each food item ask the children to identify it. Tell the children that when people get their food home they sort it out to store it. Ask the children where each item is stored and look for answers like vegetable rack for potato, fruit bowl for orange, cupboard

for the packet of rice and the fridge for the meat and the fish. Tell the children that scientists sort out food in a different way when they are studying it and turn to pages 4 and 5.

### Activities with pages 4 and 5

- ▶ Read the introductory line with the children and ask them if they can name the five groups by looking quickly round the page.
- ▶ Read about the vegetable group with the children. You may wish to remind the children that fruits contain seeds and chop open a tomato to show its seeds. You could cut open a potato to show that it does not contain seeds. Ask the children if they know how potatoes are cooked and look for an answer about boiling or frying chips.
- ▶ Ask the children to use the glossary to find out more about salads.
- ▶ Move on to read about fruit. Point out the kiwi fruit cut open to reveal the seeds. Mention the fact that we usually eat fruits raw.
- ▶ You may like to challenge the children to think of meals which contain a cooked fruit. Look for an answer about apple pie.
- ▶ Read about cereals and ask the children to find out more about them by looking in the glossary. If you have ground up wheat and made dough



# Teacher's sheet



in lesson 8 in book 1B you may like to ask the children if they know how bread is made from wheat.

- Move on to meat and read about it with the children. You may like to say that some people do not eat meat and have extra helpings of beans and lentils and a food called Quorn and show them a packet.
- Read about the dairy products. You may like to show the children a selection of cheeses.

## Differentiation

Less confident children could identify real radishes, courgettes, garlic, cauliflower, peppers, peaches, kiwi fruit and grape from the pictures. More confident children could make a drawing of a beef burger (there is one on page 11 of Science@School 1A Ourselves) and label the parts made from meat, vegetables and dairy products.

## Assessment

The children could be assessed on the ease with which they can assign foods to the food groups. There is an assessment sheet for this lesson at the end of the Teacher's Guide (page 69).

## Plenary

Show the children a turnip, a melon, some porridge oats, a sausage, a picture of some prawns and some margarine and ask them to put them in their correct groups. Ask the children to read

the question on page 5 and answer it. Record their answers on the board. Ask the children to count up the number of foods they have considered in the lesson. They could make bar charts of the numbers of foods in each group.

## Outcomes

The children:

- Know that we eat many different kinds of food.
- Can assign a food to one of five food groups.

























# Why we need food

## Objectives

- ▶ To know we need food to keep us healthy.
- ▶ To know we need food to give us energy.
- ▶ To know we need food to help us grow.

## Resources and preparation

Packets of vitamin C and multivitamins, bowl of sugar, tub of butter. Pictures of people who are undernourished and starving. Information about charities which help to get food to starving people.

## Starting the lesson

Sit the children on the carpet and let them settle. Ask them what they are doing. After the obvious answer of sitting on the carpet ask them what else they are doing and guide them to answer that they are breathing, moving a little, thinking, listening and looking. Tell them that all these actions need energy and ask them where they get their energy from. Look for an answer about food. Tell the children they are going to find out other reasons why they need food.

## Activities with pages 6 and 7

- ▶ Read the introductory sentence and point out that the children had already identified one reason and ask them to repeat it. Tell them they are using energy now to hold their books.
- ▶ Move on to the first paragraph and read it with the children. Ask the children to give you examples of fruit and vegetables. Tell the children that vitamins are so important that sometimes people who are not well are advised to take extra supplies of vitamins and show them the vitamin packets. Remind children that they should not take any pills or medicines unless they are given to them by an adult who is looking after them. Look at the picture and ask the children who likes melon and tell them that it is a healthy food.
- ▶ Read about energy and show the children the sugar and butter and tell them that they contain large amounts of energy. Ask the children to look up energy in the glossary and read the information to you.
- ▶ Look at the caption about barley and ask the children if they can think of a drink which contains barley and look for an answer about barley water.
- ▶ Read the heading about growing and ask the children if they thought about that when sitting on the carpet. Tell them that they are growing now as



# Teacher's sheet



they sit with their books. You may tell the children that you have stopped growing but there are two parts which keep on growing. Look at your finger nails and pull your hair and ask the children what they are. Look for an answer about hair and nails.

- ▶ Read the paragraph about growing and ask them if they can remember what dairy products are. Ask them to look in the glossary if they cannot remember.
- ▶ Read the last paragraph with the children. Let the children find out more about disease by looking it up in the glossary.
- ▶ Ask the children how they feel when they are hungry and look for an answer about slight pain in the stomach. You may say that fortunately most people have some food to eat if they are hungry but in some parts of the world some people are not so lucky and these people lose weight because they are starving. Show them the pictures of people who are not getting enough food and the information about charities which try to get food to them. You may wish to include water provision in this as briefly explained in the plenary in lesson 4 and may wish to defer this activity until lesson 4 has been completed.
- ▶ Let the children read the question then guide them to an answer by looking back at the keeping healthy paragraph about vitamins and the last line on page 7 to form an answer about not getting enough vitamins and becoming ill.

## Differentiation

Less confident children could design a poster to show how people who are starving can be helped. More confident children can work in groups to think how they could raise money to send to a charity to get food to starving people.

## Assessment

The children could be assessed on the detail in their posters and their skills in working together to organise a charity activity.

## Plenary

Ask the children why they need food and look for the answers to keep us healthy, to give us energy, to help us grow. Ask again and get the children to chant the three answers. Repeat a few times so they will respond in the next lesson. The children could display their posters and talk about how they would raise money. They could vote for which charity event they would like to try and which poster they would like to use.

## Outcomes

The children can:

- ▶ Know we need food to keep us healthy.
- ▶ Know we need food to give us energy.
- ▶ Know we need food to help us grow.
- ▶ Can work together on a project.

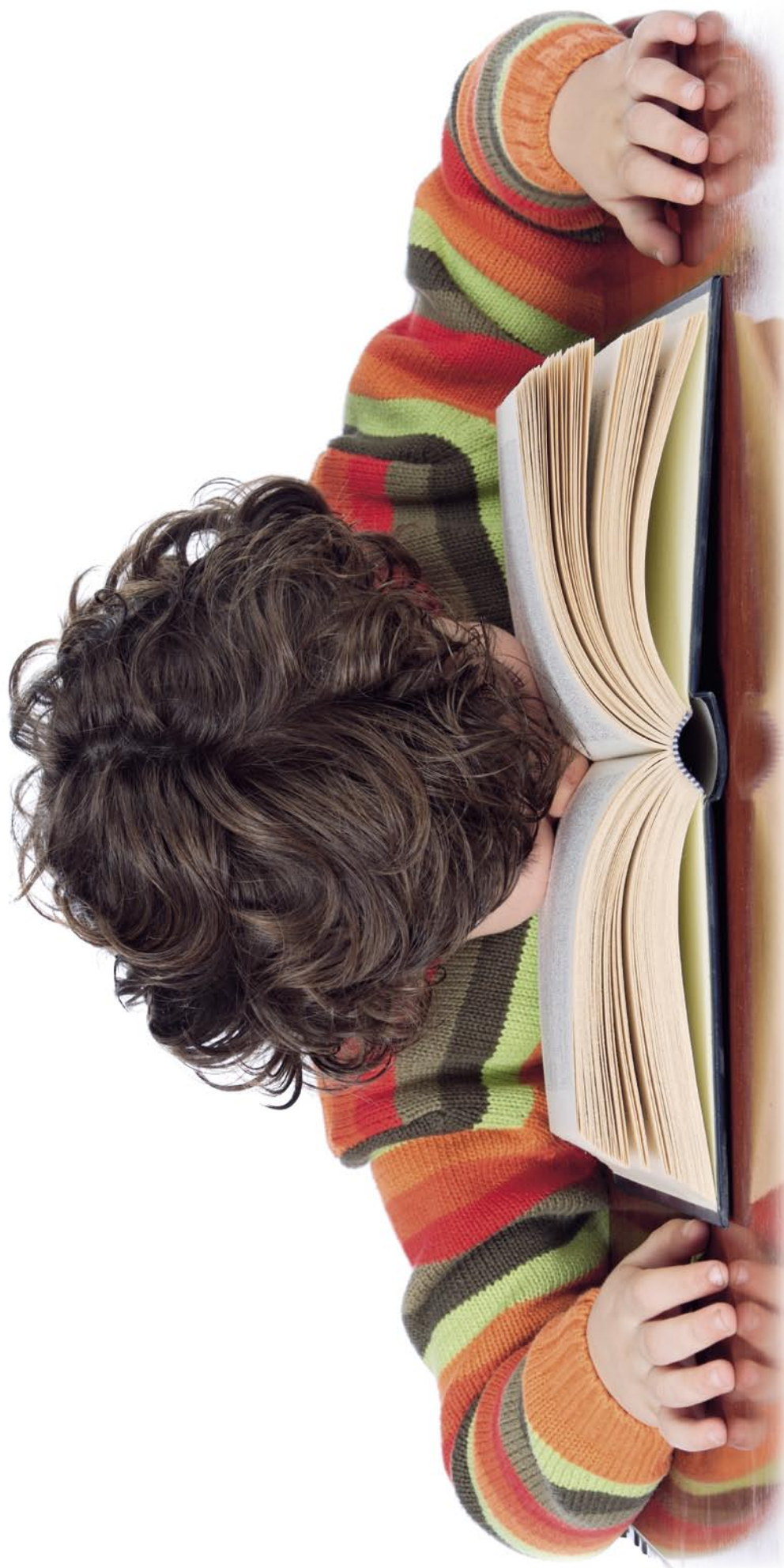














## Healthy meals

### Objectives

- ▶ To know that we must eat a variety of foods to stay healthy.
- ▶ To know that eating too much of some foods can make us unhealthy.

### Resources and preparation

For the starter – six bags of sweets.  
Teacher assistants and volunteers.

### Starting the lesson

Ask the children why they need food and look for them chanting – to keep us healthy, to give us energy, to help us grow. Ask the children if it is a good idea to eat just one kind of food. For example, you could say you liked sweets and start eating from a packet then show them half a dozen more packets you have in your bag. Ask the children if they think it is a good idea just to eat sweets all the time by a show of hands. Ask someone who thinks it is not a good idea to explain. Look for an answer about needing vitamins from fruit and vegetables to keep you healthy and meat, fish, eggs and dairy products to help you grow. Conclude that you should eat a range of foods and ask if it's possible to have a range of foods in one meal.

### Activities with pages 8 and 9

- ▶ Read the introductory line with the children and reflect that you were wrong just wanting to eat sweets for every meal.
- ▶ Read the first paragraph and then ask the children to say what is going on in the picture and look for an answer about cheese being put on the pizza. Ask the children if they can identify any other foods on the pizza.
- ▶ Read the last paragraph on page 8 to confirm their answers.
- ▶ Look at the picture of the cake with the children and pretend that you would like to eat loads of cakes since you can't eat loads of sweets. Read the paragraph about the cakes with the children then ask what would happen to you if you ate loads of cakes. Look for an answer about you becoming fat.
- ▶ Look at the pictures of the pie and crisps with the children and ask who likes them. Ask who would like to eat a lot of them and then read the second paragraph. Ask if it is a good idea to eat them. Look for an answer about not eating them at all and then direct the children to read the past paragraph.



# Teacher's sheet



- Ask the children to write down their three favourite foods. Ask your helpers to make sure the children spell the names correctly. Ask each child in turn to read out their favourite food and make a table of the results. Let the children produce a bar chart from the results.

## Differentiation

Less confident children will need help in transferring the information from the table on the board to the chart on their paper. More confident children could make a table of the second favourite foods and the third favourite foods.

## Assessment

The children could be assessed on the presentation of their charts. There is an assessment sheet for this lesson at the end of the Teacher's Guide (page 71).

## Plenary

Show the children the charts for the first, second and third favourite foods and ask them to compare them. Ask the children if the foods that are rich in sugar, fat and salt or those rich in vitamins will help them grow or give them energy. You may point out that sugar gives you energy but in large amounts can make people fat.

Return to the question on page 9 and ask the children to tell you about a favourite warm meal and assess with them if it is healthy. For example, baked beans help growth and tomato sauce is made from a vegetable that contains vitamins.

## Outcomes

The children:

- Know that we must eat a variety of foods to stay healthy.
- Know that eating too much of some foods can make us unhealthy.
- Can make a bar chart from data in a table.















## Drinking

### Objectives

- ▶ To know that our bodies need water to stay healthy.
- ▶ To know that milk is a healthy drink.
- ▶ To know that drinking too many fizzy drinks can harm health.
- ▶ To make a bar chart from a tally table.

### Resources and preparation

For the starter – pictures taken from magazines to show a breakfast lunch and tea or dinner and some snacks. Cut off any part of the pictures showing a drink or a liquid (ie bowl of cereal and milk or soup).

### Starting the lesson

Tell the children you have got some pictures of the meals someone ate in a day. Show the children the pictures of the meals in turn and pin them on a board so they can see all the pictures at once. Ask the children if they think the meals are healthy meals. The pictures may show that each meal contains a range of healthy foods and the children may agree that the meals are healthy. Disagree with them and tell them there is something missing from the meals. If the children do not notice drinks are missing ask them to describe a meal they have had and ask them about what they might have finished the meal off with. Look for an answer about drinks.

### Activities with pages 10 and 11

- ▶ Read the two introductory sentences and ask the children about when they feel thirsty. Look for an answer about hot days or after exercise.
- ▶ Read the first paragraph with the children then ask them to squeeze their arms and legs and tell them that they are squeezing a lot of water in their bodies. If the children volunteer accounts of incidents when they cut themselves and bled, tell them that the blood is mostly water and that is why it is important to stop bleeding to keep the water in the body.
- ▶ Read the second and third paragraph. Some children may ask why the body gets rid of water when it really needs it. Answer by first telling them that we need to keep our bodies at the same temperature all the time and when we exercise we get too hot. The skin releases water onto the skin to cool us down. Secondly tell the children that we need to get rid of parts of the food that our bodies do not use and water is needed to get rid of our solid wastes. Thirdly tell the children that as we use up our food our bodies make some substances, which could harm us if they stayed inside us. These substances are carried away in the urine.
- ▶ Let the children look at the two pictures and captions on the page



# Teacher's sheet



and say that to remain healthy we must go to the toilet regularly and drink water.

- ▶ Read the fourth paragraph with the children and remind them of the unused food and harmful substances that the body needs to get rid of.
- ▶ Let the children read the labels and paragraph on page 11 and answer the question. Make a table on the board featuring water, tea, coffee, milk, fizzy drinks and squash. Tell the children that for recording purposes you will ignore the milk that is in tea and coffee. Record the children's answers as a tally then ask them to make a bar chart of the results. The chart shows how frequently the different kinds of drinks are drunk.
- ▶ Ask the children which type of drink could be the most unhealthy if drunk in large amounts. If they struggle to find an answer, direct them to look back at page 11, and look for a food in a drink which could be harmful in large amounts. Help them to find the sugar in fizzy drinks. Take them back to page 9 to show them that too much sugar can make people fat.
- ▶ Look on the chart to see if fizzy drinks are among the most frequently drunk drinks.
- ▶ Ask the children why they think babies and young animals drink milk. If they struggle refer them back to page 5 to see that milk is a dairy product and then move to page 7 to see that dairy products are important for growth.

- ▶ Look on the chart to see if milk is among the most frequently drunk drinks.

## Differentiation

Less confident children will need help making the chart. More confident children could try and count how many drinks they take in a day. They could make a table like yours on the board and make a tally.

## Assessment

The children could be assessed on the presentation of their charts and tables. They could be assessed on their searching skills by turning back to pages to find answers.

## Plenary

Review the charts by saying that if the children were drinking healthily they would be drinking some milk. Look to see if milk is as frequently drunk as fizzy drinks. Stress that it is not harmful to drink fizzy drinks in small amounts but if more fizzy drinks are drunk than other drinks then health may be harmed. Ask the children who have made a daily tally of drinks to show their results to the class and let the class assess if the drinking style is healthy (i.e. not too many fizzy drinks and some milk).

If the children have been considering starvation in lesson 2 you may also wish to add that some people have to travel long distances for water and that charities exist to provide wells so the water supply is much closer to home.





# Teacher's sheet



You may wish to bring this into your fundraising project.

## Outcomes

The children:

- ▶ Know that our bodies need water to stay healthy.
- ▶ Know that milk is a healthy drink.
- ▶ Know that drinking too many fizzy drinks can harm health.
- ▶ Can make a bar chart from a tally table.















## Exercise

### Objectives

- ▶ To know that we need to take exercise to remain healthy.
- ▶ To know about the importance of the heart.
- ▶ To know about a healthy regime for exercise and rest.

### Resources and preparation

For the starter – a copy of Science@School 1A Ourselves page 5. Check that none of the children's relatives have suffered from a heart attack recently before discussing the heart at point four in the activities with the pages.

### Starting the lesson

Remind the children that most of their bodies are made from bones and muscle and show them the page in the book to remind them of last year's work. Sit the children on the carpet so that there is some space around each one. Ask them to stand up and then squat down on their haunches and put their arms straight down in front of them so their knuckles touch the ground. Ask them to slowly stand up and feel their muscles and bones move. Ask them to keep their arms straight and raise them above their head and feel the muscles in the shoulders pulling up their arms. Now ask the children to lower their arms and then squat down again. They could repeat the

activity several times as you talk about muscles pulling on bones.

### Activities with pages 12 and 13

- ▶ Read the introductory sentence with the children and tell them that the exercise they have just taken helps to keep their muscles strong and bodies fit.
- ▶ Read the first paragraph with the children and you could get them back on the carpet to repeat the exercise to emphasise the importance of exercise.
- ▶ Read the second paragraph and make as if to ask them to exercise again and then stop. Tell them that they should realise now that exercise is important and you will not ask them to do it again ....until PE time!
- ▶ Read the third paragraph and then ask the children if they know where the heart is and what it does. To clarify their answers tell them that it is about the size of a clenched fist and clench your right fist. Let the children do the same. Now place your clenched fist a little left of centre on your chest and tell the children that the heart is in this position inside your body. Let the children copy you.
- ▶ Tell the children that the heart pumps the blood round the body and unclench and clench your fist several times as you say that the heart beats as it pumps the blood and let the children copy your actions.



# Teacher's sheet



- ▶ Tell the children that the heart is made of muscle and like the other muscles in your body it needs exercise to stay healthy.
- ▶ Let the children look at the pictures and read the captions. Discuss other exercises that the children may take such as bouncing on a trampoline, skipping or using the climbing frames in a park.
- ▶ Let the children answer the question by drawing themselves performing each exercise. Each drawing should have a caption.

## Differentiation

Less confident children may need help with spelling the words in the captions to their pictures. More confident children could draw seven boxes to represent the days of the week and draw in the exercises they do each day.

## Assessment

The children could be assessed on the presentation of their drawing and captions.

## Plenary

Ask the children to think back to the last time they exercised hard by running and answer the last question. They should say they felt warmer and sweaty and breathed deeper and faster than normally. They may also say that they felt tired. Tell the children that it is also important to take plenty of rest as sleep

and say that a healthy life style is to go to bed early and to exercise at least once day.

## Outcomes

The children:

- ▶ Know that we need to take exercise to remain healthy.
- ▶ Know about the importance of the heart.
- ▶ Know about a healthy regime for exercise and rest.

















## Babies and toddlers

### Objectives

- ▶ To know that babies and toddlers need a great deal of care.
- ▶ To compare babies and toddlers.

### Resources and preparation

The children may have brought pictures of themselves in as babies when studying Science@School 1A Ourselves. If you did not teach them the previous year you may like to bring in a picture of yourself as a baby.

### Starting the lesson

Ask the children if they have ever seen a new baby and ask them to tell you about it. Ask them what the new baby did and how it looked. Look for answers about the baby being tiny and if it was newborn having a face all squashed up, look for hair, for the baby being asleep. Show the children a picture of yourself as a baby and tell them that they are going to look at babies and toddlers.

### Activities with pages 14 and 15

- ▶ Read the introduction with the children then ask them to have a quick look at the pictures and see if they can see toddlers doing something that babies cannot do. Look for answers about sitting up and standing up.
- ▶ Read the first paragraph with the children and look at the pictures. Ask the children to describe a day in the life of a baby. Look for answers which say that the baby sleeps most of the time. It may wiggle a little from time to time and cry when it is hungry. The baby has milk at regular intervals through the day and night and its nappy needs changing regularly.
- ▶ Ask how people should care for babies and look for answers about keeping the baby warm, holding it gently but firmly, taking care to protect the baby's head, keeping pets away, investigating to find out why it is crying – does the nappy need changing, is it time for a feed?
- ▶ Read the paragraph on page 15 with the children and look at the pictures and the captions. Ask the children to describe a toddler's day. Look for answers about toddlers sleeping less but having a nap in an afternoon. Look for them having food and drink at various times in the day when the adults are having meals. Look for answers about toddlers playing with toys and watching television and learning to use a potty.
- ▶ Ask the children how a toddler should be cared for and look for answers about not being given small toys that they could swallow, not being allowed on the stairs or being closely supervised if they are learning to go up and down. Making sure the



# Teacher's sheet



toddlers cannot get out onto roads and streets on their own. Making sure they do not play with objects that have sharp edges or with electrical devices and their plugs and sockets.

## Differentiation

The children could present an account of a baby's day. Less confident learners could draw a sequence of pictures with captions. More confident learners could write a short account about a baby's day.

## Assessment

The children could be assessed on the presentation of their account of a baby's day. There is an assessment sheet for this lesson at the end of the Teacher's Guide (page 73).

## Plenary

Review the accounts of the baby's day and ask the children to answer the question on page 15. Look for an answer about change in size, change in face and ability to make more expressions, the ability to stand up and walk about. Ask the children how they are different from toddlers and look for answers about being larger, can ride bicycles, can go to the toilet on their own, can use a knife and fork instead of a spoon, can say many more words, can read.

## Outcomes

The children:

- ▶ Know examples of the care that babies and toddlers need.
- ▶ Can compare babies and toddlers in terms of appearance and abilities.
- ▶ Can produce an account of a baby's day.

















## Growing animals

### Objectives

- ▶ To know that humans produce young which grow into adults.
- ▶ To know that animals produce young and these grow into adults.

### Resources and preparation

A collection of pictures of young animals. These should include chicks, ducklings, calf, lamb, elephant, foal, baby whale, owl chicks (or other nestlings), seal pup, caterpillar, maggots (see flashcards).

### Starting the lesson

If the children went on a farm visit as part of their work when studying Science@School 1A Ourselves you may like to remind them of it and discuss what they saw. Move on to show the children the pictures of the animals and ask them what they might grow into. If the children did not go on the farm visit move straight on to the pictures. You could pin them up around the classroom as you study this section of the book.

### Activities with pages 16 and 17

- ▶ Read the introductory sentence with the children and then assess it by looking at your collection of pictures. When talking about the caterpillar and maggot producing adult insects tell the children that there are over a

million different kinds of insects and they all start off looking very different from their parents.

- ▶ Read the first paragraph and briefly review the previous lesson on babies and toddlers.
- ▶ Let the children read the second paragraph and look at the pictures and captions. If any children have new puppies or kittens they could tell the class about them.
- ▶ Move to the question on page 17 and ask the children to answer it. They could use some of the pictures on display, such as baby elephants and baby whales as triggers to think of more animals such as monkeys, rabbits, guinea pigs, snakes, tortoises, crocodiles, hippopotamuses, giraffes.
- ▶ Read the paragraphs on page 17 with the children. Ask them to look at the picture above the words and tell them to point to the first stage in the animal's life and look for them pointing at the eggs. Now ask them to point at the next stage in the animal's life and look for them pointing at the small tadpoles without legs. Continue in this way until the children can point at all the stages in the frog's life in sequence.

### Differentiation

Tell the children that the Sun is a star and that the Earth, our planet, moves around it and contains millions of different kinds



# Teacher's sheet



of living things. Continue by saying that scientists have found planets moving around other stars in the sky and one day we may be able to send spacecraft there to look for life. Ask the children to think of an alien and what its young might look like and draw both young and adult and give the alien a name. Less confident children may draw the young as a small adult. More confident children could be encouraged to draw the young alien as having stages like the frog.

## Assessment

The children can be assessed on their work on alien life forms – their presentation and their use of their imaginations.

## Plenary

Let the children display their aliens and talk about them. Remind the children that all these aliens are just ideas and may probably not be real. Finish off by considering the real animals on this planet and consider how an animal such as a kitten or puppy changes in terms of appearance and what it can do, as it grows up.

## Outcomes

The children:

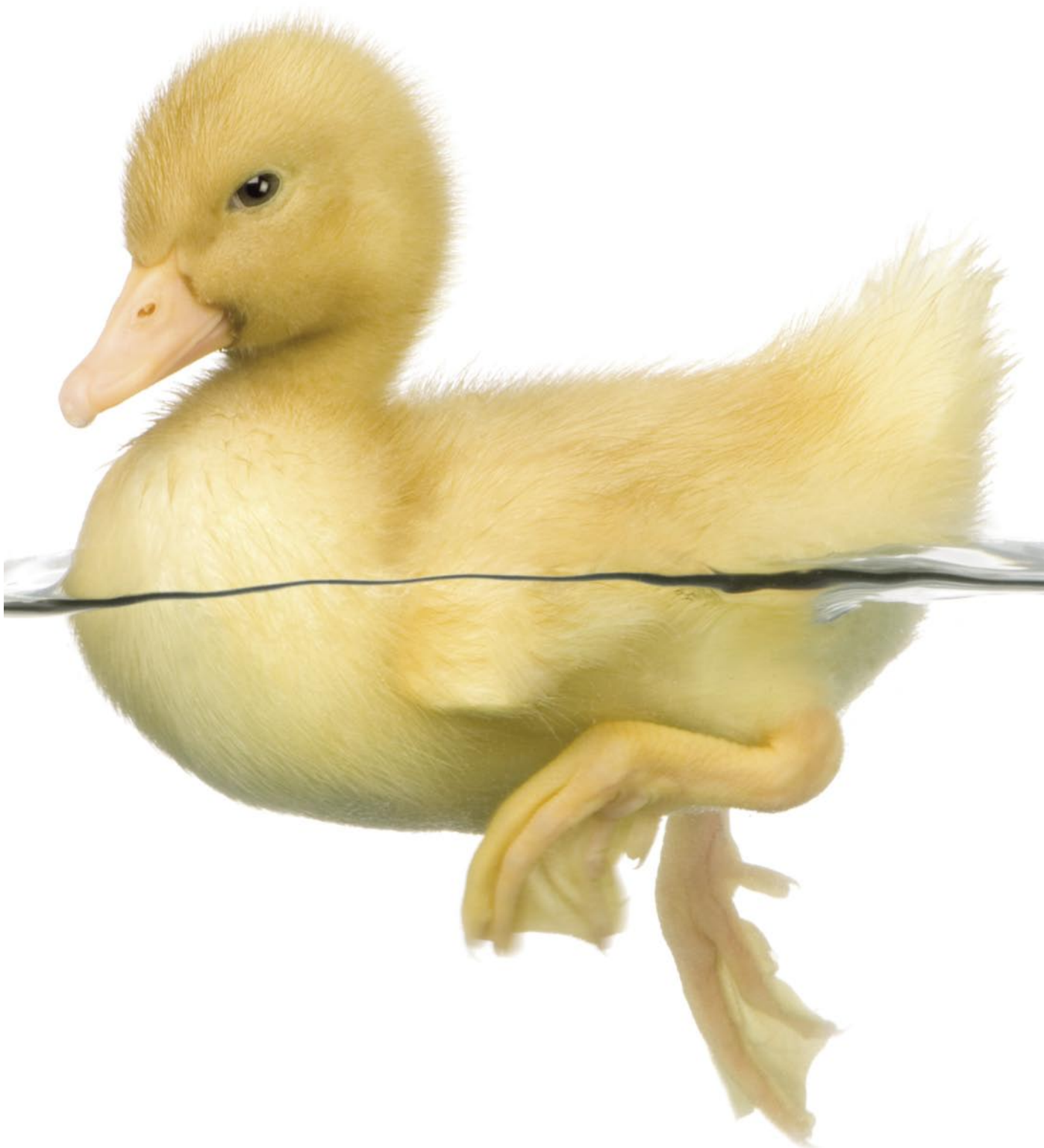
- ▶ Know that humans produce young which grow into adults.
- ▶ Know that animals produce young and these grow into adults.
- ▶ Know that changes take place as an animal grows up.

















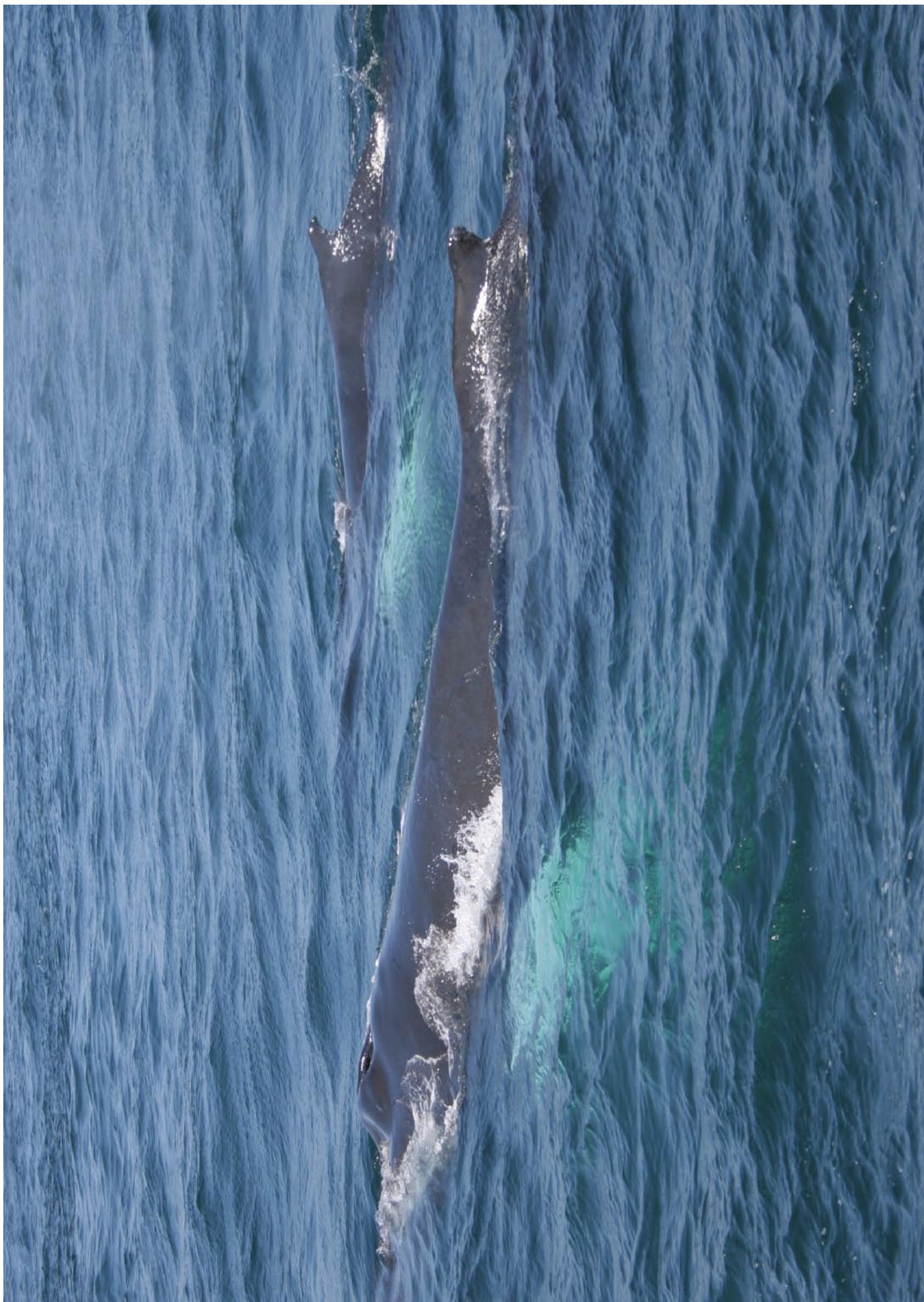




























## Germs

### Objectives

- ▶ To know that germs can make us ill.
- ▶ To know that germs are too small to be seen.
- ▶ To know that our bodies can fight germs.
- ▶ To know that there are ways to reduce the chances of infection.

### Resources and preparation

Take a clear polythene bag and make a few pin pricks in it. Dampen a slice of bread and seal it in the bag and leave for a few days until mould appears. A fresh slice of bread.

### Starting the lesson

Show the children a slice of bread and ask them what might happen to it after a few days. Look for an answer about going mouldy and a description of its appearance. Show the children the mouldy slice in the bag. Do not open the bag. Tell the children what you did to the slice and ask them how they thought it had turned mouldy. Steer them round to thinking about tiny living things in the air that we cannot see. Tell them that if these living things can find a suitable food they will start to grow. Mention that the tiny living things that grew into a mould are called fungal spores but there are other tiny things in the air that can attack us and they are called germs.

### Activities with pages 18 and 19

- ▶ Read the two introductory lines with the children and move straight on to the left hand photograph. Remind the children about what happened to the damp slice of bread when the fungal spores reached it and ask the children what might happen to the cut if germs reached it. Look for answers about it becoming infected.
- ▶ Move to the first paragraph and read it with the children. Ask them what new information they have found out about germs and look for an answer about germs are found in water and on things we touch.
- ▶ Move on to the second paragraph and read the first sentence. Explain that our skin forms a protective coat which keeps germs from getting at our blood and muscles and other parts of our bodies. Read the second sentence and explain that the water that comes out of the tap has been made germ free at the waterworks so we can drink it and use it for washing. The clean water will wash away any germs that have landed on the skin and the cut.
- ▶ Ask the children why the plaster helps the cut to heal and look for an answer about it covering the cut and preventing germs getting to it.
- ▶ Let the children look at the second picture and read the caption.





# Teacher's sheet



Ask them what might happen if the boy did not use the handkerchief and just coughed and sneezed in the classroom. Look for an answer about the germs leaving his mouth and nose, flying about in the air and going into other people's noses and mouths. Tell the children that the body produces lots of mucus to try and wash the germs out and this is what we release when we sneeze. This mucus is teeming with germs and cloth handkerchiefs must be washed and paper handkerchiefs disposed off and not left lying about.

- ▶ Ask the children what the boy could do to stop the spread of germs if he wanted to cough but did not have a handkerchief. Look for an answer about covering his mouth with his hand.
- ▶ Move on to page 19 and read the two paragraphs. Tell the children that germs do not like heat so that is why the body gets hot to try and get rid of them.
- ▶ Let the children look at the picture of the girl and read the caption. Ask the children to find out more about the thermometer in the glossary.
- ▶ Let the children look at the picture of the boy and read the caption. Tell the children that we touch things with our hands and refer them back to the first sentence of the first paragraph on page 18 about germs being on things we touch.
- ▶ Ask the children when we should wash our hands. They should answer after going to the toilet and before

eating a meal. They may also say after handling dirty materials such as soil. Some children may wonder why they have to wash their hands after going to the toilet if their bodies do not contain germs. Tell the children that some germs can live in some parts of our bodies and do us no harm but if they get into another part they can make us very ill. The solid wastes we produce contain germs that live harmlessly in our bowels (large intestine) but if they got into our mouths and stomach they could make us very ill. Hands should also be washed because liquid wastes can contain germs too.

## Differentiation

Ask the children to make a poster about 'Keeping germs away'. The children could feature washing hands, using plasters and handkerchiefs.

## Assessment

The children could be assessed on their ideas and presentation of their posters.

## Plenary

Ask the children to answer the question on page 19 and then say that the purpose of the posters was to stop people getting germs and becoming ill. Ask the children to display their posters around the classroom and leave them there for a few days as part of a "Let's fight germs" campaign. In this campaign when children go to the toilet



# Teacher's sheet



the others could ask them if they have washed their hands on their return. Children who cough and sneeze without a handkerchief could have handkerchiefs waved at them by the others.

## Outcomes

The children:

- ▶ Know that germs can make us ill.
- ▶ Know that germs are too small to be seen.
- ▶ Know that our bodies can fight germs.
- ▶ Can take part in a campaign to fight germs.













## Medicines

### Objectives

- ▶ To know that medicines can fight an illness.
- ▶ To know that adults should administer medicines to children.

### Resources and preparation

Ask a health professional to visit and ask them if they will be happy to answer questions about their job. Tell the children about the visit and help them plan questions to ask. Some empty medicine packets with a large amount of writing on the side and the names of the compounds contained in the medicines. A selection of packaging of medicine (including empty and clean medicine bottles), a selection of packaging for sweets and empty and clean drinks bottles.

### Starting the lesson

Introduce the visitor and show him or her the posters around the classroom. Let the children tell the visitor about the "Let's fight germs" campaign and then read out their questions. After the question and answer session let the visitor talk about medicines, their benefits and their dangers. Let the children thank the visitor.

### Activities with pages 20 and 21

- ▶ Read the introductory sentences with the children and remind them about what the visitor said.
- ▶ Let the children read the first paragraph and then look at the top photograph and caption. Ask the children about a common medicine that many people take and look for an answer about cough medicine.
- ▶ Read the next paragraph with the children and then look at the bottom picture and read the caption. You may like to show the children some empty medicine packets so that they can see the large amount of writing on the side. You may try and pronounce the names of some of the compounds that the scientists have made to put in the medicine.
- ▶ Look at the top picture on page 21 with the children and read the caption. Point out that some tablets look like sweets but they must never be eaten like sweets.
- ▶ Read the first paragraph with the children and emphasise that only a certain amount can be given to the body at a time. Read the next paragraph and point out how it supports what you have just said then read the third paragraph.





# Teacher's sheet



- Look at the lower picture and read the caption. You may need to handle this section with sensitivity if there is a child in the class who suffers from asthma.

## Differentiation

You may want to emphasise parts or all of the content again with less confident learners to make sure they have secured this knowledge (the selection of packaging can be used in this activity). More confident learners could be given a selection of empty medicine packets and sweet packets. They could look at empty medicine bottles and drink bottles and then write down how they can tell medicines from sweets and drinks by looking at their packaging.

## Assessment

Less confident learners could be assessed by an oral test on their knowledge of the content. More confident learners could be assessed on their written work on medicines and sweets.

## Plenary

Preset the class with the selection of medicine and sweet packaging and ask them how they can tell the difference. Ask them what would happen if medicines were consumed in large amounts and ask them to answer the question on page 21. Look for an answer that implies an adult such as a parent, carer, doctor or nurse.

## Outcomes

The children can:

- Know that medicines can fight an illness.
- Know that adults should administer medicines to children.









# Assessment



Name: .....



# Food

**Draw a line between each food and its food group.**

potato

milk

rice

chicken

radish

lamb

pasta

cauliflower

cream

butter

bread

leek

fish

orange

peach

yoghurt

cherry

Vegetables

Fruit

Cereals

Meat

Dairy products





# Assessment



Name: .....



# Healthy meals

## 1. Which of these foods do you need for a healthy diet?

lots of sugar

vegetables

fruit

lots of salt

meat

dairy products

lots of chocolate

lots of fat

cereals

## 2. Which meal is healthier?

Pie, chips, a bar of chocolate  
and a fizzy drink.

A pizza, apple and milk.



# Assessment





Name: .....



# Babies and toddlers

1. Tick the boxes of the sentences you think are correct.

Babies can stand up. ☐

Toddlers can stand up. ☐

Babies sleep more than toddlers. ☐

Babies only drink milk. ☐

Toddlers don't drink milk. ☐

Toddlers talk but babies don't. ☐

Babies cry. ☐

Toddlers cry. ☐

Toddlers eat lots of different food. ☐

Babies and toddlers wear nappies. ☐