

**Collins**

PRIMARY  
GEOGRAPHY

# Investigation

Teachers' Book 3



Stephen Scoffham | Colin Bridge

# Primary Geography

## Teacher's Book 3 Investigation

Stephen Scoffham | Colin Bridge

<b>Geography in the primary school</b>	2
<b>Collins Primary Geography</b>	3
<b>Places, themes and skills</b>	4-5
<b>Layout of the units</b>	6-7
<b>Using the books</b>	8
<b>Lesson summary</b>	9
<b>Studying the local area</b>	10
<b>Studying places in the UK and wider world</b>	11
<b>Differentiation and progression</b>	12
<b>Assessment</b>	13
<b>High quality geography</b>	14
<b>Information on the units</b>	16-25
<b>Copymaster matrix</b>	26-29
<b>Copymasters</b>	30-59
<b>Geography in the English National Curriculum</b>	60-61

# Geography in the primary school

## The study of geography

Geography is the study of the Earth's surface. It helps children understand the human and physical forces which shape the environment. Children are naturally interested in their immediate surroundings. They also want to know about places beyond their direct experience. Geography is uniquely placed to satisfy this curiosity.

Geography is an enquiry led subject that seeks to answer fundamental questions such as:

- Where is this place?
- What is this place like (and why)?

## Geographical perspectives

Geographical perspectives offer a uniquely powerful way of seeing the world. Since the time of the Ancient Greeks geographers have been attempting to chronicle and interpret their surroundings. One way of seeing patterns and connections is to think in terms of key ideas. Three concepts which geographers have found particularly useful in a range of settings are place, space and scale.

- Place focuses attention on the environment,
- Space focuses attention on location
- Scale introduces a change in perspective that enables us to link the local and the global.

A layer of secondary concepts such as inter-connections, change and movement lie beneath these fundamental organising ideas and provide a way of further enhancing our understanding.

- How and why is it changing?
- How does this place compare with other places?
- How and why are places connected?

These questions involve not only finding out about the natural processes which have shaped our environment, they also involve finding out how people have responded to them. Studying this interaction at a range of scales from the local to the global and asking questions about what is happening in the world around us lie at the heart of both academic and school geography.

As they conduct their enquiries and investigations geographers make use of a number of specific skills. Foremost among these are mapwork and the ability to represent spatial information. The use of maps, charts, diagrams, tables, sketches and other cartographic techniques come under the more general heading of 'graphicacy' and are a distinguishing feature of geographical thinking. As more and more information has come to be represented electronically, the use of computers and other electronic applications has been championed by geography educators.

Geography in primary schools offers children from the earliest ages a fascinating window onto the contemporary world. The challenge for educators is to find ways of providing experiences and selecting content that will help children develop an increasingly deep understanding.

# Collins Primary Geography

*Collins Primary Geography* is a complete programme for pupils in the primary school and can be used as a structure for teaching geography from ages 5-11. It consists of five pupil books and supporting teacher's guides with notes and copymasters. There is one pupil book at Key Stage 1 and four pupil books at Key Stage 2. There is also a supporting DVD for each Key Stage.

The overall aim of the programme is to inspire children with an enthusiasm for geography and to empower them as learners. The principles which underpin the programme include a commitment to promoting international understanding in a more equitable world and a concern for the welfare of the planet. Three different dimensions - connecting to the environment, connecting to each other and connecting to ourselves – are explored throughout the programme in different contexts and at a range of scales. We believe that learning to think geographically in the broadest meaning of the term will help children take wise decisions in the future as they grow into adulthood.

## Structure

*Collins Primary Geography* provides full coverage of the English National Curriculum requirements. Each pupil book covers a balanced range of themes and topics but also takes the opportunity to develop case studies with a more precise focus:

- Books 1 and 2 *World Around Us* introduce pupils to the world at both a local and planetary scale.
- Book 3 *Investigation* illustrates how pupils can conduct their own research and enquiries.
- Book 4 *Movement* focuses especially on how movement affects the physical and human environment.
- Book 5 *Change* includes case studies on how places alter and develop.
- Book 6 *Issues* introduces more complex ideas to do with the environment and the way people interact with their surroundings.

Although the books are not limited to a specific year band, Book 3 will be particularly suitable for year 3 children. Similarly Book 4 is focused on year 4 children. Remember that it is possible to trace themes from one book to another if you want a wider range of material on a specific topic.

## Investigations

Enquiries and investigations are an important part of pupils' work in primary geography. Asking questions and searching for answers can help children develop the key knowledge, understanding and skills. Fieldwork is time consuming when it involves travelling to distant locations, but local area work can be equally effective. Many of the exercises in *Collins Primary Geography* focus on the classroom, school building and local environment. We believe that such activities can have a seminal role in promoting long term positive attitudes towards sustainability and the environment.

# Places, themes and skills

**Each book is divided into ten units giving a balance between places, themes and skills.**

## **Places**

There are locality studies throughout each book and studies of specific places from the UK, Europe and other continents. These studies illustrate how people interact with their physical surroundings in a constantly changing world. The places have been selected so that by the end of the scheme, children will be familiar with a balanced range of reference points from around the world. They should also have developed an increasingly sophisticated locational framework which will enable them to place their new knowledge in context.

## **Themes**

Physical geography is covered in the initial three units of each book which focus on planet Earth, water and weather. Human geography is considered in units on settlements, work and travel. There is also a unit specifically devoted to the urban and rural environment and human impact on the natural world. This is a very important aspect of modern geography and a key topic for schools generally.

## **Skills**

Maps and plans are introduced in context to convey information about the places which are being studied. The books contain maps at scales which range from the local to global and use a range of techniques which children can emulate. Charts,

diagrams and other graphical devices are included throughout. Fieldwork is strongly emphasised and all the books include projects and investigations which can be conducted in the local environment.

## **Information technology**

Geography has always been closely associated with information technology. The way in which computers can be used for recording and processing information is illustrated in each of the books. Satellite images are included together with information from data handling packages. Oblique and vertical aerial photographs are included as sources of evidence.

## **Cross-curricular links**

The different units in *Collins Primary Geography* can be easily linked with other subjects. The physical geography units have natural synergies with themes from sciences, as do the units on the environment. Local area studies overlap with work in history. Furthermore, the opportunities for promoting the core subjects are particularly strong. Each lesson is supported by discussion questions and many of the investigations involve written work in different modes and registers.

## Places, themes and skills

Places and Themes	Book 3 Units	Book 4 Units	Book 5 Units	Book 6 Units
Planet Earth	Landscapes	Coasts	Seas and oceans	Restless Earth
Water	Water around us	Learning about rivers	Rivers in action	Drinking water
Weather	Weather worldwide	Weather patterns	The seasons	Local weather
Settlements	Villages	Towns	Cities	Planning issues
Work and travel	Travel	Food and shops	Jobs	Transport problems
Environment	Caring for the countryside	Caring for towns	Pollution	Conservation
United Kingdom	Scotland	Northern Ireland	Wales	England
Europe	France	Germany	Greece	European Union
North and South America	South America <i>Chile</i>	North America <i>The Rocky Mountains</i>	North America <i>Jamaica</i>	South America <i>The Amazon</i>
Asia and Africa	Asia <i>India</i>	Asia <i>UAE</i>	Africa <i>Kenya</i>	Asia <i>Singapore</i>

# Layout of the units

Each book is divided into ten units composed of three lessons. In the opening units pupils are introduced to key themes such as water, weather, settlement and the environment in at increasing levels of complexity. The following units focus on places from around the UK, Europe and other continents. The overall aim is to provide a balanced coverage of geography.

## **Unit Title**

Identifies the focus of the unit and suggests links and connections to other subjects.

## **Satellite image**

Graphical devices ranging from maps to satellite images amplify the topic.

## **Lesson Title**

Identifies the theme of the lesson. The supporting copymaster also uses this title which makes it easy to identify.

## **Data Bank**

Provides extra information to engage children and encourage them to find out more for themselves.

## **Enquiry question**

Suggests opportunities for open-ended investigations and practical activities.

## **Mapwork exercise**

Indicates how the lesson can be developed through atlas and mapwork.

## **Key word panel**

Highlights key geographical words and terms which will be used during the lesson.

## **Investigation panel**

Suggests a practical activity which will help pupils consolidate their understanding.

## **Introductory text**

Introduces the topic in a graded text of around 100 words.

## **Summary panel**

Indicates the knowledge and understanding covered in the unit.

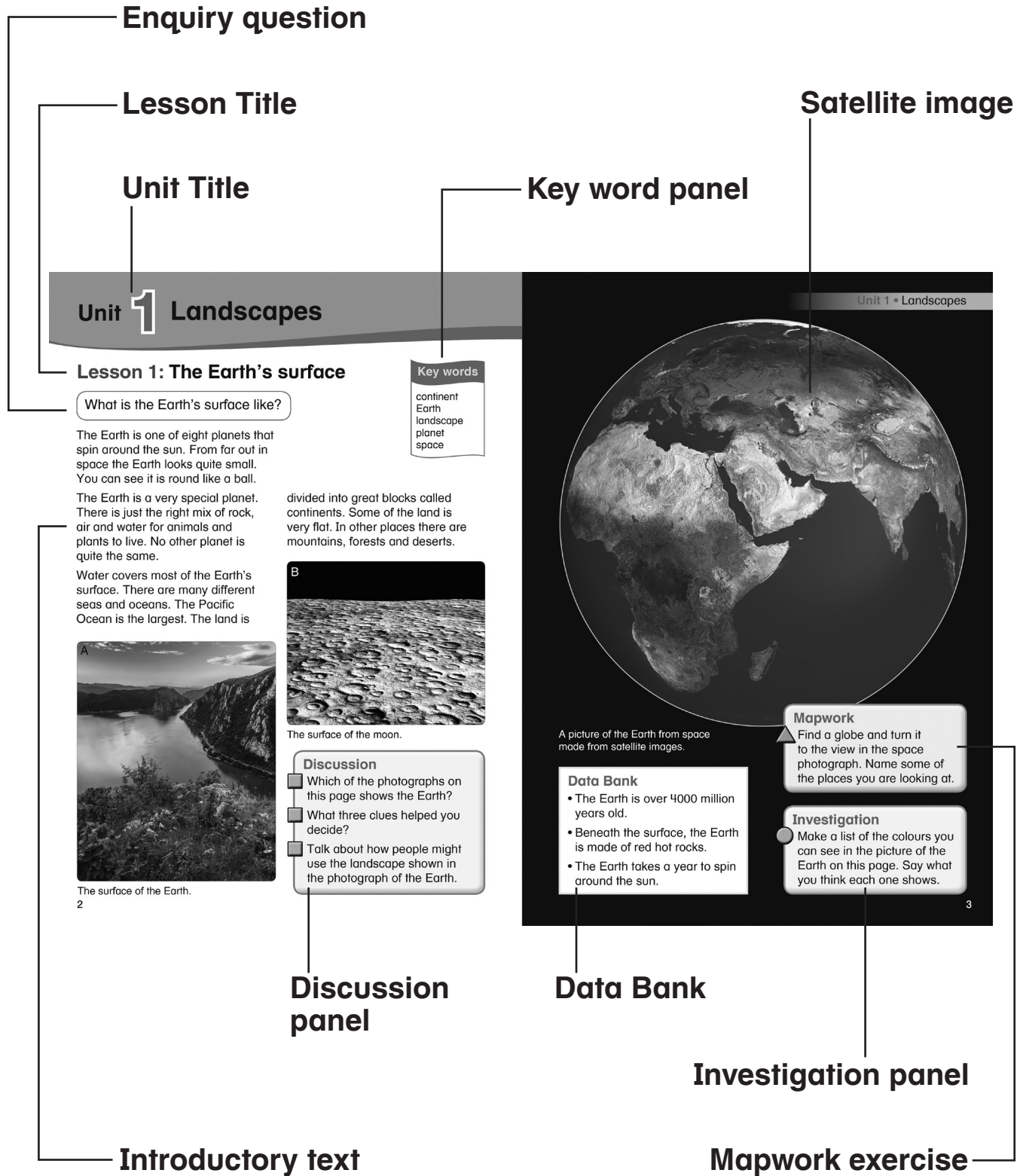
## **Discussion panel**

Consists of three questions designed to draw pupils into the topic and to stimulate discussion. The first question often involves simple comprehension, the second question involves reasoning and the third question introduces a human element which helps to relate the topic to the child's own experience.

## **Copymasters**

Each lesson has a supporting copymaster which can be found in pages 30-59 of this book.

# Layout of the units





## Using the books

*Collins Primary Geography* has been designed to support both whole school and individual lesson planning. As you devise your schemes and work and lessons plans you may find it helpful to ask the following questions. For example, have you:

- Given children a range of entry points which will engage their enthusiasm and capture their imagination?
- Used a range of teaching strategies which cater for pupils who learn in different ways?
- Thought about using games as a teaching device?
- Explored the ways that stories or personal accounts might be integrated with the topic?
- Considered the opportunities for practical activities and fieldwork enquiries?
- Encouraged pupils to use globes and maps where appropriate?
- Considered whether to include a global dimension?
- Checked to see whether you are challenging rather than re-inforcing stereotypes?
- Checked on links to suitable websites, particularly with respect to research?
- Made use of ICT to record findings or analyse information?
- Made links to other subjects where there is a natural overlap?
- Promoted geography alongside literacy skills especially in talking and writing?
- Taken advantage of the opportunities for presentations and class displays?
- Ensured that the pupils are developing geographical skills and meaningful subject knowledge?
- Clarified the knowledge, skills and concepts that will underpin the unit?
- Identified appropriate learning outcomes or given pupils the opportunity to identify their own ones?

These questions are offered as prompts which may help you to generate stimulating and lively lessons. There is clear evidence that when geography is fun and pupils enjoy what they are doing it can lead to lasting learning. Striking a balance between light hearted delivery and serious intent is part of the craft of being a teacher.

### Misconceptions

There is a growing body of research which helps practitioners to understand more about how children learn primary geography and the barriers and challenges that they commonly encounter. The way that young children assume that the physical environment was created by people was first highlighted by Jean Piaget. The importance and significance of early childhood misconceptions was further illuminated by Howard Gardner. More recent research has considered how children develop their understanding of maps and places. Children's ideas about other countries and their attitudes to other nationalities form another very important line of enquiry. Some key readings are listed in the references on page 15.

## Lesson summary

The table below provides an overview of the lessons in *Collins Primary Geography* pupil book 3. Individual schools may want to adapt the lessons and associated activities according to their particular needs and circumstances. It is also possible to pursue a specific theme such as water or weather in greater depth using lessons from other books in the series.

Theme	Unit	Lesson 1	Lesson 2	Lesson 3
Planet Earth	Landscapes	The Earth's surface	The shape of the land	Investigating landscapes
Water	Water around us	A wet planet	The effects of water	Recording water
Weather	Weather worldwide	Different types of weather	Living in hot and cold places	Sunshine matters
Settlements	Villages	A village community	Different types of village	Investigating villages
Work and travel	Travel	Ways of travelling	Finding your way	Routes and journeys
Environment	Caring for the countryside	Wildlife around us	Protecting wildlife	Improving our surroundings
United Kingdom	Scotland	Introducing Scotland	Edinburgh: The capital city of Scotland	Mull: A Scottish Island
Europe	France	Introducing France	Growing Food	Making cars
North and South America	South America	Introducing South America	Spotlight on Chile	The Galapagos Islands
Asia and Africa	Asia	South America Introducing Asia	India: A country in Asia	Pallipadu: A village in India

## Studying the local area

The local area is the immediate vicinity around the school and the home. It consists of three different components: the school building, the school grounds, and local streets and buildings. By studying their local area, children will learn about the different features which make their environment distinctive and how it attains a specific character. When they are familiar with their own area, they will then be able to make meaningful comparisons with more distant places.

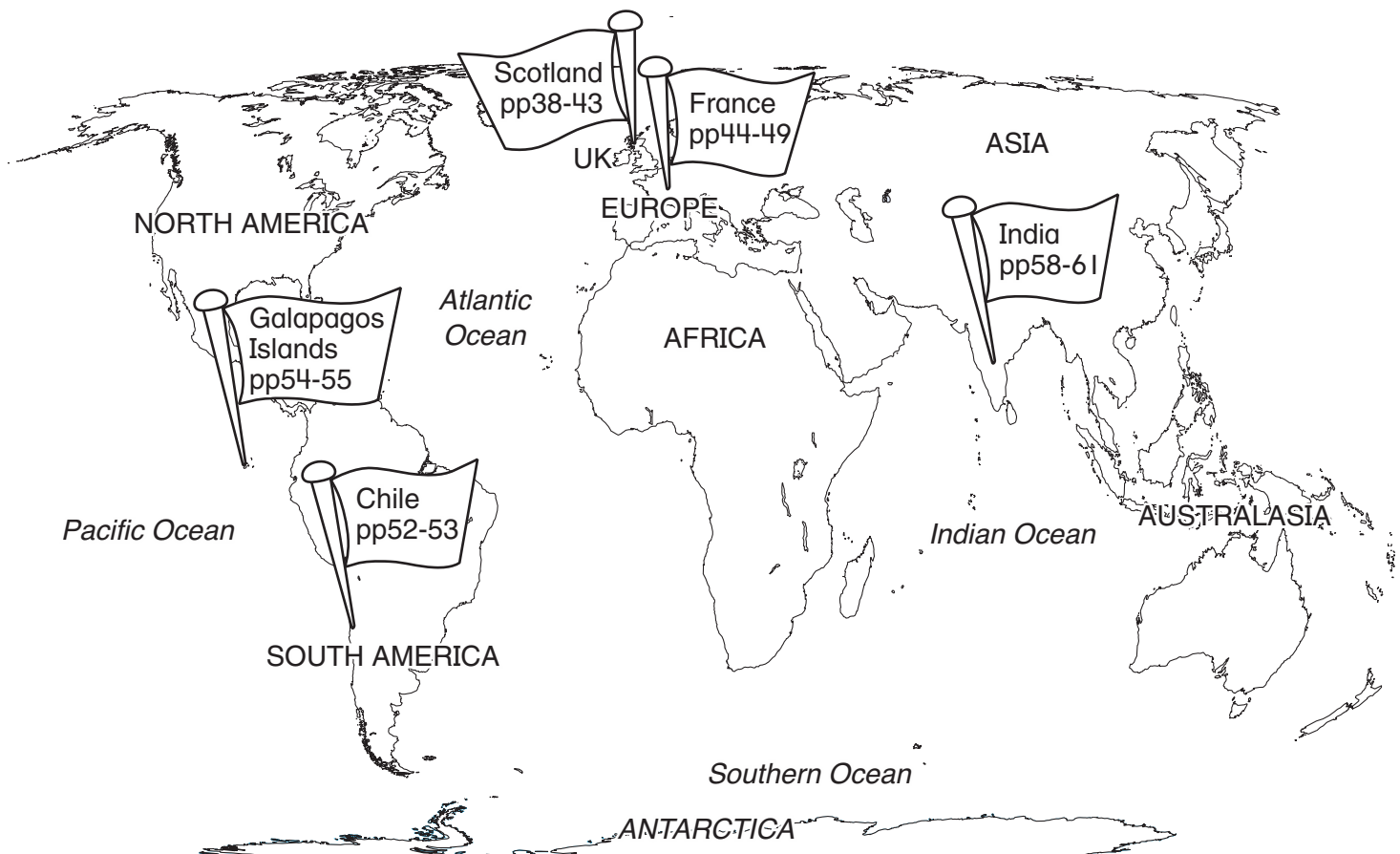
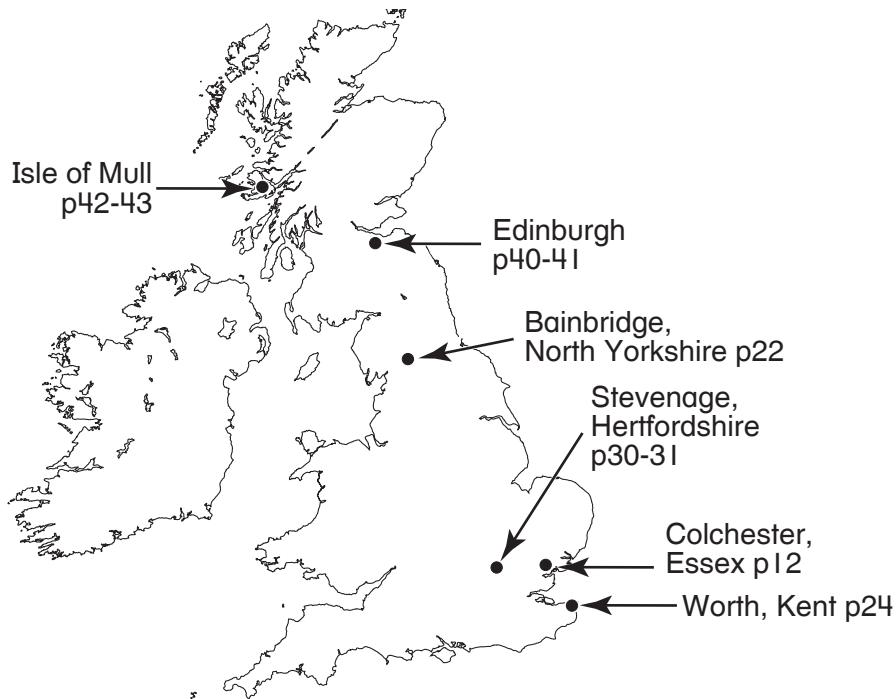
There are many opportunities to support the lessons outlined in *Collins Primary Geography* with practical local area work. First-hand experience is fundamental to good practice in geography teaching, is a clear requirement in the programme of study and has been highlighted in guidance to Ofsted inspectors. The local area can be used not only to develop ideas from human geography but also to illustrate physical and environmental themes. The checklist below illustrates some of the features which could be identified and studied.

Landscape features	Hill, valley, cliff, mountain, rock, slope, soil, wood
Water features	River, stream, pond, lake, estuary, coast
Surface features	Slopes, rock, soil, plants and other small scale features
Climate features	Local weather and site conditions
Settlement	Origins of a settlement (market town, port, resort), land use and economic activity
Buildings	House, cottage, terrace, flat, housing estate
Transport	Bus station, railway station, airport, harbour, roads (safe place& for traffic surveys)
Industry	Farm, workshop, warehouse, factory, office
Shops	Single shop, shopping parade, shopping mall, supermarket,
Services	Fire, police, ambulance, hospital, dentist, recycling point
Leisure facilities	Library, museum, park, swimming pool, golf course, leisure centre
Local issues	Pedestrianisation, improvement scheme, new shops, play areas, road widening, reservoir, rubbish tip

All work in the local area involves collecting and analysing information. An important way in which this can be achieved is through the use of maps and plans. Other techniques include annotated drawings, bar charts, tables and reports. There will also be opportunities for the children to make presentations in class and perhaps to the rest of the class in assemblies.

# Studying places in the UK and wider world

*Collins Primary Geography Book 3* contains studies of the following places in the UK and wider world. Place studies focus on small scale environments and everyday life. By considering people and describing their surroundings, the information is presented at a scale and in a manner which relates particularly well to children. Research shows that pupils tend to reach a peak of friendliness towards other countries and nations at about the age of ten. It is important to capitalise on this educationally and to challenge prejudices and stereotypes.



# Differentiation and Progression

*Collins Primary Geography* sets out to provide access to the curriculum for children of all abilities. It is structured so that children can respond to and use the material in a variety of ways. Within each unit there is a range of exercises and discussion questions. This means activities can be selected which are appropriate to individual circumstances.

## **Differentiation by outcome**

Each lesson starts with an introductory text and linked discussion questions which are designed to capture the children's imagination and draw them into the topic. There are opportunities for slower learners to relate the material to their own experience. More able children will be able to consider the underlying geographical concepts. The pace and range of the discussion can be controlled to suit the needs of the class or group.

## **Differentiation by task**

The mapwork and investigation exercises can be modified according to the pupils' ability levels. Teachers may decide to complete some of the tasks as class exercises or help slower learners by working through the first part of an exercise with them. Classroom assistants could also use the lessons with individual children or small groups. More able children could be given extension tasks. Ideas and suggestions for extending each lesson are provided in the information on individual units (pages 00-00).

## **Differentiation by process**

Children of all abilities benefit from exploring their environment and conducting their own investigations. The investigation activities include many suggestions for direct experience and first-hand learning. Work in the local area can overcome the problems of written communication by focusing on concrete events. There are also opportunities for taking photographs and conducting surveys as well as for such as lists, diagrams and written descriptions.

## **Progression**

The themes, language and complexity of the material have been graded to provide progression between each title. However, the gradient between different books is deliberately shallow. This makes it possible for the books to be used interchangeably by different year groups or within mixed ability classes. The way that this might work can be illustrated by considering a sample unit. For instance, in Book 3 the unit on weather introduces children to hot and cold places around the world. Book 4 looks at ways of recording the weather, Book 5 focuses on the seasons and Book 6 considers local weather conditions. This approach provides opportunities for reinforcement and revisiting which will be particularly helpful for the less able child.

# Assessment

Assessment is often seen as having two very different dimensions. Formative assessment is an on-going process which provides both pupils and teachers with information about the progress they are making in a piece of work. Summative assessment occurs at defined points in a child's learning and seeks to establish what they have learnt and how they are performing in relation both to their peers and to nationally agreed standards. *Collins Primary Geography* provides opportunities for both formative and summative assessment.

## Formative assessment

- The discussion questions invite pupils to discuss a topic, relate it to their previous experience and consider any issues which may arise, thereby yielding information about their current knowledge and understanding.
- The mapwork exercises focus especially on developing spatial awareness and skills and indicate will indicate the pupils' current level of ability
- The investigation activities give pupils the chance to extend their knowledge in ways that match their current abilities.

## Summative assessment

- The panels at the end of each unit highlight key learning outcomes. These can be tested directly through individually designed exercises.
- The copymasters (see pages 00-00) can be used to provide additional evidence of pupil achievement. Whether used formatively or summatively they are intended to broaden and consolidate understanding.

## Reporting to parents

*Collins Primary Geography* is structured around geographical skills, themes and place studies which become more complex from one book to another. As children work through the units they can build up a folder of work. This will include mapwork and investigations in the local area and will provide evidence of breadth, progression and achievement in geography. It will also be a useful resource when teachers report to parents about whether an individual child is above average, satisfactory, or in need of help in geography.

## National curriculum reporting

There is a single attainment target for geography and other National Curriculum subjects. This simply states that

*'By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.'*

This means that assessment need not be an onerous burden and that evidence of pupils' achievement can be built up over an entire Key Stage. The assessment process can also inform lesson planning. Establishing what pupils have demonstrably understood helps to highlight more clearly what they still need to learn.

# High quality geography

The regular reviews of geography teaching in the UK undertaken by Ofsted provide a clear set of recommendations. Schools have been advised to:

- focus on developing pupils' core knowledge and sense of place.
- ensure that geography elements are clearly identified within topic based work.
- maximize opportunities for fieldwork in order to improve pupil motivation.
- make the most of new technology to enthuse pupils and provide immediacy and relevance.
- provide more opportunities for writing at length and focused reading.
- enable pupils to recognise their responsibilities as citizens.
- develop networks to share good practice.
- provide subject specific support and professional development opportunities for teachers.

These recommendations can be set alongside the Primary Geography Quality Mark which has been set up by the UK Geographical Association. This provides a self-assessment framework designed to help subject leaders. There are three categories of award. The 'bronze' level recognises that lively and enjoyable geography is happening in your school, the 'silver' level recognises excellence across the school and the 'gold' level recognises that excellence that is shared and embedded in the community beyond the school. The framework is divided into four separate cells (a) pupil progress and achievement (b) quality of teaching (c) behavior and relationships (d) leadership and management. For further details see (see [www.geography.org.uk](http://www.geography.org.uk)).

Achieving accreditation for geography in school is a useful way of badging achievements and identifying targets for future improvement. The Geographical Association provides a wide range of support teachers to help with this process. In addition to an ambassador scheme and CPD sessions it produces a journal for primary schools, *Primary Geography*, three times a year. Other key sources are the Geographical Association website, the *Primary Geography Handbook* and books and guides for classroom use.

## Finding time for geography

The pressures on the school timetable and the demands of the core subjects make it hard to secure adequate time for primary geography. However, finding ways of integrating geography with mathematics and literacy can be a creative way of increasing opportunities. Geography also has a natural place in a wide range of social studies and current affairs whether local or global. It can be developed through class assemblies and extra-curricular studies. Those who are committed to thinking geographically find a surprising number of ways of developing the subject whatever the accountability regime in which they operate.

## Ofsted Inspections

Ofsted inspections are designed to monitor standards of teaching in schools in England and Wales. Curriculum development is an on-going process and inspectors do not always expect to see totally completed programmes. What they are looking for is evidence of carefully planned strategies which are having a positive impact on the quality of teaching. However, inspectors must also note weaknesses and highlight aspects which need attention. If curriculum development is already in hand in your school, it should receive positive support. The following checklist provides prompts which may help prepare for inspections.

- 1 Identify a teacher who is responsible for developing the geography curriculum
- 2 Provide a regular opportunity for discussing geography teaching in staff meetings.
- 3 See that all members of staff are familiar with the geography curriculum.
- 4 Decide how geography will fit into your whole school plan.
- 5 Make an audit of current geography teaching resources to identify gaps and weaknesses
- 6 Discuss and develop a geography policy which includes statements on overall aims, topic planning, teaching methods, resources, assessment and recording.
- 7 Discuss the policy with the governors.
- 8 Devise an action plan for geography which includes an annual review procedure.

## References and further reading

- Bonnett, A (2009) *What is Geography?* London: Sage
- Butt, G. (Ed) (2011) *Geography, Education and the Future*, London: Continuum
- Catling, S. and Willy., T. (2009) *Teaching Primary Geography*, Exeter: Learning Matters
- DfE (2013) National Curriculum in England: Programmes of study –Key Stages 1 and 2 available at [www.education.gov.uk/schools/teachingandlearning/curriculum/primary](http://www.education.gov.uk/schools/teachingandlearning/curriculum/primary)
- Lucas, B. and Claxton, G. (2011) *New Kinds of Smart*, Maidenhead: Open University Press
- Martin, F. (2006) *Teaching Geography in Primary Schools : Learning to live in the world*, Cambridge: Kingdon
- Ofsted (2011) *Geography: Learning to Make a World of Difference*, London: Ofsted
- Scoffham, S. (Ed.) (2010) *Primary Geography Handbook*, Sheffield: Geographical Association
- Scoffham, S. (Ed) (2013) *Teaching Geography Creatively*, London: Routledge
- Wiegand, P. (2006) *Learning and Teaching with Maps*, London: Routledge

## The Geographical Association

The Geographical Association (GA) provides extensive support and advice for teachers including a range of excellent publications such as the Everyday Geography and Geography Plus series. As well as holding an annual conference, the GA also produces a journal for primary practitioners, *Primary Geography*, which is published three times a year. To find out more and learn about the latest developments in geography education visit the website at [www.geography.org.uk](http://www.geography.org.uk).



# Information on the units

## Unit 1 Landscapes

The word 'geography' literally means 'Earth writing'. The way that wind, water, ice and snow have worn away the land is part of the Earth story. The way people have responded to their physical surroundings is the other major strand.

The Earth has a fixed orbit around the sun and has a relatively stable climate. The surface is covered with a mixture of rock, air and water. These unique conditions have enabled life to evolve. The first organisms probably date back 3,000 million years. On this timescale human beings are very recent additions as they have only emerged in the last 500,000 years.

### Lesson 1 The Earth's surface

What's the Earth's surface like?

Photograph A shows the Earth's surface in the Danube gorge between Serbia and Romania. The most striking features are the water, clouds, blue sky and the flowers and plants in the foreground. Photograph B shows the surface of the moon. It is dry and dusty and there are craters where meteors have crashed to the ground.

**Mapwork** *Africa, the Middle East and India show up prominently in the foreground. Europe is towards the top of the picture.*

**Investigation** *Deserts are shown in orange/yellow, grasslands in light green and forests in deep green and blue for water. You might discuss the difference between images and photographs as an extension.*

### Lesson 2 The shape of the land

Are all landscapes the same?

The Earth's crust has been shaped over geological time by a complex variety of forces - violent movements, ageing of the rocks, the action of water and erosion. At this stage it is enough for children to be able to identify different types of landscape and to interpret the photographs.

**Mapwork** *Pupils could create a coloured plastacine model island with labels on a*

*hardboard base, Papier maché models in cardboard boxes are more effective but slower to make.*

**Investigation** *there will be opportunities for children to continue adding to their notebooks as they complete other lessons.*

### Lesson 3 Investigating landscapes

What is the landscape like in the British Isles?

This double page spread relates general landscape terms to specific features (a) in the British Isles (b) in the local area. Research indicates that many young children think the landscape has been created by people. You may encounter this misconception as you talk with them about the features of your area.

**Mapwork** *Children are sometimes confused to discover that the Lake District is a mountain area.*

**Investigation** *You could develop the investigation by focusing on remarkable landscapes around the world and arrange the pictures around a world map as a class display.*

*Developing geographical language*

**Copymasters** *See 1, 2 and 3 for linked extension exercises*

# Information on the units

## Unit 2 Water around us

Water has a profound influence on our environment. Seas and oceans cover large parts of the Earth's surface. At the poles there are massive sheets of ice which never melt. Most of the water in the world is either salty or frozen. This only leaves a very small portion of fresh water.

People depend on fresh water for their survival. It is essential for drinking, cooking and washing. Modern industry and agriculture also require large quantities of water in order to operate. In some places, water is used to generate hydro-electric power. Elsewhere it is used for irrigation. Where rivers are deep enough they are used by ships and boats. Of all the varied resources on the Earth's surface, water is arguably one of the most important.

### Lesson 1 A wet planet

Where do we find water?

This double page spread introduces children to one aspect of the water cycle – the processes involved as water droplets fall back to Earth and end up in the sea. You will need to discuss the relationship between ice, water and steam if they are to really understand what happens. It can be particularly hard for young children to appreciate that water vapour is an invisible gas. The idea that glaciers are constantly moving is also problematic.

**Mapwork** *As they complete this exercise, pupils might look for lakes that are grouped together or for those that form inland drainage areas and which have no link to the sea.*

**Investigation** *This activity makes links to pupils' home environment and would be best completed as a homework exercise.*

### Lesson 2 The effects of water

Why is water important?

All forms of life depend on water for survival. The children could consider what other plants and creatures might be included in the picture. Water pollution could be introduced to provide a link to wider environmental issues.

**Mapwork** *This mapping exercise might be completed by groups using large sheets of paper and marker pens.*

**Investigation** *You might be able to support the investigation with a fieldwork visit to a pond in or near your school to see at first-hand how it creates a special habitat.*

### Lesson 3 Recording water

How is water shown on maps?

Maps show permanent water features but children will have powerful and immediate experiences of the more temporary effects of water in and around their school grounds. There are opportunities to take photographs of what happens when it rains in your area, using the picture on page 13 as the framework for a wall display.

**Mapwork** *You might could extend the work on simple co-ordinates using maps of your own locality or wider region.*

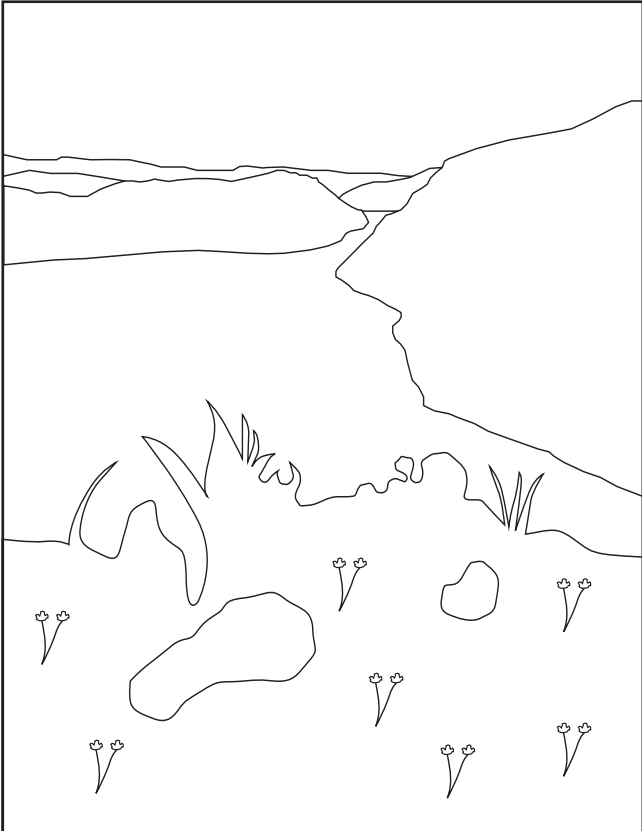
**Investigation** *From an early age children will have noticed water running down window panes and across roads and slopes. The investigation builds on this experience and leads children to recognise part of the water cycle sequence.*

**Copymasters** *See 4, 5 and 6 for linked extension exercises.*

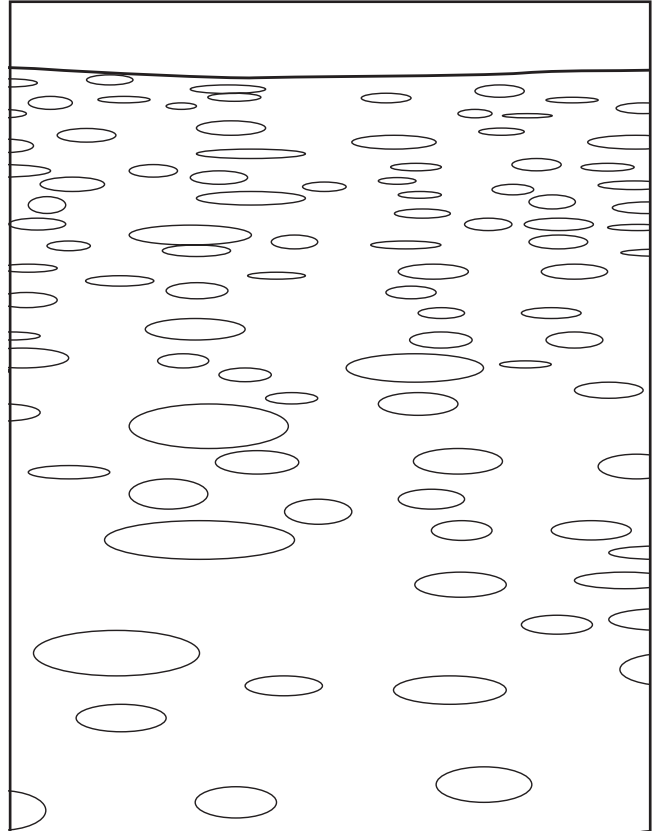
# I The Earth's surface

Name .....

1. Colour the pictures of the Earth and the moon.



The Earth



The moon

2. Tick the features which are found on the Earth and the moon.

Earth

Air	<input type="checkbox"/>
Water	<input type="checkbox"/>
Soil	<input type="checkbox"/>
Plants	<input type="checkbox"/>
Food	<input type="checkbox"/>

Moon

Air	<input type="checkbox"/>
Water	<input type="checkbox"/>
Soil	<input type="checkbox"/>
Plants	<input type="checkbox"/>
Food	<input type="checkbox"/>

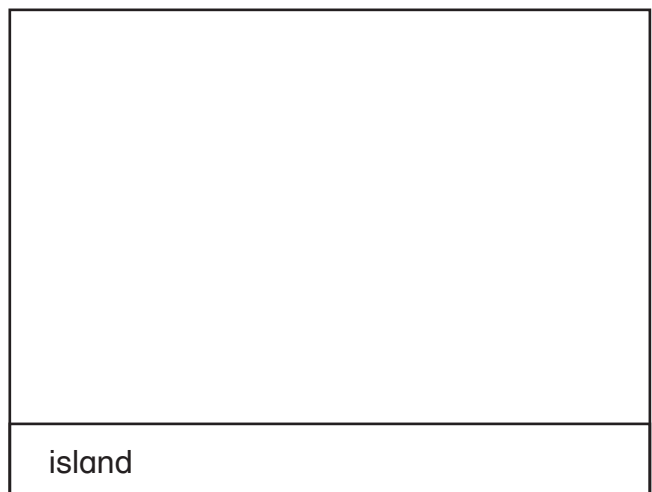
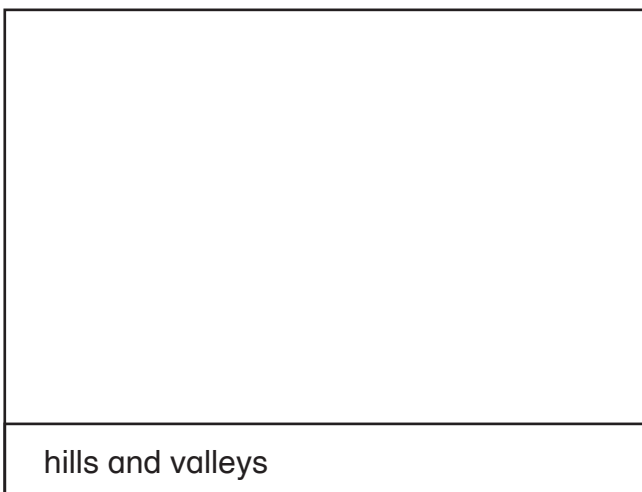
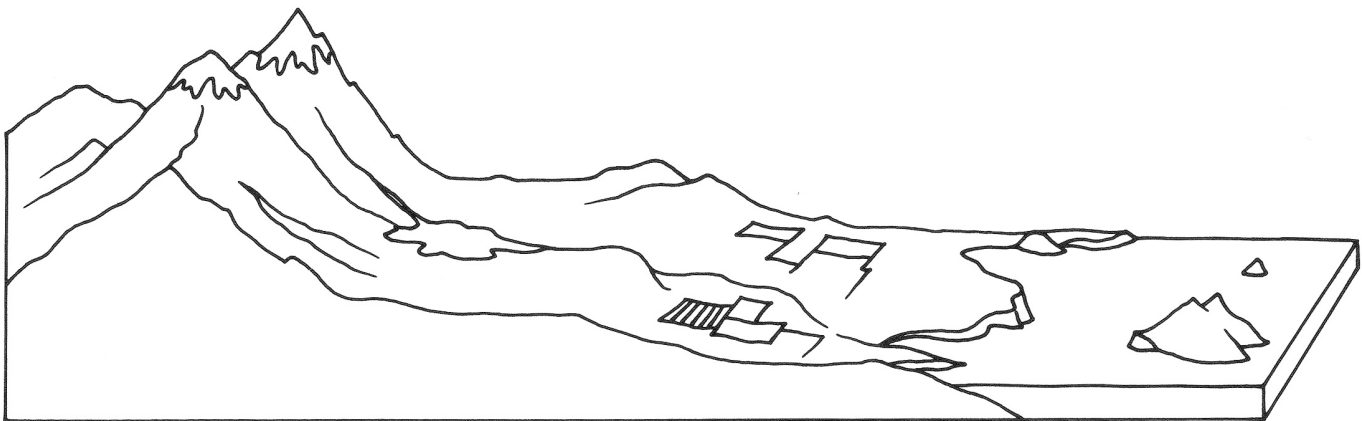
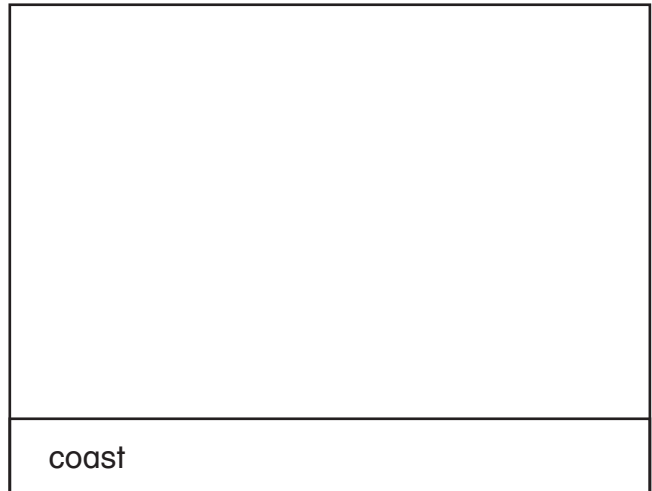
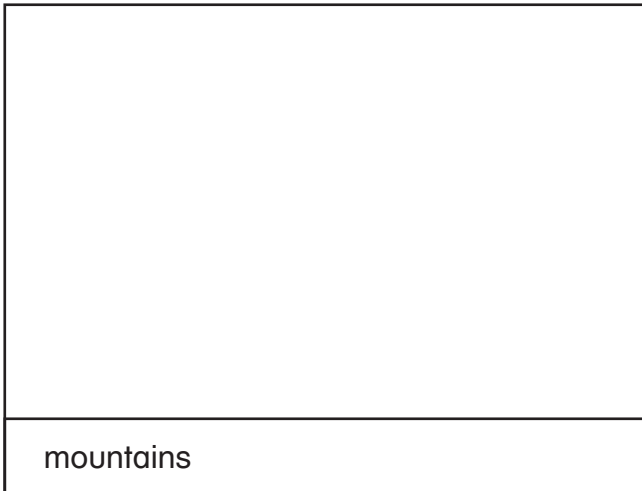
3. Complete this sentence.

The two most important things for life on Earth are \_\_\_\_\_ and \_\_\_\_\_.

## 2 The shape of the land

Name .....

1. Draw a line from each box to the right place on the diagram.
2. Draw a landscape picture in each box.
3. Colour in the pictures you have drawn.

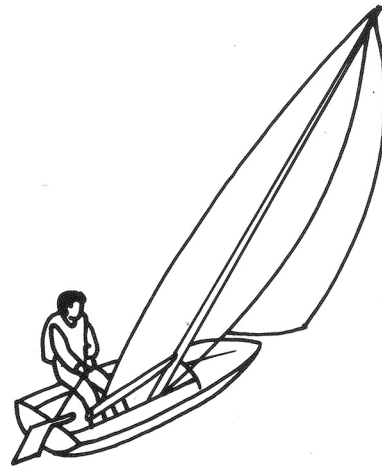
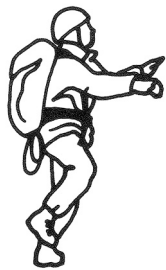


# 3 Investigating landscapes

Name .....

1. Draw a landscape around each of these pictures.
2. Write the words where they belong.

mountain    hills and valley    lowland    coast



# 4 A wet planet

Name .....

1. Draw a picture to match the word at the top of each box.
2. Is the water in each picture a solid, a liquid or a gas?  
Tick the right box.

Iceberg
liquid <input type="checkbox"/> solid <input type="checkbox"/> gas <input type="checkbox"/>

Snow
liquid <input type="checkbox"/> solid <input type="checkbox"/> gas <input type="checkbox"/>

Sea
liquid <input type="checkbox"/> solid <input type="checkbox"/> gas <input type="checkbox"/>

Rain
liquid <input type="checkbox"/> solid <input type="checkbox"/> gas <input type="checkbox"/>

Lake
liquid <input type="checkbox"/> solid <input type="checkbox"/> gas <input type="checkbox"/>

# 5 The effects of water

Name .....

1. Draw the missing plants and animals in the circles.
2. Complete the sentences.

Birds visit ponds to drink and \_\_\_\_\_

Apples and other fruit are \_\_\_\_\_

Most plants need lots of water to \_\_\_\_\_

Fish live in water.  
If \_\_\_\_\_  
\_\_\_\_\_

Tree roots take water from \_\_\_\_\_

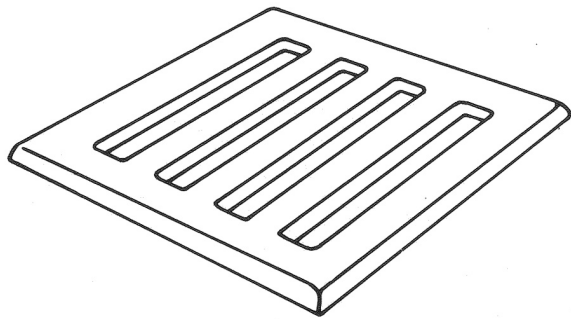
Worms and insects need water to \_\_\_\_\_  
\_\_\_\_\_

Ants can live longer without \_\_\_\_\_  
\_\_\_\_\_

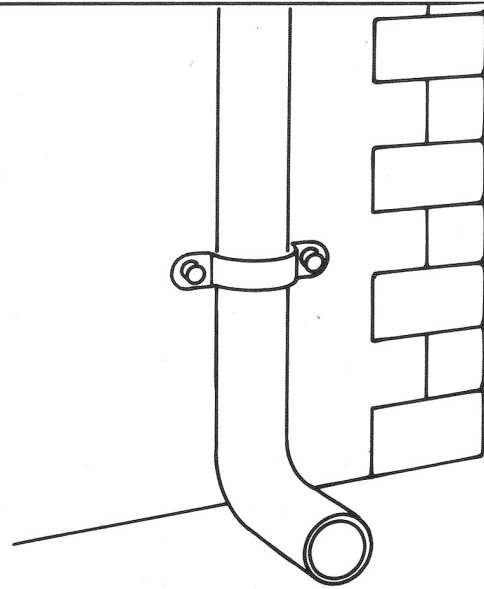
# 6 Recording water

Name .....

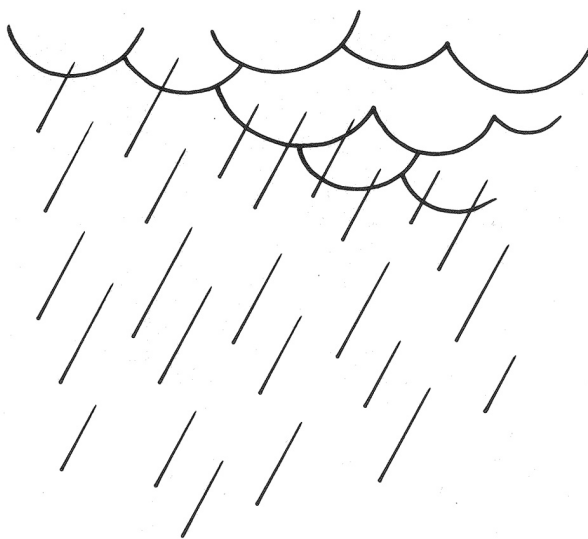
1. Read the sentences and colour the pictures.
2. Cut them out.
3. Glue the pictures in the right order on a strip of paper.
4. Draw arrows to join the pictures together.



The water goes into the drain.



It flows down the drainpipe.



Rain falls from the cloud.



It runs off the roof into the gutter.