

Ages: 9–11 yrs


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Creative Homework Tasks

Activities to Challenge and Inspire 9–11 Year Olds



Giles Hughes

Creative Homework Tasks

**Activities to Challenge and Inspire
9-11 Year Olds**

Giles Hughes

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Thinking Strategies for 9–11 Year Olds

Published by Brilliant Publications

Unit 10,

Sparrow Hall Farm,

Edlesborough,

Dunstable,

Bedfordshire,

LU6 2ES

Website: www.brilliantpublications.co.uk

General information enquiries:

Tel: 01525 222292

The name 'Brilliant Publications'
and the logo are registered trade marks.

Written by Giles Hughes

Illustrated by Frank Endersby

Cover illustration by Frank Endersby

Printed in the UK

© 2010 Giles Hughes (text); Brilliant Publications (design and layout)

Printed ISBN: 978-1-905780-56-3

ebook ISBN: 978-0-85747-002-7

First published 2010

10 9 8 7 6 5 4 3 2 1

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Pages 7, 9, 11, 13–14, 16–17, 19, 21–22, 24–25, 27–28, 30, 32, 34–35, 37–39, 41, 43, 45, 47–48, 50, 52, 55–56, 58, 60–61, 63–64, 66–67, 69, 71–72, 74–75, 77, 79 and 81 are photocopiable. These pages have the phrase 'This page may be photocopied for use by the purchasing institution only' written at the bottom of each. They may be photocopied by the purchasing institution or individual teachers for classroom use only, without consent from the publisher and without declaration to the Publishers Licensing Society. The material in this book may not be reproduced in any other form or for any other purpose without the prior permission of the publisher.

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Introduction

It's a Friday afternoon and in schools across the country audible groans of disappointment filter from each classroom as homework assignments are given out.

On Sunday evenings tensions rise in family homes as parents and their children begin negotiations, threats, sulks and bribery over uncompleted homework.

Back at school on the following Monday mornings, teachers begin to chase up the late and missing homework tasks. Once again the nation's dogs have developed a taste for paper, homework booklets have mysteriously vanished into thin air and thousands of homework sheets have been left on the back seats of cars and busses.

Does this sound all too familiar? Teachers, pupils and parents seem to accept these rituals as an unavoidable part of school life.

In writing these *Creative Homework Tasks* I decided to try to change this pattern of behaviour. As a busy teacher and parent, I felt homework was an extra source of stress I could do without and set out to find a solution that would suit everyone.

My first undertaking was to look at a variety of homework schemes and assess the quality and variety of homework assignments. The vast majority of homework tasks were numeracy and literacy based, the sheets themselves tended to look similar, generally being formal in layout and lacking pictures, diagrams and illustrations.

It was obvious that these tasks were completely inappropriate for the largest group of non-participants, most of whom were boys. I invited groups of children to carry out a 'preferred learning style' questionnaire. The results indicated that the majority of children who were reluctant to carry out homework tasks were kinaesthetic learners and visual learners.

When asked to list things that they were interested in outside of school and their favourite school lessons, football, art, science fiction, dinosaurs, sport, computer games and crafts all figured highly on their lists!

Knowing what the children were interested in and how they preferred to learn gave me something tangible to go on – my job was to now go out and plan a series of new homework tasks that would appeal directly to them.

The first creative homework task I came up with was one where they had to invent their own 'James Bond' style watch (*Escape* pages 34–35 in book one for 7–9 year olds). The watch design had to incorporate three gadgets which their 'hero' uses to defeat or escape from an enemy.

Children love secrets and an element of mystery, so in order to attract their interest I staged this first task. On Monday morning I sat with my back to the class working at my desk before calling the register, apparently engrossed in what I was doing. Within moments I was surrounded by a group of inquisitive children eager to see what I was up to. Quickly I covered my work, giving just enough time for them to see I had been busy drawing something. Despite constant pestering I refused to tell them what my sketch was of. I continued this charade during the day, making sure that news and occasional glimpses of my 'Design a Gadget Watch' homework sheet slowly filtered around the class. The design of the sheet was highly visual, keeping text down to a minimum.

On Friday I introduced the task to the children, proudly showing my watch design and explaining its functions. To my amazement two of the boys called out, 'we've done ours already, we sneaked in at playtime and saw it on your desk!' These two individuals, who hadn't managed a single piece of homework between them all year, now produced finished watch designs and stories from their bags! That week every child in the class completed their homework on time and I realized I was onto a winner.

Over the next year the number of children participating in homework rose as they worked their way through the new creative tasks. In addition, feedback from parents was extremely positive, many noticing a positive change in their children's attitude towards homework. In many cases it seemed the format and content of these new homework tasks was putting an end to the confrontation, arguments and bribery they previously resorted to in order to ensure homework was done.

Indeed, one boy's homework had improved beyond recognition. His handwriting, spelling, grammar, design skills and drawing were a revelation. Alas it was too good to be true, the new tasks had proved to be a temptation for his father who had completed them himself! The boy ended up taking two copies home so that they could work together, even then his father insisted on handing his homework in too!

Once a new ethos was established in class I started to introduce tasks that appealed to a wider audience. My first tasks were developed with underachieving, kinaesthetic boys in mind. I gambled that if I kept the tasks visually stimulating and creative in nature these children would still retain their new-found enthusiasm. It was also important to start introducing a wider range of curriculum areas, particularly numeracy and literacy while doing away with lists of sums, lengthy explanations and mountains of text. Devising tasks that get children to think creatively, or giving traditional tasks a creative twist, is the key.

The tasks you will find in this book have been trialled in a number of schools and are the culmination of many months of research, feedback and editing. They have been designed so that they can be given out with little or no input from the teacher if need be. In my experience a little enthusiasm from the teacher goes a long way. There are extensive teacher notes for each task – giving examples of extension activities, relevant websites, fun ways of accessing the tasks and solutions to the problems!

There are some great ideas in the book that all children will love – many seem too good to waste on homework! Why not start them off at school or dip into the teacher's notes to find an extension exercise to do at home?

Above all, enjoy the tasks – homework no longer needs to be a grind!

Abstract Noun Poem

Teacher's
Notes

The children's task is to write a poem describing an abstract noun.

Give some examples of abstract nouns and explain to the children that they are going to write a poem describing an abstract noun.

Abstract nouns are ideas, feelings and emotions, such as love or hate. Abstract nouns cannot be seen or touched in the same way as concrete nouns.

More able pupils can be challenged to add descriptive adjectives and adverbs to their poems.

Try using this word bank of abstract nouns for extension work:

Hate

Courage

Intelligence

Bravery

Cowardice

Embarrassment

Joy

Beauty

Luck

Misfortune

Grief

Boredom

Abstract Noun Poem

You are going to choose one of the following abstract nouns and write a poem about it.

Hope Anger Love
Illness Happiness
War Fear

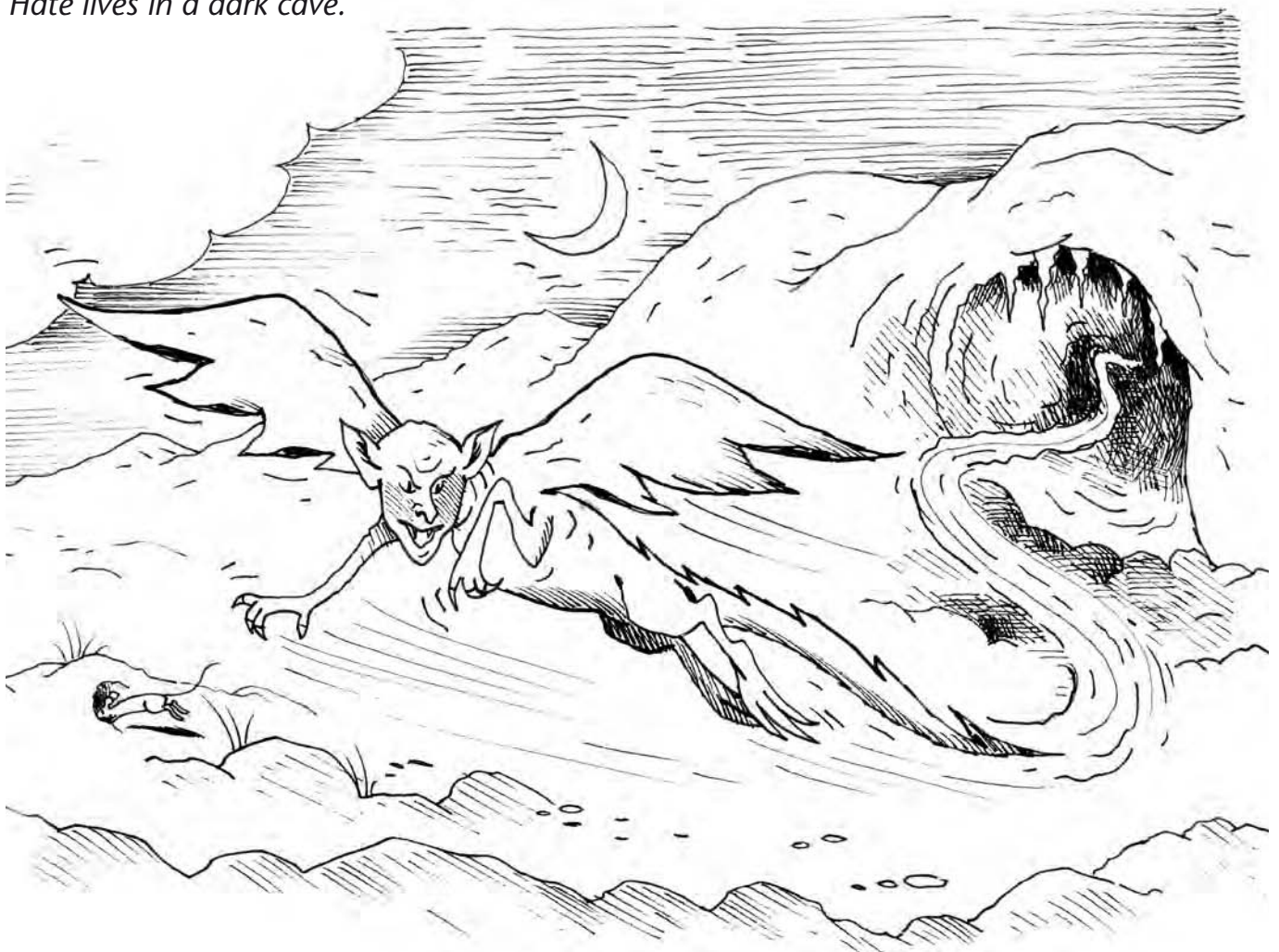
Hate

*Hate is black
It smells like petrol
Hate tastes like poison
It sounds like a wailing siren
It feels like sharp nails
Hate lives in a dark cave.*

Consider these questions when you write your poem, it might help you.

- *What colour is it?*
- *What does it smell like?*
- *What does it taste like?*
- *What does it sound like?*
- *What does it feel like?*
- *Where does it live?*

Record your answers to these questions in a simple free verse poem, and complete your poem with an illustration.



Personal Rain Catcher

Teacher's
Notes

The children's task is to write and illustrate an advert that will persuade people to buy a 'Personal Rain Catcher'. They will need to exaggerate any positive features they can think of for this invention.

Start off by reviewing different adverts from magazines or from the TV. Talk about what makes them successful. Then introduce the task.

Encourage the children to use the persuasive strategies listed on the sheet. Using them will make their advert more effective.

For example:

- Are you sick of paying ridiculous prices for bottles of mineral water? (Question)
- Save a fortune in water bills with a fabulous Personal Rain Catcher! (Exaggeration)
- Allowing yourself to get dehydrated is dangerous! Don't get caught out next time it rains! (Warning)
- Order your Personal Rain Catcher today – start collecting free water tomorrow! (Instruction)
- You'll never go thirsty again with a Personal Rain Catcher! (Promise & Exaggeration)
- Try using a Personal Rain Catcher next time it rains – what will you use your water for? (Invitation & Question)
- 'Rain water is scientifically proven to be better for you than tap water.' Dr H. Two – Oxford University Professor (Expert Opinion).



Personal Rain Catcher

Your task is to write and illustrate an advert that will persuade people to buy a Personal Rain Catcher.

Try using these strategies to make your advert more persuasive:

Question: Are you sick of paying ridiculous prices for bottled water?

Invitation: Try using a Personal Rain Catcher next time it rains.

Promise: You'll never go thirsty again!

Warning: Don't be left parched and thirsty each time it rains!

Exaggeration: The Personal Rain Catcher is the invention you've been waiting for all your life!

Instruction: Order a Personal Rain Catcher today!

Expert opinion: 'I never leave the Palace without my Personal Rain Catcher' – The Queen.

Do you think this is a good invention?
Explain your thoughts.



How To Make Your Parents Really Angry!

Teacher's
Notes

Talk about the heading and invite the children to tell you how easy it is to make their parents really angry. Encourage them to retell situations from home. Tell them that their task for today is to write a 'step by step' guide, giving instructions on 'How to make their parents really angry'.

Organizing ideas within the structure of an instructive text is key for this activity!

The piece should begin with the heading 'How to Make Your Parents Really Angry', followed by a short introduction. For example: 'Do you want to know how to make your parents see red? Follow these simple instructions for a guaranteed volcanic parental eruption.'

Follow this with a sub-heading – 'You will need ...'. Bullet point a list of equipment needed, include terms like 'bad attitude' or 'nerves of steel' for a comic effect.

The next sub-heading should read 'What To Do'. This should be a numbered list of instructions in chronological order. Use temporal connectives to link the instructions together: 'firstly, later, next, finally'. The events described in the list should get progressively worse so that the parents finally lose it at bedtime.

To finish, a concluding paragraph should sum up or reinforce the end result. For example: 'Follow these simple instructions and ensure your poor parents will explode before the day is over.'



How To Make Your Parents Really Angry!

I bet you know exactly what to say and do in order to make your parents see red and blow their top!

Your task is to write a step by step guide on how to annoy your parents.

You will need a main heading, followed by an introduction (sometimes asking a reader a question works well here).

Your first sub-head should be:

You will need ...

Show as a list using bullet points. Some things might be less obvious like 'nerves of steel' or 'loads of attitude!'.

Your second sub-head should read:

What to do ...

These instructions should be shown a numbered list, in chronological order. Try working your way through the day, so Mum and Dad finally lose it at bedtime. Don't forget to use key words like firstly, secondly, later on and finally.

Finish your instructions with a concluding paragraph that sums up, or reinforces what the end result should be.



Special Effects Box

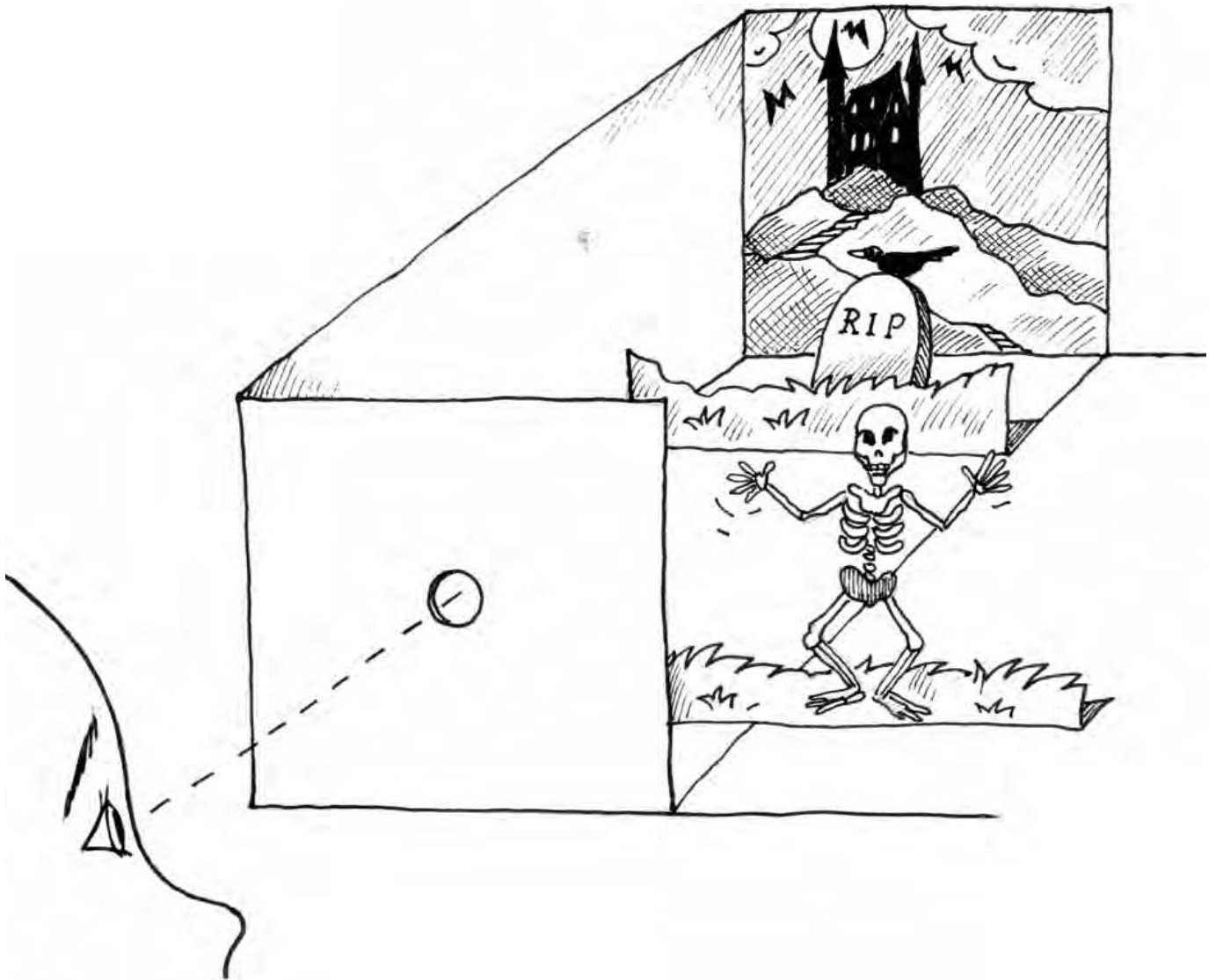
Teacher's
Notes

The task for the children is to create a 3-D scene for the story given on the following page. They should cut a peep hole into the short side of an old shoe box and, to get the 3-D effect, carefully position a background, middle ground and foreground within the box.

If you feel the task is too complex for your children, it can be simplified; the children can be challenged to make sound effects only. Supply them with the resource sheet where they can make notes and add symbols next to the text.

Discuss with them which possible symbols could represent the noises.

Each symbol can represent a particular sound to be made on the 'Sound Effects Shoe Box'. Annotating the text in this way is almost like composing music and can enable other people to try reading and playing their story.



Special Effects Box

Your task is to 'customize' an old shoe box, turning it into a special effects box for a spooky story!

Here is the beginning of a 'spooky' story:

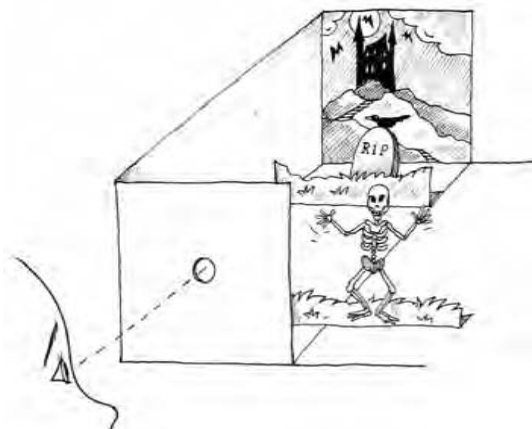
'Come on, you're not chicken are you?' mocked Paul, looking hard at his friend.

'Me! Scared! Of that silly old house!' laughed Andrew, putting on a brave face. The two boys edged nervously towards the front door. Slowly, they crept up the rotten steps, the wood creaking beneath their feet. Paul could feel his heart pounding as Andrew pushed the front door open. The rusted hinges groaned ominously as the door swung open ...

- At what places in the text would you choose to add a special effect?
- How could you add greater suspense or excitement?
- How could you 'customize' your shoe box to create a special effect?

Create a 3-D scene for the story by cutting a peep hole into the box and carefully positioning a background, middle ground and foreground.

What happens next in the story? Why not complete the story and add more 'special effects'.

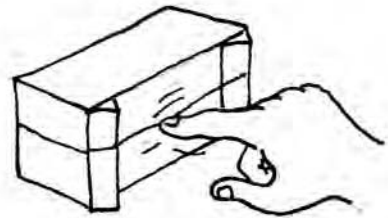


Here are some ideas on how you could 'customize' your shoe box:

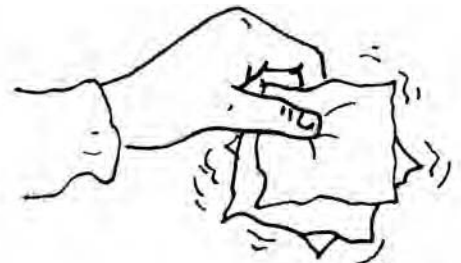
Create sound effects by:



Dragging your finger over a piece of corrugated cardboard.



Try stretching an elastic band around the box and plucking it.



Rustle some pieces of paper together. Or fill a compartment with tissue paper that can be rustled.



Partition a section of the box off and make it into a 'feely box'.

Stick petals or a piece of burnt paper into the box to smell.

Special Effects Box

Sound effects story

Here is the beginning of a 'spooky' story. Beneath each line is a box. Make notes and draw symbols in each box explaining what sound effects should be heard when the text is being read out loud.

'Come on, you're not chicken are you?' mocked Paul, looking hard at his friend.

'Me! Scared! Of that silly old house!' laughed Andrew, putting on a brave face.

The two boys edged nervously towards the front door. Slowly, they crept up the rotten steps, the wood creaking beneath their feet.

Paul could feel his heart pounding.

Andrew pushed the front door open.

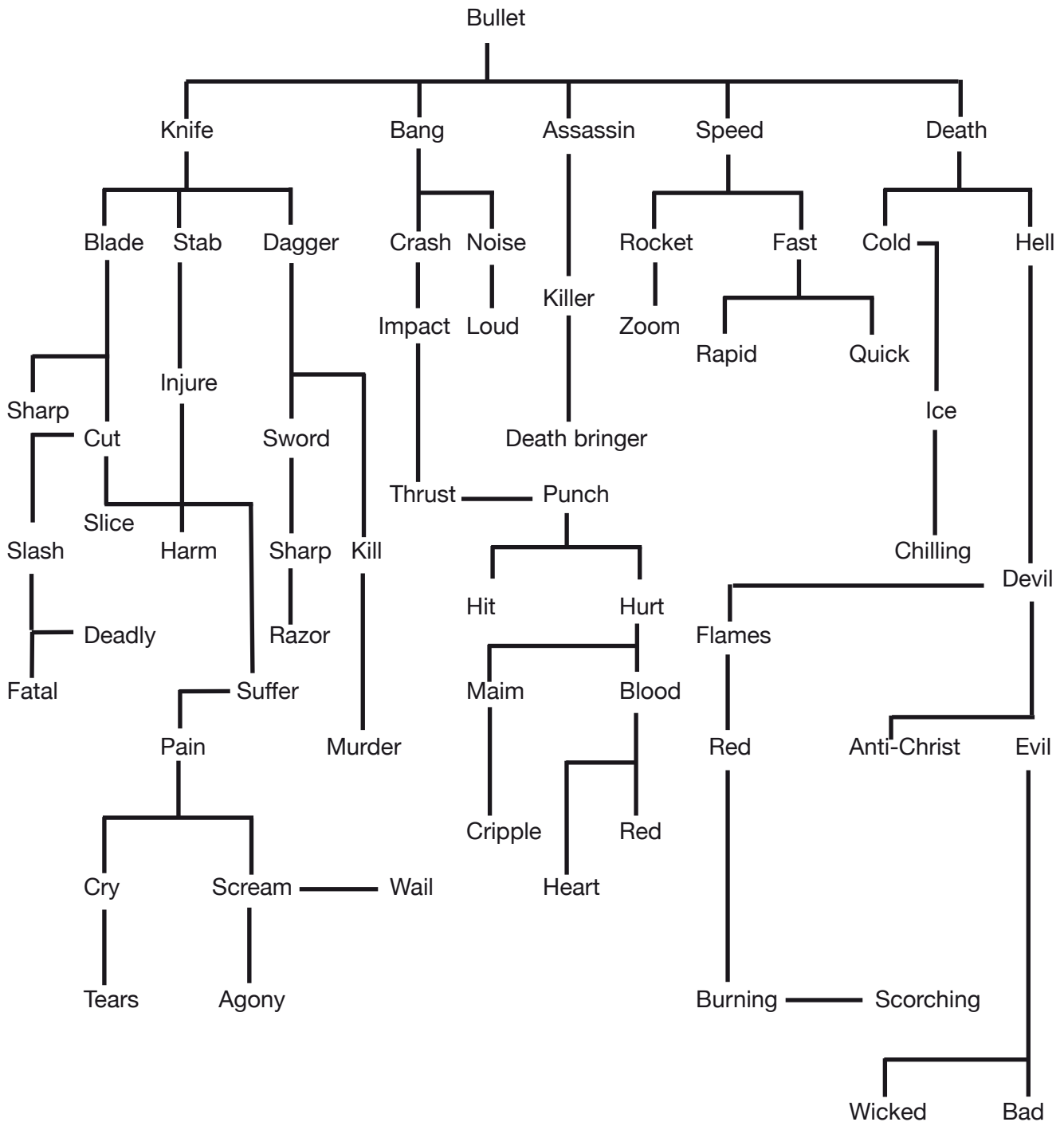
The rusted hinges groaned ominously as the door swung open ...

What happens next? Turn the paper over and finish the story!

The Bullet

The task for the children is to create a word web starting with the word **BULLET**. Using this word web, they can then write a poem with same title.

Writing poetry using a word web is a great way to generate similes and metaphors. The bigger and more complex the word web, the more interesting and effective the poem. Use this word web as an example for Bullet Poems, and discuss the task of writing a poem entitled The Bullet!

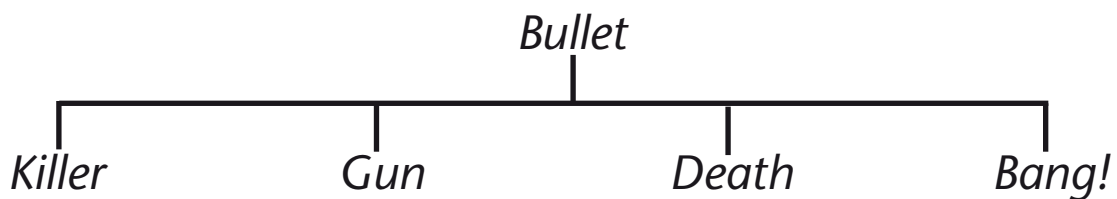


Why not challenge your children to create poems entitled **Clouds** or **The Tree** by using a word web.

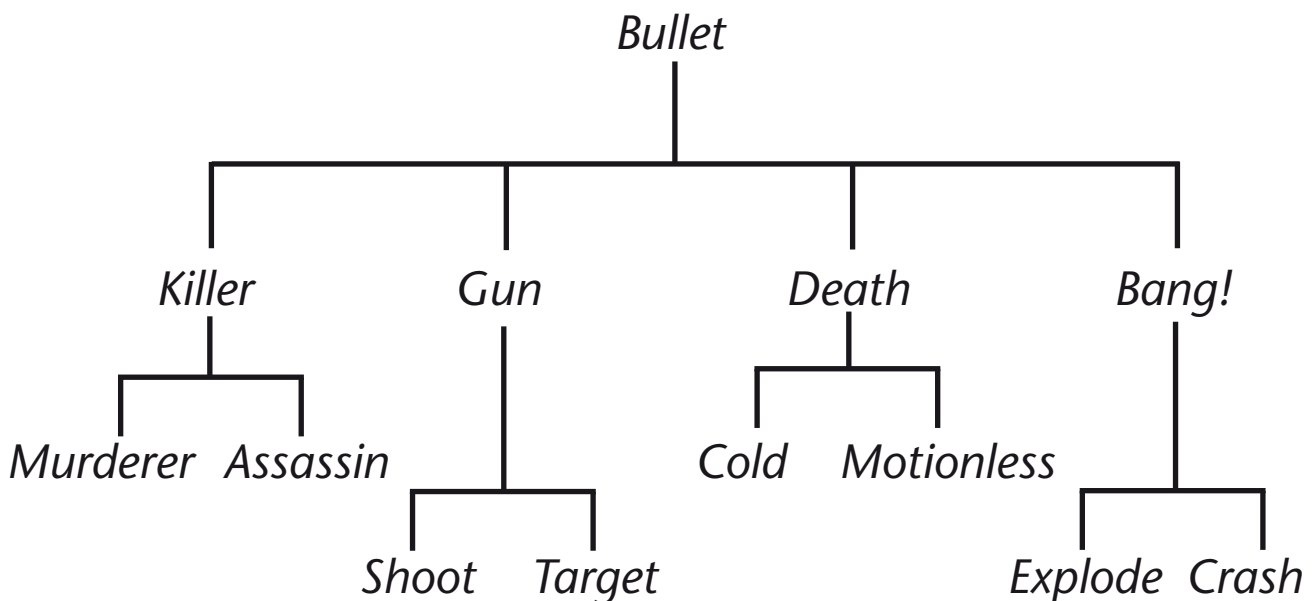
The Bullet

- *What does a bullet make you think of?*
- *What does a bullet look like?*
- *What does a bullet symbolize?*
- *What is the first thing that comes into your head when you think of a bullet?*

Write down all your ideas in a word web like this:



What do these words make you think of? Keep making your word web grow in this way!



The Bullet

Using the word web you have just created, your task is to use it to help you write a poem entitled *The Bullet!*

Simply pick out words and combinations of words from your word web and your poem will start to take shape. It should be packed with description, simile and metaphor.

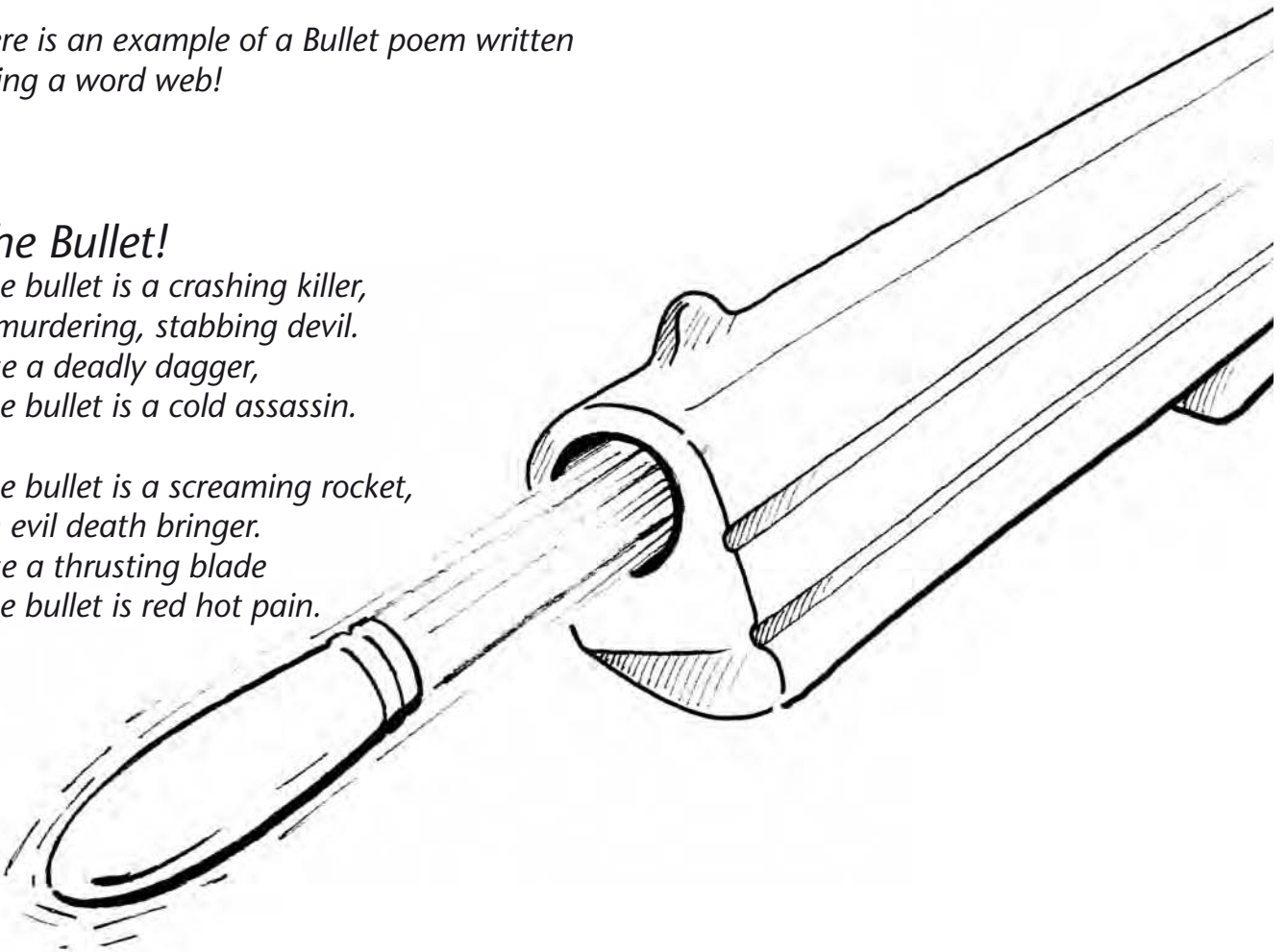
Once completed you can illustrate your poem.

*Here is an example of a *Bullet* poem written using a word web!*

The Bullet!

*The bullet is a crashing killer,
A murdering, stabbing devil.
Like a deadly dagger,
The bullet is a cold assassin.*

*The bullet is a screaming rocket,
An evil death bringer.
Like a thrusting blade
The bullet is red hot pain.*



The children's task is to invent a new confectionery for Willie Wonker's chocolate factory.

In Roald Dahl's book *Charlie and the Chocolate Factory*, five children win a tour around the chocolate factory. Each child is an awful character and one by one they end up in bizarre, weird and funny situations which require removing them from the tour. For example, Violet Beauregarde tries an experimental piece of three-course-dinner chewing gum, which causes her to turn blue and then swell up into a very large blueberry. She is then sent to the Juicing Room to be squeezed back into her normal shape!

Originally Roald Dahl intended that another child would visit the factory. This chapter, entitled 'Miranda Piker' was later dropped but can still be found on the web at:

www.entertainment.timesonline.co.uk/tol/arts_and_entertainment/books/article546539.ece

In this chapter Miranda comes into contact with 'Spotty Powder!' Try downloading the missing chapter and reading it to the children. Then challenge them to write a chapter of their own that features their invention. They will of course have to invent a character to try out their confectionery!

Alternatively, the children could present their invention in the form of an advert.

Sweet Inventions

Have you read the book or seen the film, **Charlie and the Chocolate Factory**? In it a character called Willy Wonka runs a fantastic chocolate factory, where he produces all kinds of wonderful and delicious sweets, including some sweets that seem impossible such as ice-cream that never melts and chewing gum that never loses its flavour. He even creates a huge castle for Indian Prince Pondicherry entirely out of chocolate!



Your task is to invent a new confectionery for Willy Wonka.

This sweet or chocolate bar must have an unusual, almost magical effect on the person who eats it.

- Think about who would want to eat your invention.
- Why would they want to eat it?
- What does it taste like?
- What will happen to them as it is eaten?
- What are the consequences of eating it?
- Does it have any side effects?
- Can you illustrate your new invention?

Here is an example.

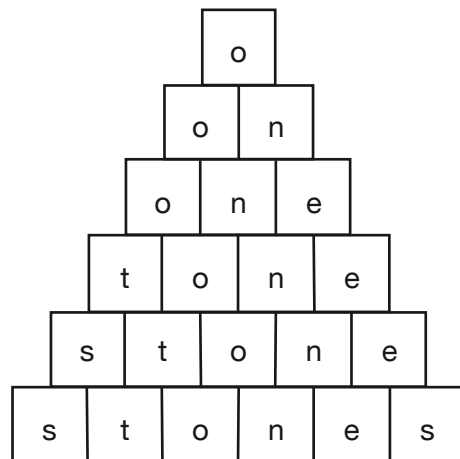
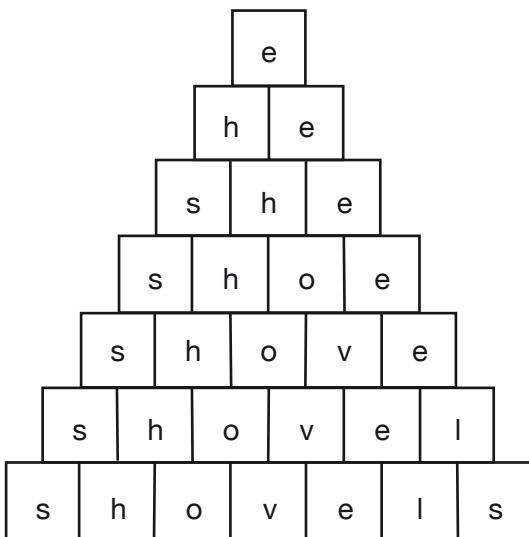
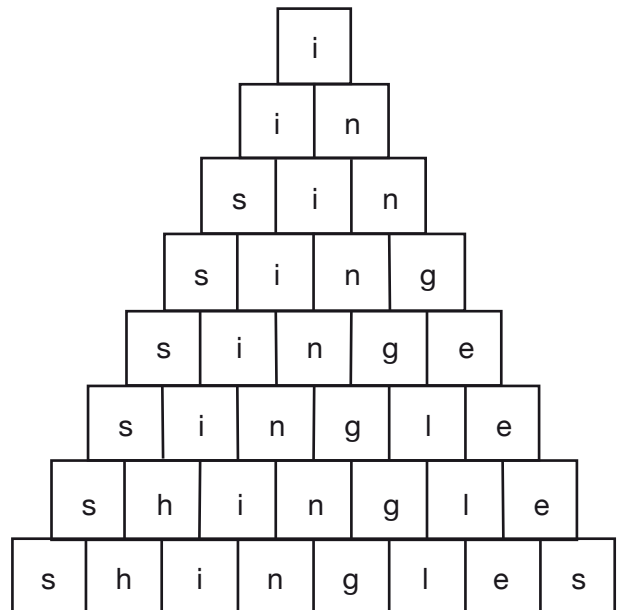
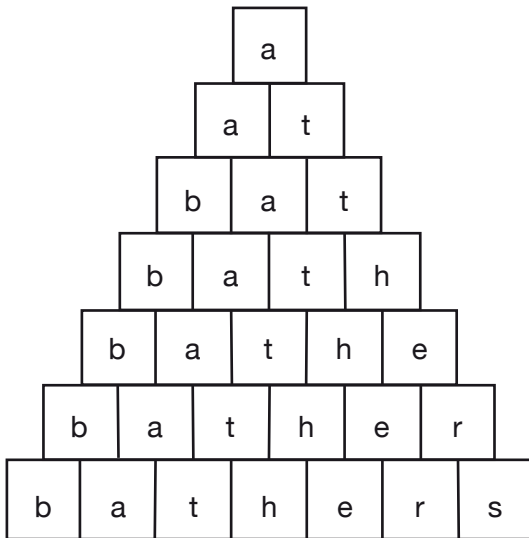
SPOTTY POWDER!

Spotty Powder looks exactly like sugar but tastes even sweeter! Each grain of Spotty Powder slowly melts on the tongue sending your taste buds into ecstasy. However, Spotty Powder doesn't just taste fantastic – it has a more interesting use! All you have to do is sprinkle it over your cereal at breakfast time, pretending it's sugar. Eat it. And then ... exactly five seconds after that, you come out in bright red spots all over your face and neck. So when your mother looks at you across the breakfast table she will say, 'My poor child. You must have chickenpox. You can't possibly go to school today.' So you stay at home. But by lunch-time, the spots have all disappeared. This amazing new invention will appeal to all children who have exams or tests looming, who haven't done their homework or who simply want a day off school!

Word Triangles

The children's task is to create a word triangle.

Explain to the children what a word triangle is and show them some examples. The length and complexity of the word triangles each child produces is dependent on their ability. Here are some examples of how the word triangles could develop.



Word Triangles

What is a word triangle and how do I make one?

Start off with one letter – the letter 'a' is a good choice. Add an extra letter each time you start a new line – the letter can be placed anywhere as long as it makes a new word!

See how this word triangle has been created:

Start with the letter 'a'.

a

a
a t

Add the letter 't' to make a new word: at.

a
a t
s a t

Add the letter 's' to make a new word: sat.

a
a t
s a t
s l a t

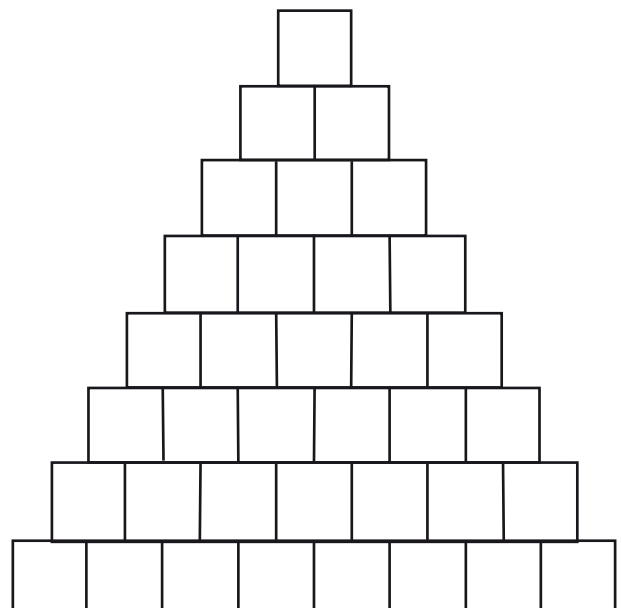
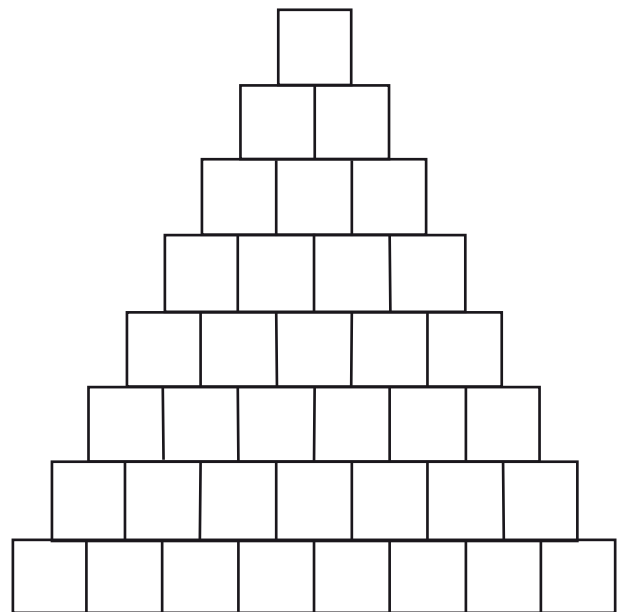
Add the letter 'l' to make a new word: slat.

a
a t
s a t
s l a t
s l a t e

Add the letter 'e' to make a new word: slate.

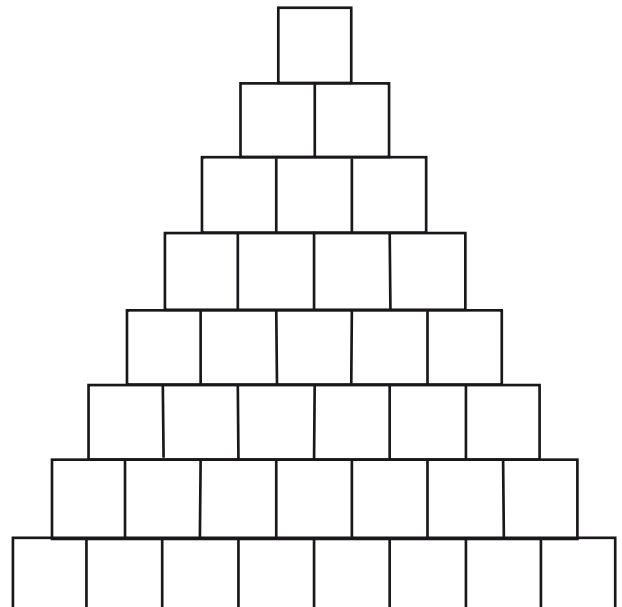
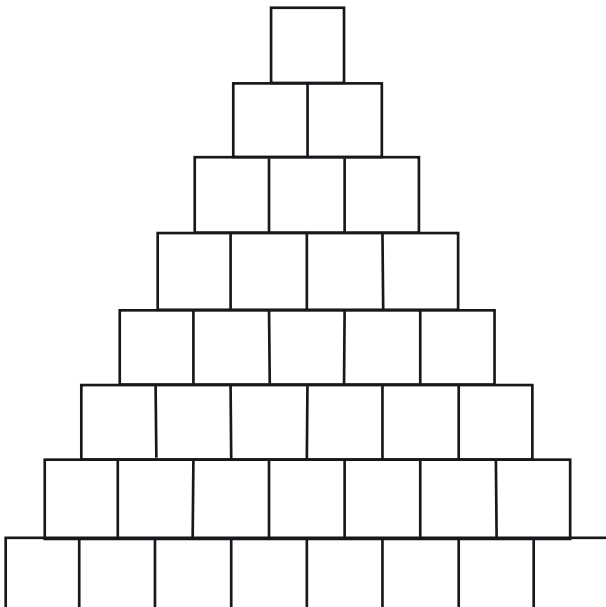
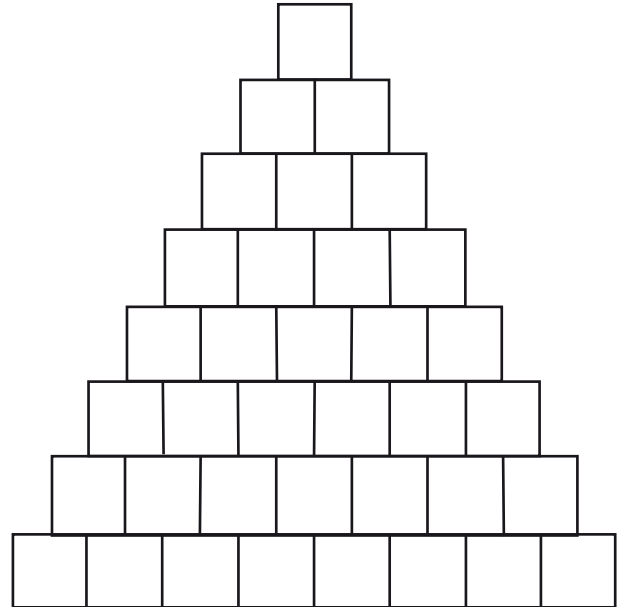
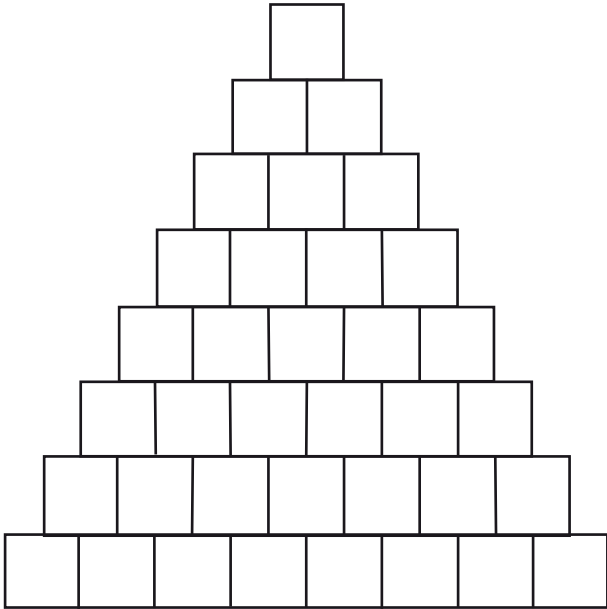
Your task is to create some word triangles of your own! How big can you make your word triangle? Use a dictionary to help you!

You might need to experiment in rough before you write out your final word triangles. Remember you have to start with a vowel.



Word Triangles

Now try to build some of your own! How big can you make your word triangles? Using a dictionary will help you! You might need to experiment in rough before you write out your final word triangles.



Calculator Fun!

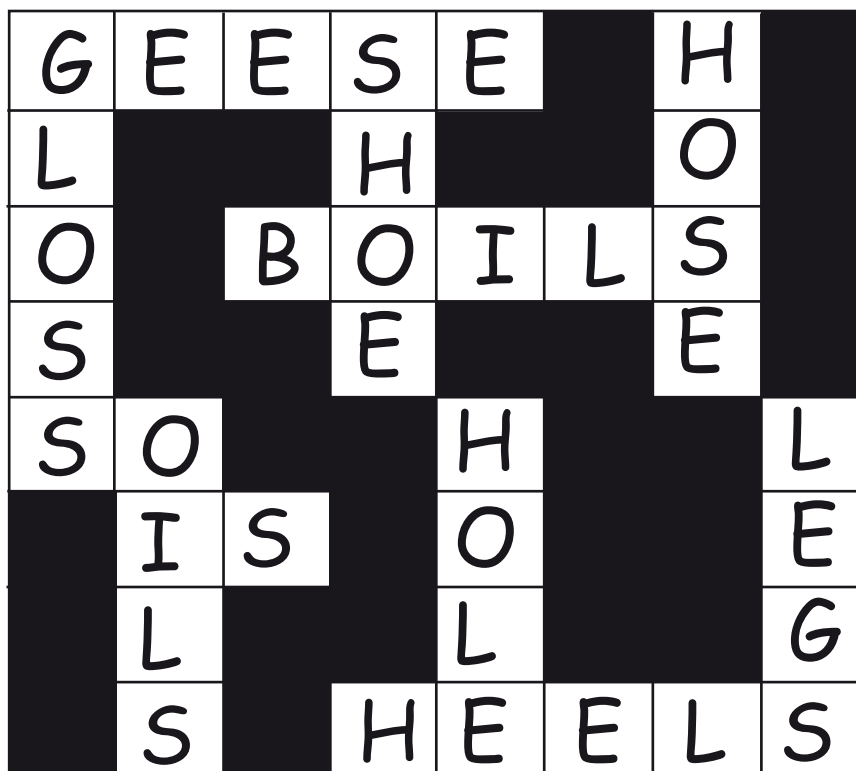
Show examples of how to create letters/words from the numbers on a calculator and ask the children to solve the crossword puzzle on page 25.

These are the numbers needed to make letters on the calculator:

S	L	B	g	E	I	O	h
5	7	8	6	3	1	0	4

77345 will give you the word SHELL

The solution to the crossword on page 25 is:



Before attempting their own crossword it is useful to make a word bank of words possible using a calculator. For example:

LOG	HELLO	LOSE	SHELL	BEG
HOSE	SHOE	BILL	HOLE	SLEIGH
SOLE	HEEL	BLESS	EGGS	

The children should then fit their words into a grid, leaving the task of writing clues until the end.

Calculator Fun!

Have you noticed that if you type a number into your calculator, then turn it upside down, sometimes it looks like a letter of the alphabet?

Type these numbers into the calculator

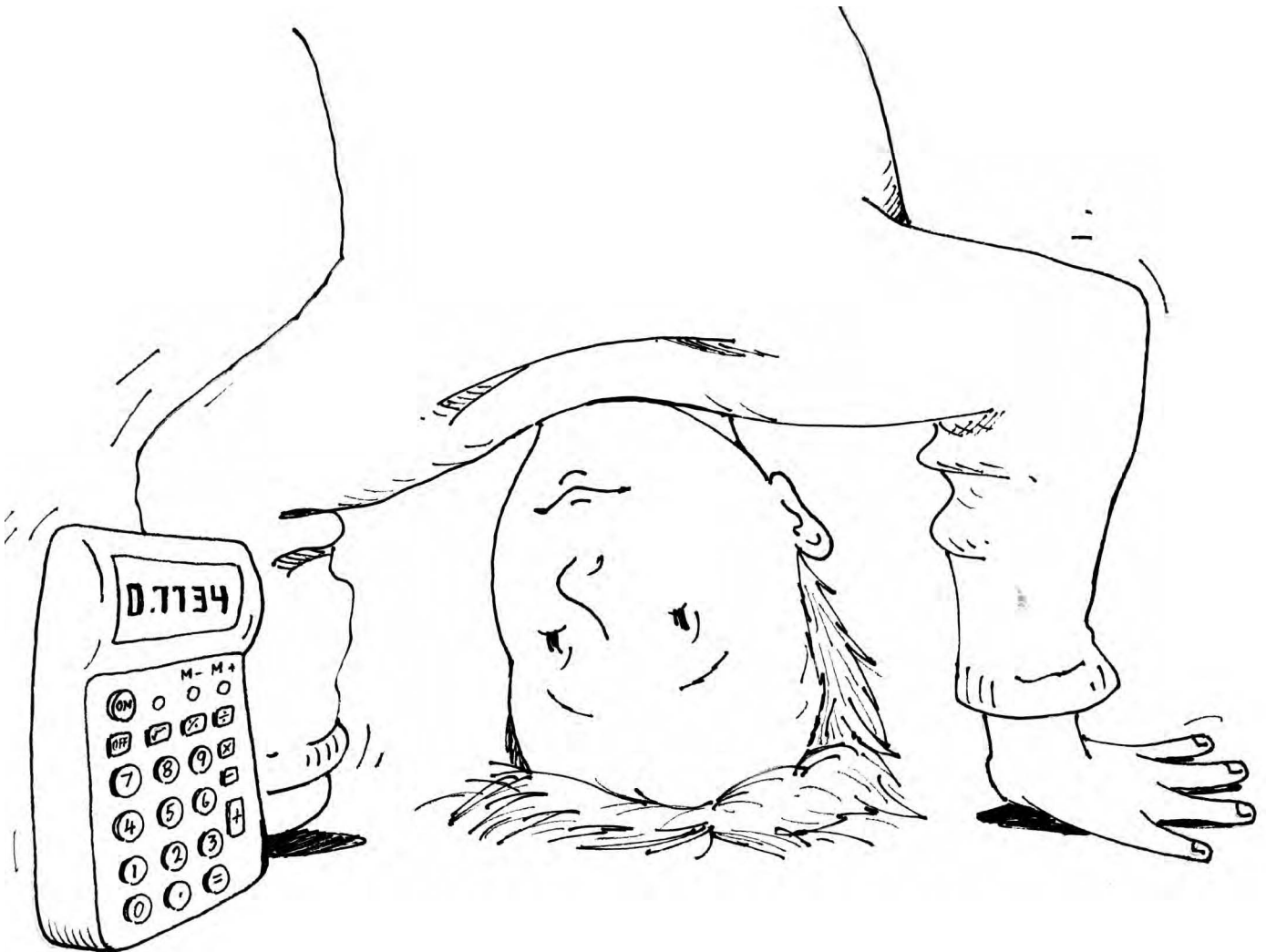
7 7 3 4 5

Now turn the calculator upside down and see what word you have made.

What numbers do you need to press to make these letters?

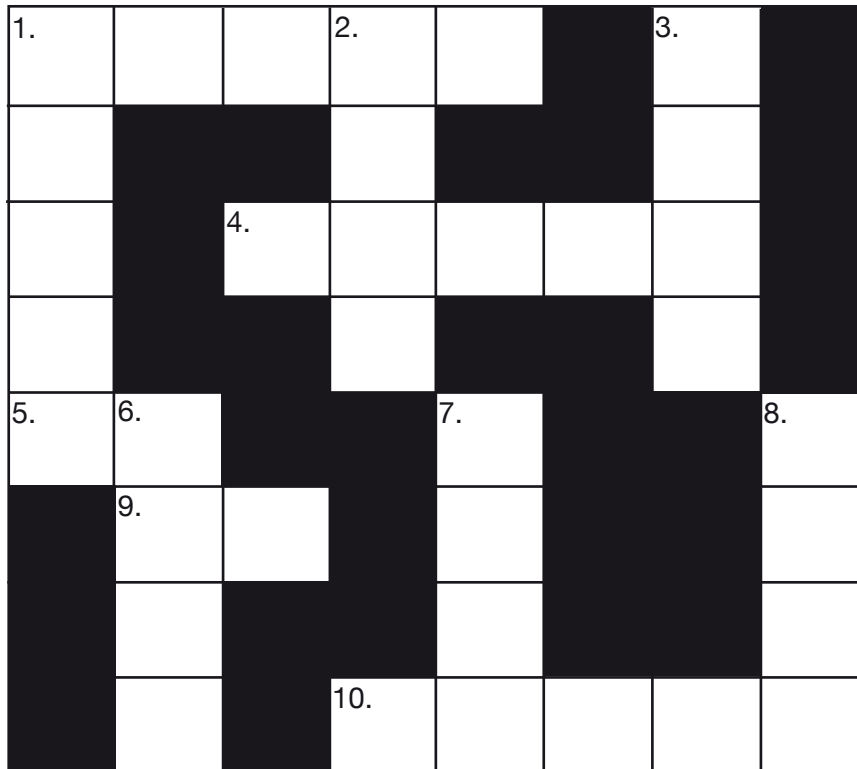
S L B g

E I O h



Calculator Fun!

Use your calculator to work out the answers to this simple 'Number crossword'. Each clue has a mathematical calculation to perform and a written clue to help you check your answer.



Work out the clues on your calculator, then turn it upside down to read off the answers!

Clues across

1. Double 17668 for these large duck-like birds
4. 14277×4 to tell you what water does at 100°C
5. Write two quarters as a decimal for this connective
9. The perimeter of a rectangle measuring 15.25cm by 10.25cm for this verb
10. $12345 + 44989$ for what you might find on the bottom of your shoes

Clues down

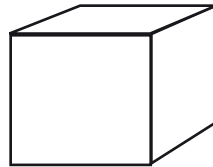
1. $105902 - 50826$ for a type of household paint
2. 609×5 for an item of footwear
3. 35.04×100 for something to water the garden with
6. $125 + 3521 + 1089 + 975$. Olive, engine and castor are all kinds of this.
7. Half of 7408 for something you might dig
8. $10000 - 4363$ for what you walk on.

Now try designing your own 'Calculator crossword'.

Painting Shapes

The task for the children is to look at the shape that stacks of cubes make and determine how many cubes have 'X' number of sides painted.

All the shapes on the homework sheet are made out of single cubes like this –



The children will have to work out how many little cubes will have five sides painted, four sides painted, three sides painted, two sides painted and one side painted.

Some children may prefer to build these shapes with building blocks in order to complete the task. The answers are as follows:

	No. of cubes with 5 sides painted	No. of cubes with 4 sides painted	No. of cubes with 3 sides painted	No. of cubes with 2 sides painted	No. of cubes with 1 side painted
Shape A	1	2	0	1	0
Shape B	0	4	0	0	1
Shape C	0	0	4	4	0
Shape D	1	4	0	4	0
Shape E	0	4	4	0	1
Shape F	0	0	4	12	9
Shape G	0	0	4	18	24

As an extension task for the more able, give a cost for painting one side of a cube. Then ask them to work out the total price for painting a shape.

For example, if it costs £5 to paint one side of a cube, how much would it cost to paint Shape A?

Shape A has 1 cube with 5 sides painted ($5 \times £5 = £25$)

Shape A has 2 cubes with 4 sides painted ($8 \times £5 = £40$)

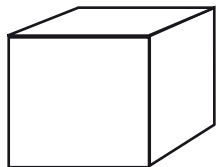
Shape A has 1 cube with 2 sides painted ($2 \times £5 = £10$)

Total cost for painting Shape A =

$$£25 + £40 + £10 = £75$$

Painting Shapes

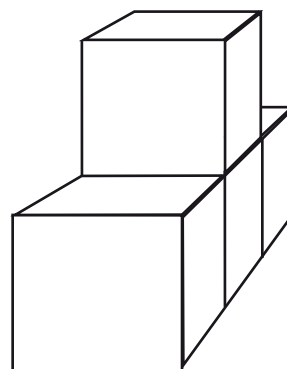
All the shapes on this sheet are made out of single cubes like this –



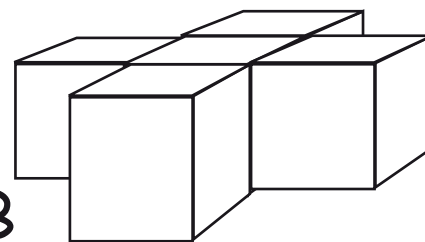
Imagine that the outside of the shape has to be painted.

Work out how many small cubes will have five sides painted, four sides painted, three sides painted, two sides painted and one side painted.

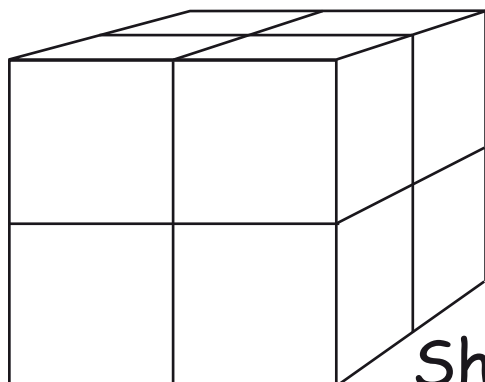
Record your findings on the table below.



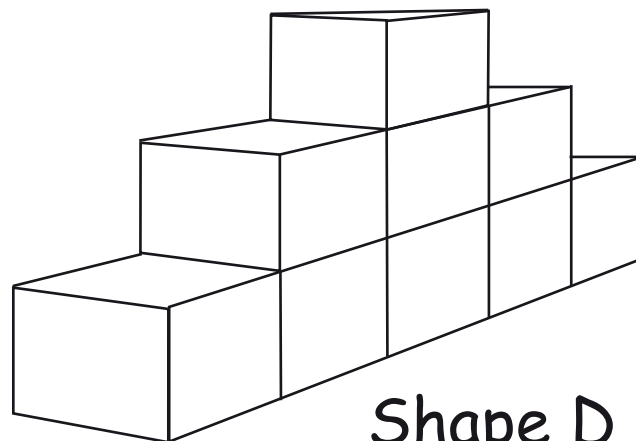
Shape A



Shape B



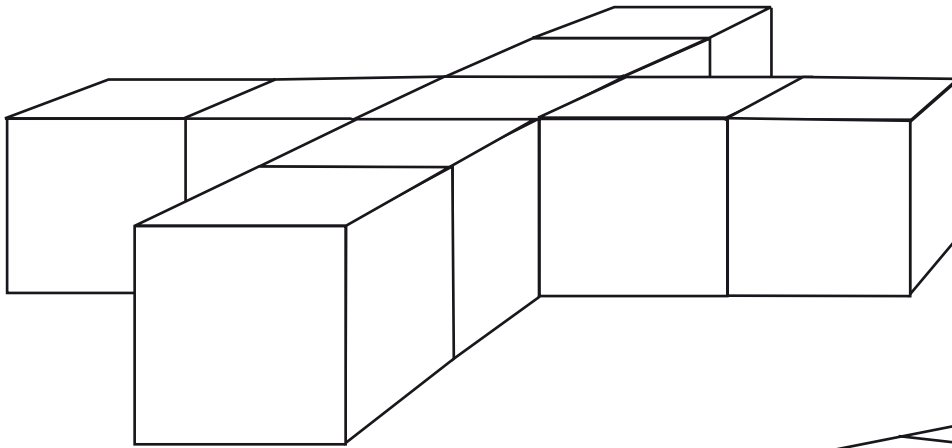
Shape C



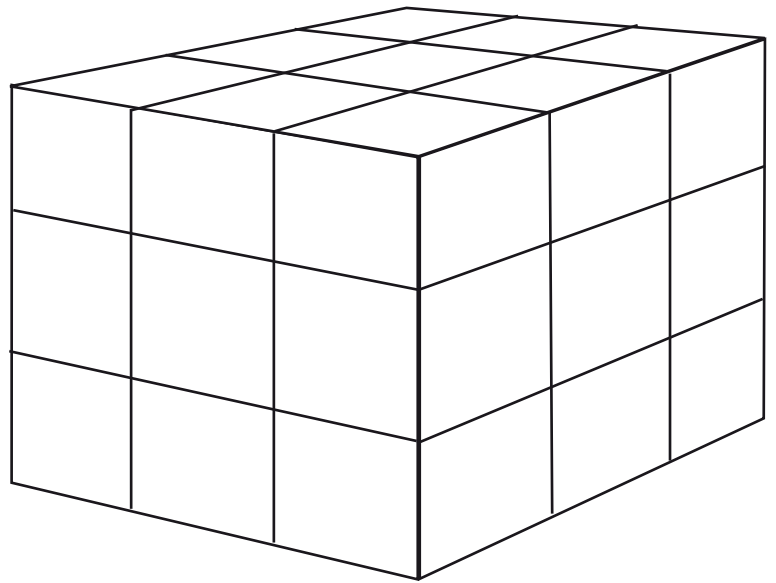
Shape D

	No. of cubes with 5 sides painted	No. of cubes with 4 sides painted	No. of cubes with 3 sides painted	No. of cubes with 2 sides painted	No. of cubes with 1 side painted
Shape A					
Shape B					
Shape C					
Shape D					
Shape E					
Shape F					
Shape G					

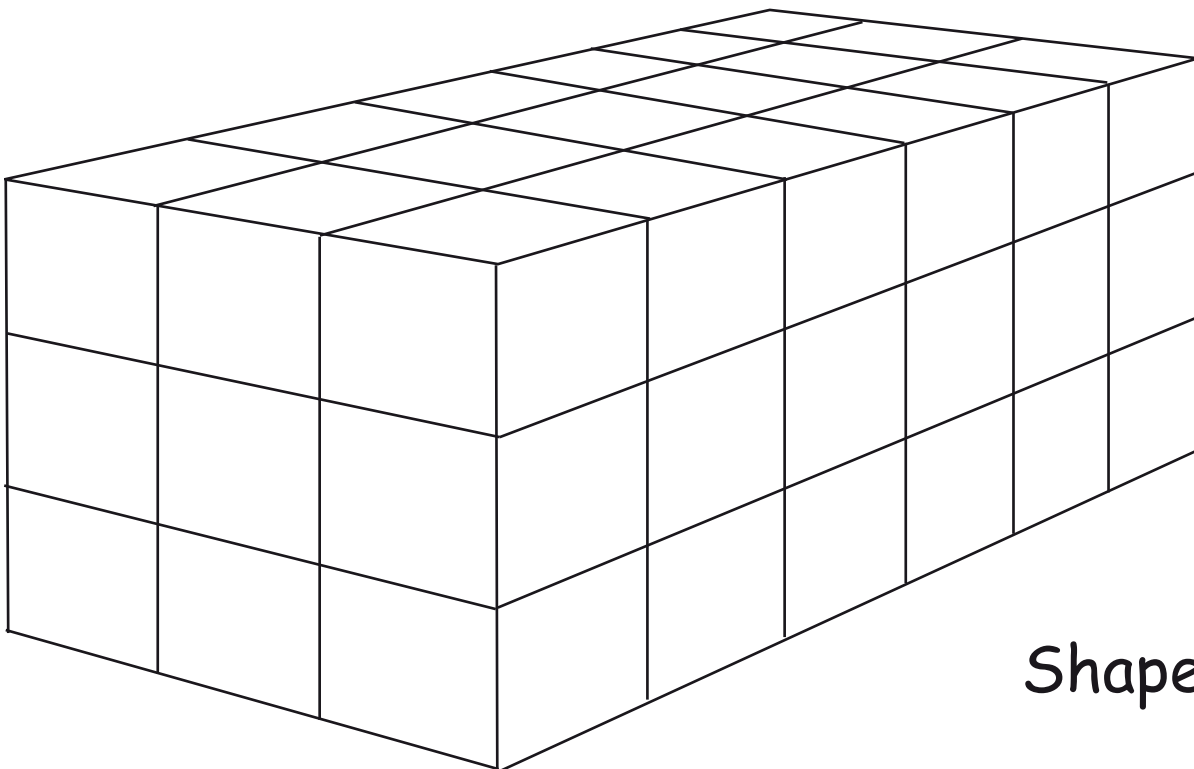
Painting Shapes



Shape E



Shape F



Shape G

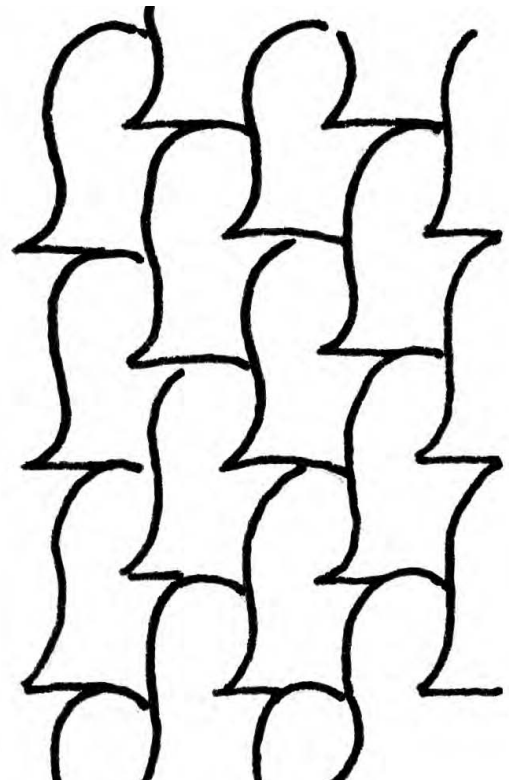
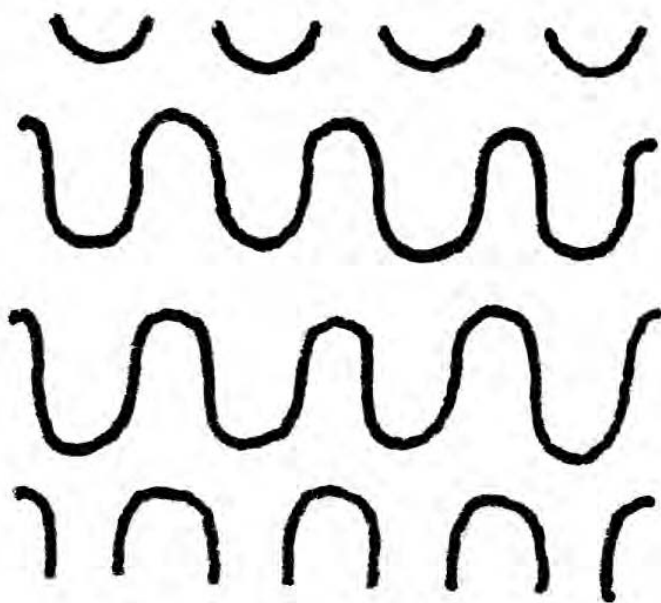
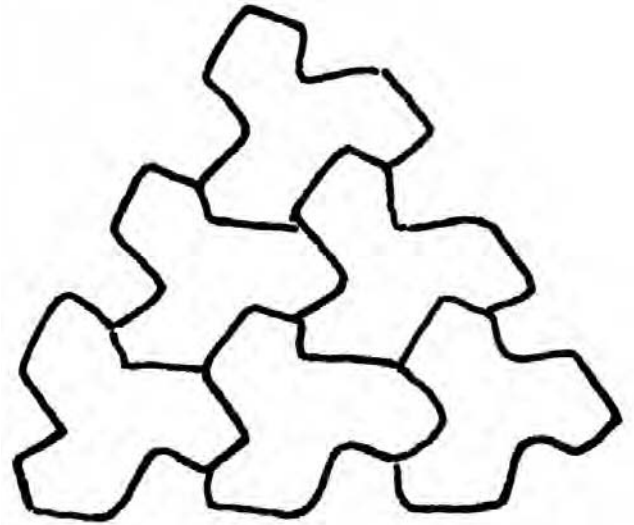
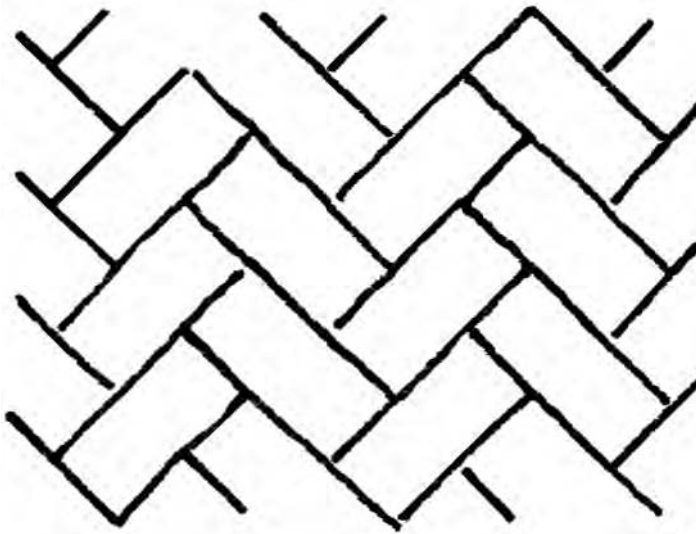
Tessellating Shapes

The task for the children is to learn about and design their own tessellating shapes.

Explain what a tessellating shape is. They can experiment and play with tessellating shapes online at www.mathcats.com/explore/tessellations/ocean.html or make your own tessellating shapes by following the instructions given on www.mathcats.com/explore/tessellations/howtotile.html.

The artist Escher used tessellating shapes extensively in his work. Find out more at www.tessellations.org/eschergallery1thumbs.htm

With a little practise the children can produce complex tessellations like these Egyptian designs:

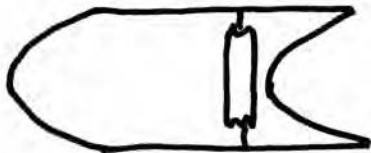


Tessellating Shapes

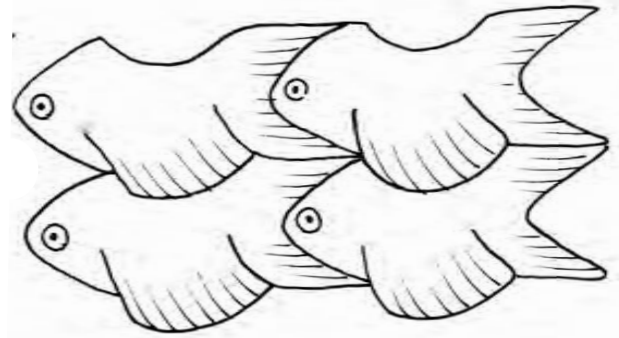
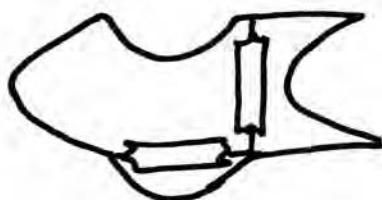
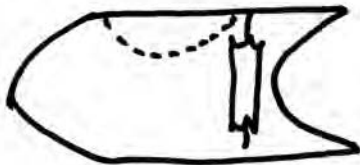
If a shape tessellates, it fits together exactly – like the tiles on the wall of your bathroom. Some simple shapes, like squares and rectangles, tessellate. It is also possible to create really complicated shapes that tessellate – like this fish!

Follow the instructions below and design your own tessellating fish shape!

1. Take a rectangular piece of paper. Cut a cone shape from one of the short sides and stick it to the opposite side to make the tail.



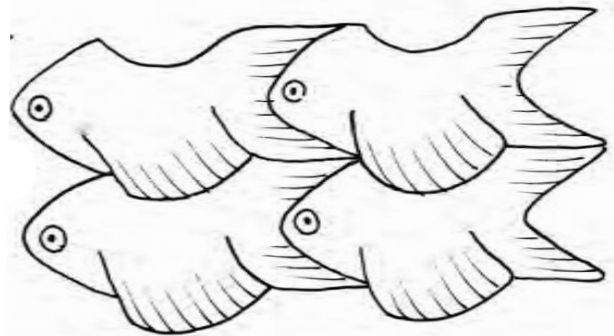
2. Cut a fin shape from the top and stick it to the bottom.



3. Use your shape as a stencil and draw around it. Fill in some detail.



4. Draw around your stencil to form a pattern



The trick with designing tessellating shapes is to start with a simple shape that tessellates already.

Whatever you cut away from one side needs to be added to the opposite side.

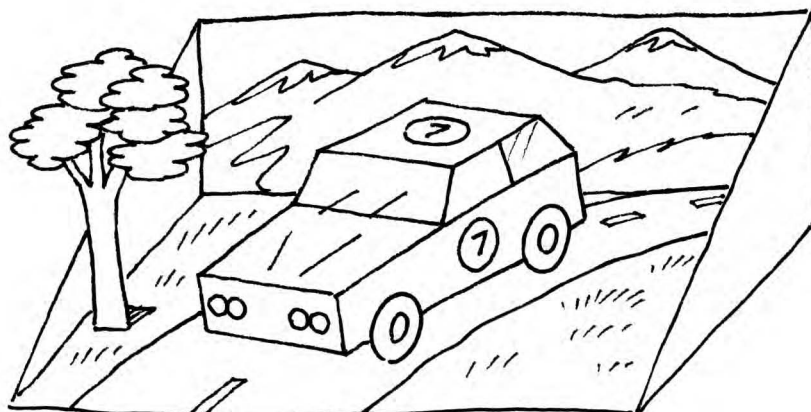
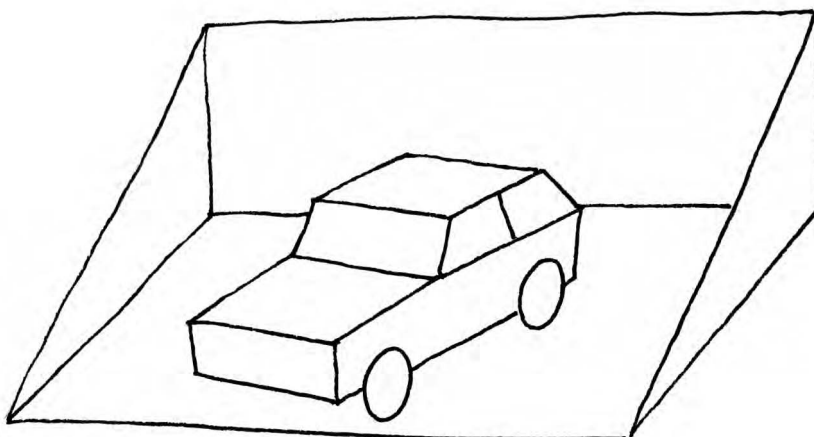
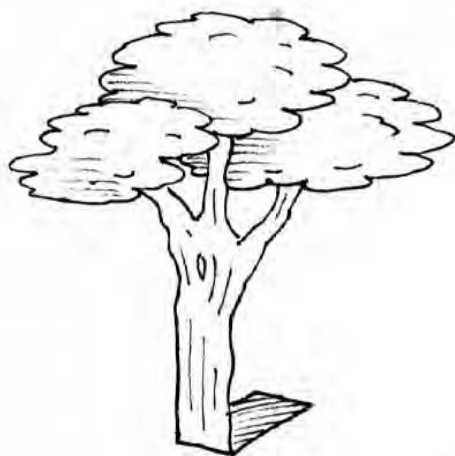
Design a 3-D Car!

Tell the children that they are going to build and customize their own 3-D car from the net drawn on the activity page. For an extension to this task, ask the children to create their own 'diorama' using their 3-D car.

For inspiration, create your own 'diorama' that features a car like the one below. Show it to them.

Cut open an old shoe box and position the model car inside. Decorate the box by adding props. It is possible to create a realistic 3-D miniature scene.

- Try drawing and painting a background and side panels
- Add a road or a track
- Use toy trees or animals
- Construct model buildings using Lego bricks
- Create figures and props from folded card and paper.



Design a 3-D Car!

Your task is to build and customize your own model car!

Cut out this simple net of a car. Score and fold all the dotted lines, then glue the flaps to construct the car.

Draw details like tyres, wheels, number plates, lights and a sunroof.

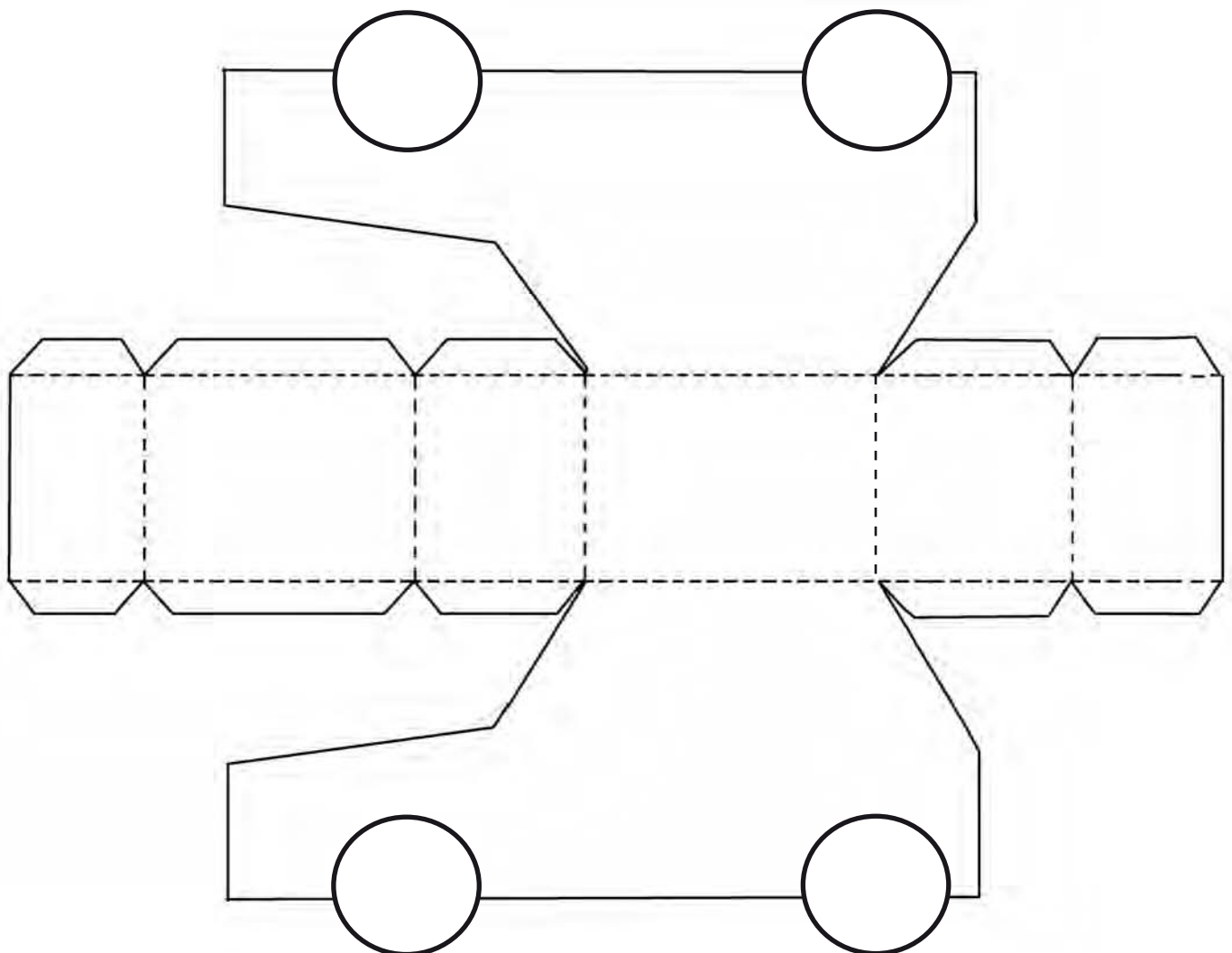
*What will your car be? A 4 x 4, a police car, a family saloon or even a futuristic vehicle?
What colour scheme will you give your car?*

What does your car look like inside? How will you show this?

Try adding extras like spoilers, wing mirrors, a roof rack, a spare wheel mounted on the back or even a surfboard on the roof!

Feeling adventurous?

Can you work out how to make opening doors, an opening bonnet or an opening boot?



Food Chains

The task for the children is to construct a food chain mobile from the resource sheets provided. They will have to look at the sheet and decide which order they will put things in, and which type of mobile to create.

The children have a choice of mobile to make – the food chain mobiles can be hung in different ways; hanging prey inside predators is a creative variation.

Talk about the food chain and explain how it is a necessary part of 'life'. Try giving more able children a specific habitat to create a food chain for. They would need to research animals that live in that habitat in order to produce their food chain. Try the following habitats: forest and woodland, Arctic tundra, desert river, ocean, grassland or human!



Food Chains

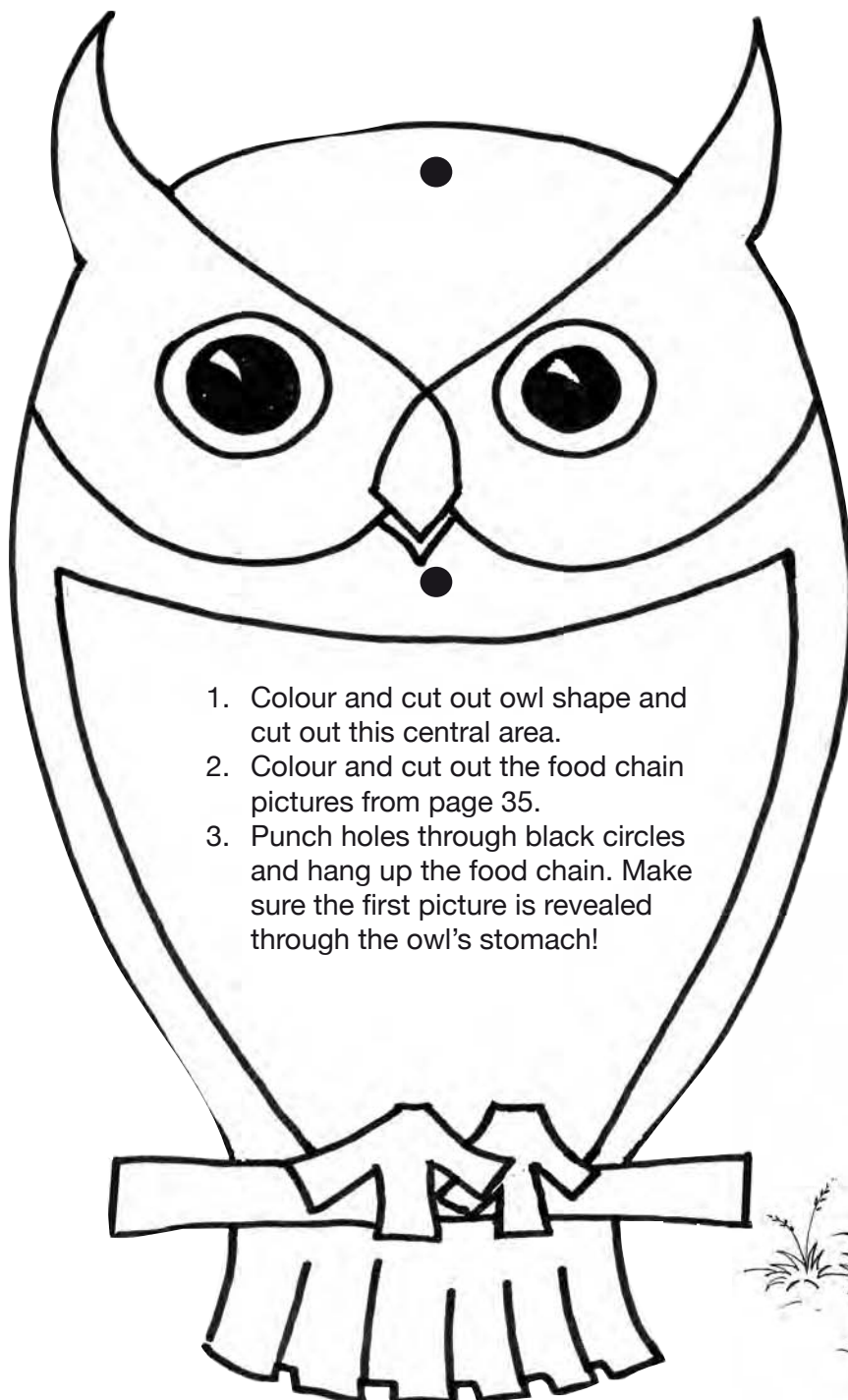
Make your own 'Food Chain' mobile. Colour and cut out the pictures on the resource sheet (page 35), decide which type of mobile you wish to create.

Punch holes through the black circles in the cards and thread through with string to create the mobile of your choice.

Why not draw some pictures of your own and add them to your mobile?

On the back of each picture write the appropriate scientific key words from the list below.

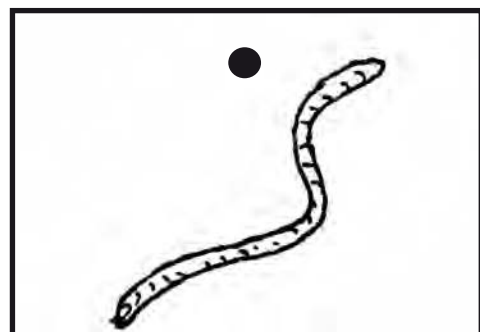
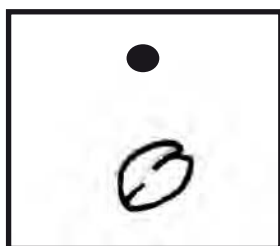
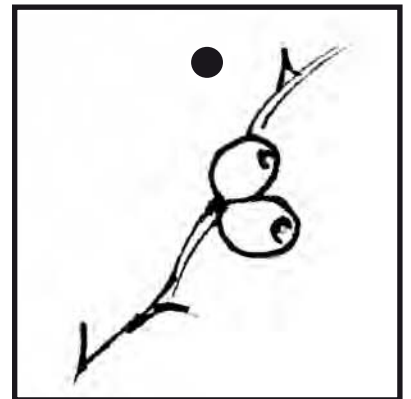
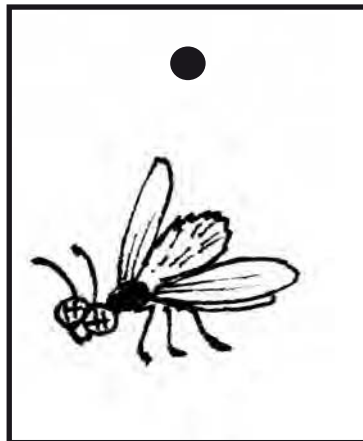
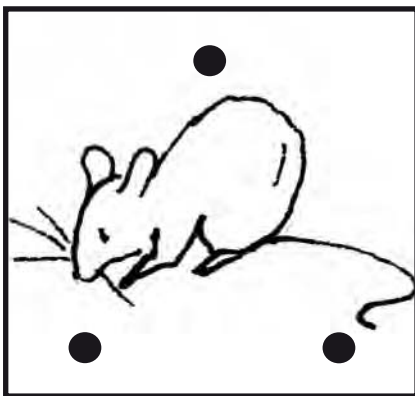
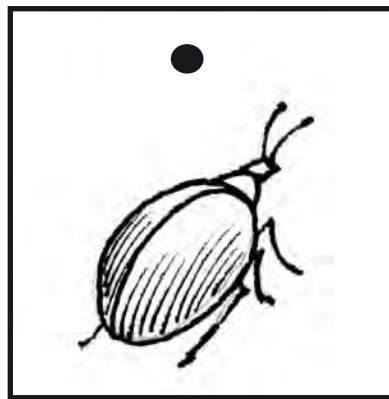
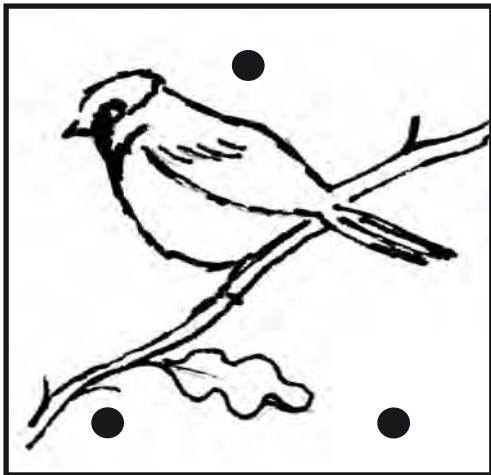
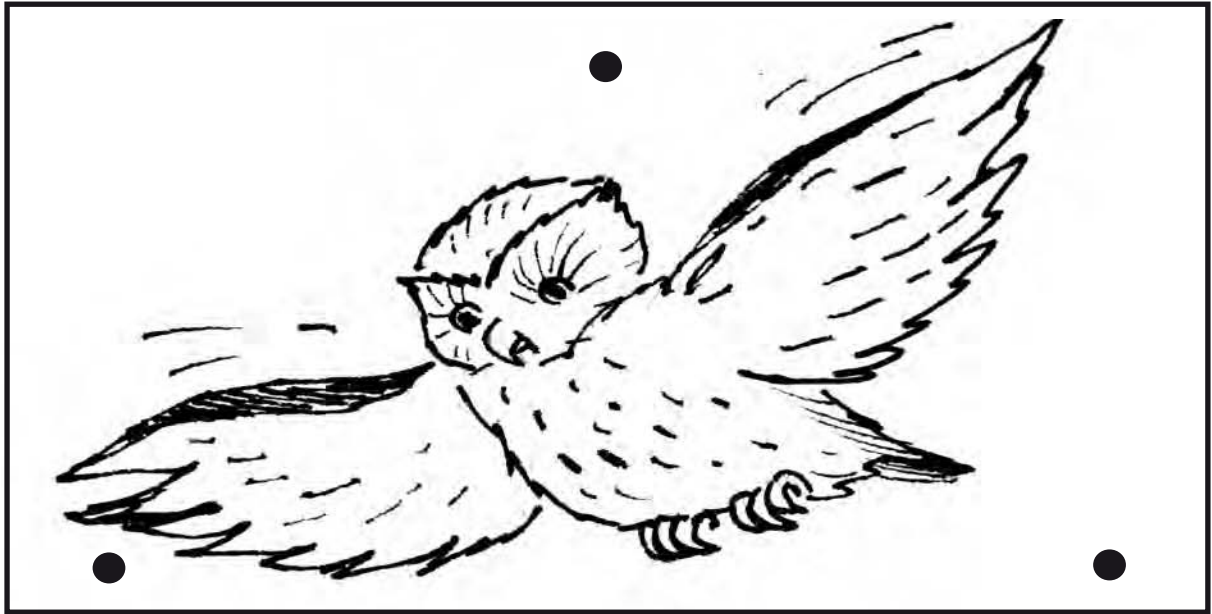
Predator
Prey
Carnivore
Herbivore
Omnivore
Consumer
Producer
Mammal
Bird
Insect
Seed
Mollusc
Green Plant
Warm-blooded
Cold-blooded
Vertebrate
Invertebrate



1. Colour and cut out owl shape and cut out this central area.
2. Colour and cut out the food chain pictures from page 35.
3. Punch holes through black circles and hang up the food chain. Make sure the first picture is revealed through the owl's stomach!



Food Chains



Fish Finger Collage

Teacher's
Notes

The children's task is to draw a simple line drawing of their chosen fish shape, showing fins and tails. They should then cut out the fingers and lay them overlapping, over the body to create a scaled effect. Fins and tails can be built up using whole fingers and even parts of the hand. Simply add an eye to finish.

The completed collages display well and look great in black and white.

Supply the children with several sheets of handprints. The children can produce their own handprints by using poster paint; although this is messy, it's great fun! But, if you think this is too messy, you could photocopy their hands in different positions – using the light/dark control to achieve the cleanest image. These images can be enlarged or reduced for variety. Alternatively, simply use the Hand Resource Sheet on page 39. A resource sheet showing different kinds of fish is also available on page 38.

You can photocopy the finished collages; these can be painted with inks, watercolours or brushed in order to create really colourful fish.

Try reducing and enlarging the fish collages to make a more interesting display.

Fish Finger Collage

Look at some pictures or photographs of different types of fish. (If you can't find any pictures yourself, your teacher will give you a resource sheet with some examples!)

Look at their varied shapes, textures and markings. What body features can you see?

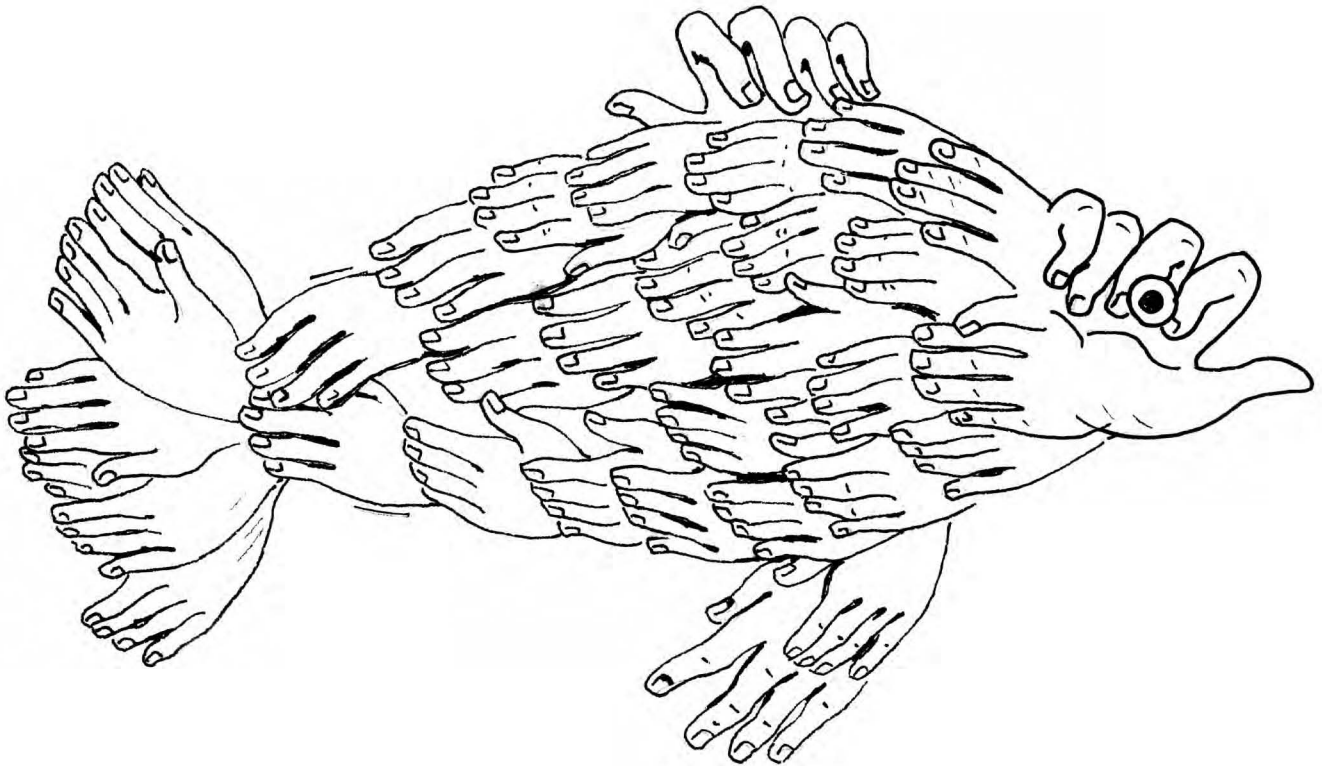
Sketch a simple fish shape onto your page. Make sure it has a body, a tail and fins running along the top and bottom.

Cut out fingers and hands and stick them down onto your fish design.

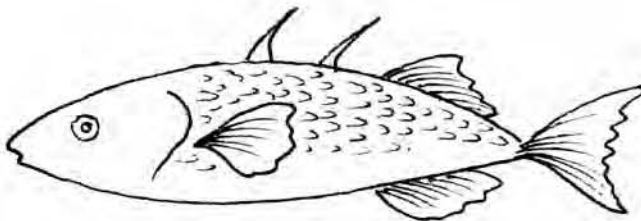
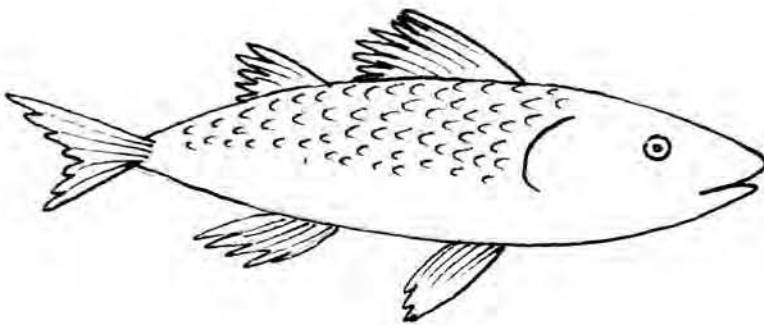
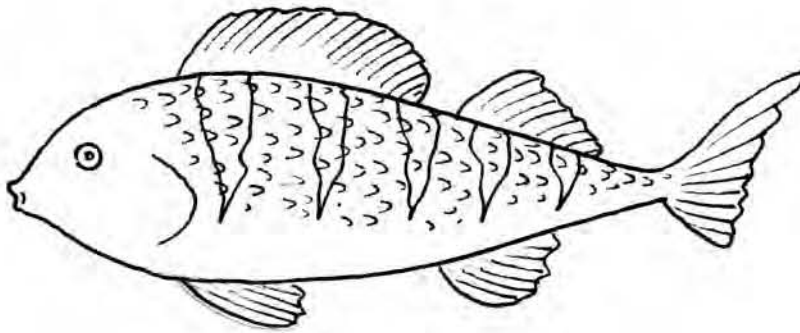
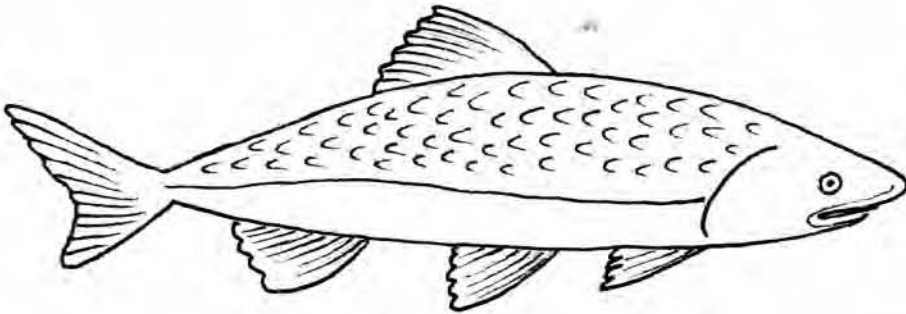
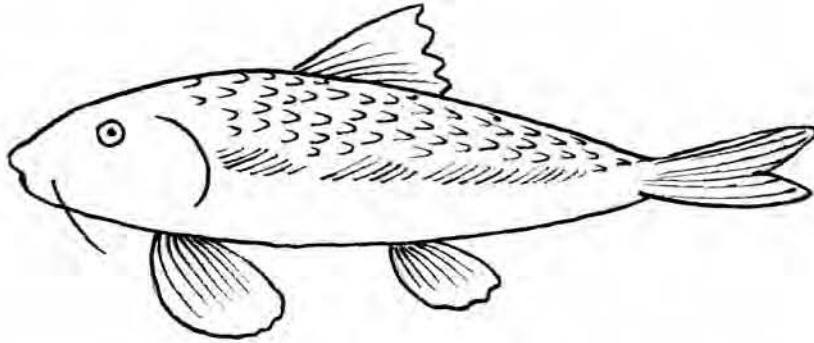
Use finger tips to look like scales – overlap them to give a more realistic look.

Build up the tails and fins by using whole fingers and even parts of the hand.

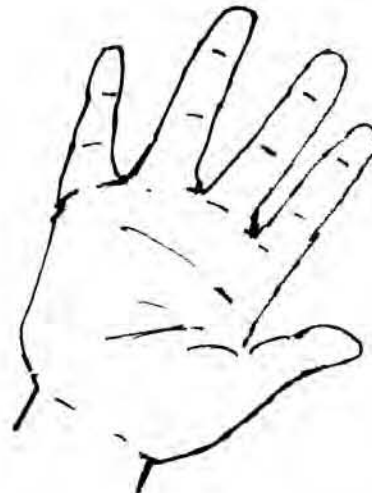
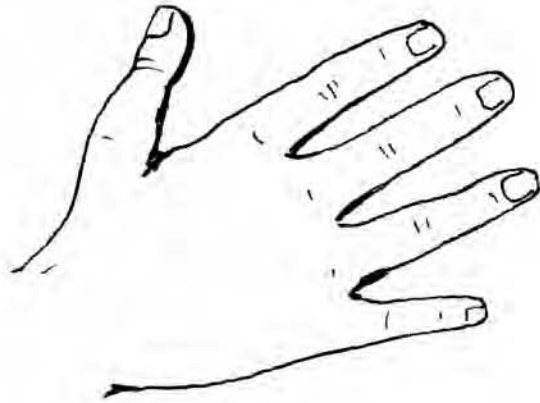
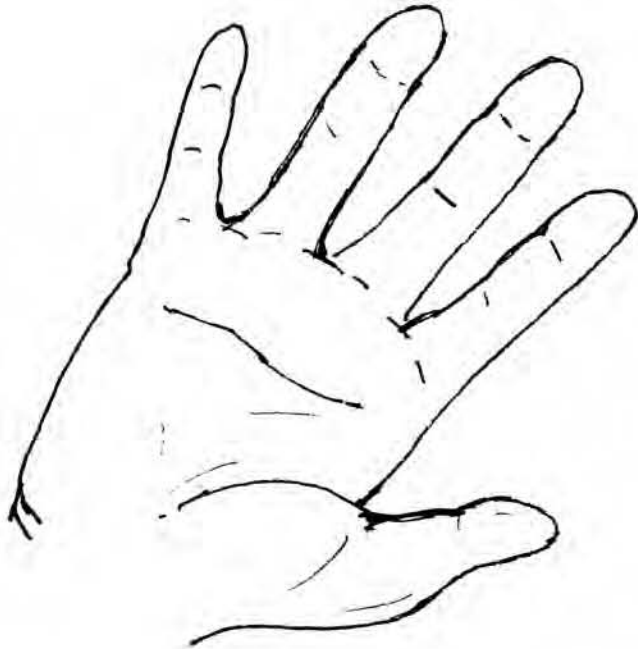
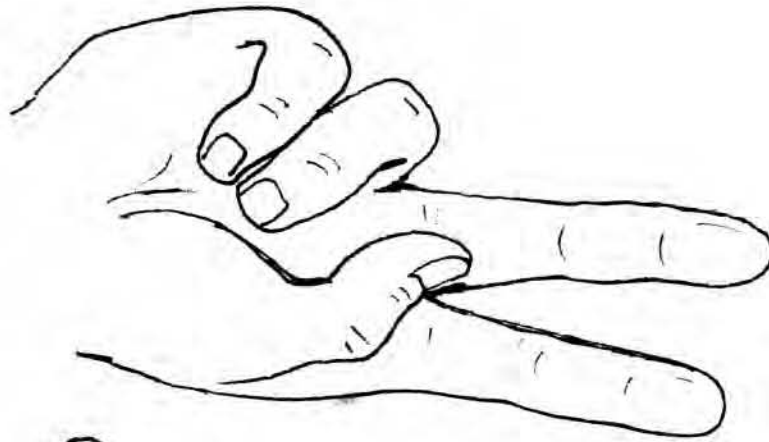
Stick on an eye shape to complete your **Fish Finger Collage**.



Fish Finger Collage



Fish Finger Collage



The task for the children is to imagine life on other planets!

Discuss with the children the idea of aliens, and other life forms living on other planets. Generate debate and ideas!

Even at present, life on planet Earth exists under the most un-life like conditions ... the deep ocean floor is home to much life, and even though the sunlight is unable to penetrate past 300 feet of water, life here still thrives. Many deep-sea creatures have luminescent features they use to attract prey!

Microscopic 'rock eating' bacteria have been found living in rock, miles beneath the Earth's crust, where no light or oxygen can penetrate. Some bacteria love heat; they are found in hot springs and can survive in temperatures well above 100°C!

Some bacteria can live in sulphuric acid; unbelievably some bacteria can live inside nuclear reactors!

Planets in our solar system: Fact File

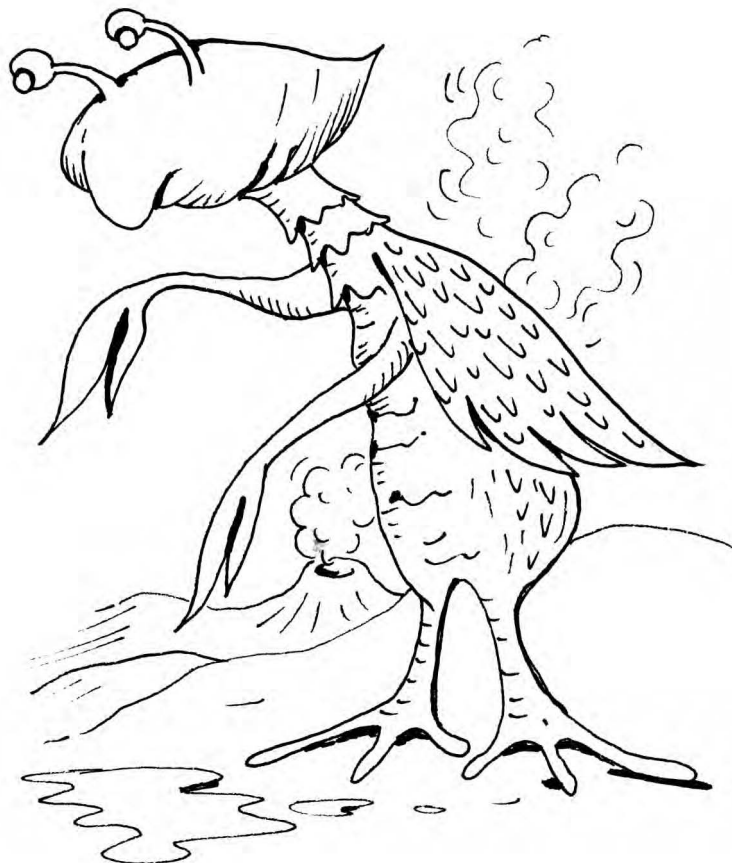
Use these facts to stimulate imaginations! (Facts are only given for the more interesting and appropriate planets!)

Mercury: Mercury is closest to the sun; it is a solid planet with a rocky surface and an iron core. During the day the temperature can be as high as 80°F and at night as low as -280°F. Mercury has a heavily cratered surface with a little ice at its north pole.

Venus: Venus is a solid planet, very similar to Earth in size. The surface is scattered with volcanoes that are still active. It is the hottest planet – the surface temperature is hot enough to melt lead! The atmosphere is mostly carbon dioxide, and is covered by thick clouds of sulphuric acid ... so not a great holiday destination!

Mars: Mars is another solid planet with many mountains and canyons. It was once covered in water; evidence of rivers, lakes and oceans can be seen on its surface. It is much colder than Earth (average temperature -55°C) and has vast dust storms that engulf the planet for months.

Jupiter: Jupiter is huge; its mass is 318 times greater than the Earth's. Jupiter is mostly gas, with a small core of liquid hydrogen and rocky material. It is very stormy and has lightning. Jupiter conducts electricity and has a magnetic field. The magnetic field is much greater than the Earth's. It is very windy on Jupiter with winds up to 400mph.



Aliens!

Could there be life on other planets?

If so – what might these life forms look like?

Imagine what life might exist on the planets in our solar system.

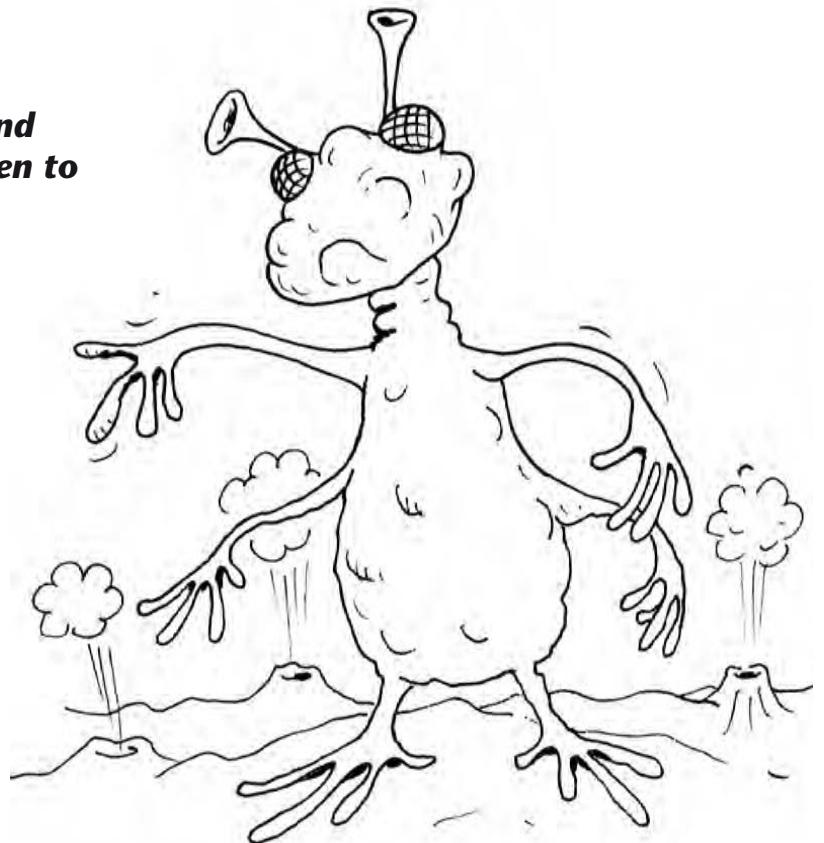
Venus is a solid planet like Earth. It is the hottest planet in the solar system with a deadly poisonous atmosphere. Its rocky, barren surface is covered by erupting volcanoes!

Jupiter is a massive planet which is mostly gas. It is very stormy with high winds and lightning. It does not have a solid surface like Earth.

Research some facts on a planet in our solar system. Imagine what an alien living on that planet might look like. How might it have had to adapt to its new environment?

Draw and label your ideas.

Label and explain any unusual and interesting features you have given to your alien life forms.



Mars Landing

The task for the children is to design and make a device for protecting a robot vehicle (in this case an egg) as it lands on Mars.

The choice of materials for this task should be left open – cardboard boxes, balloons, plastic bags, string, cotton wool, fabric, tape, glue etc.

It is unlikely that the children's first thoughts and designs will be successful. Stress that they will probably need to plan, build, test and then modify their decisions several times before it works!

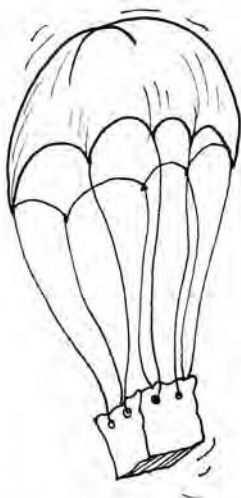
In school the teacher can organize a fair test to assess the decisions. It is more fun if the **eggs** in the real test are not hardboiled!

Hardboiled eggs do have an advantage. The same egg can be used for a number of trials, by marking off the cracks with a felt tipped pen you can tell which are old and which are new. The children can count the cracks after each unsuccessful trial.

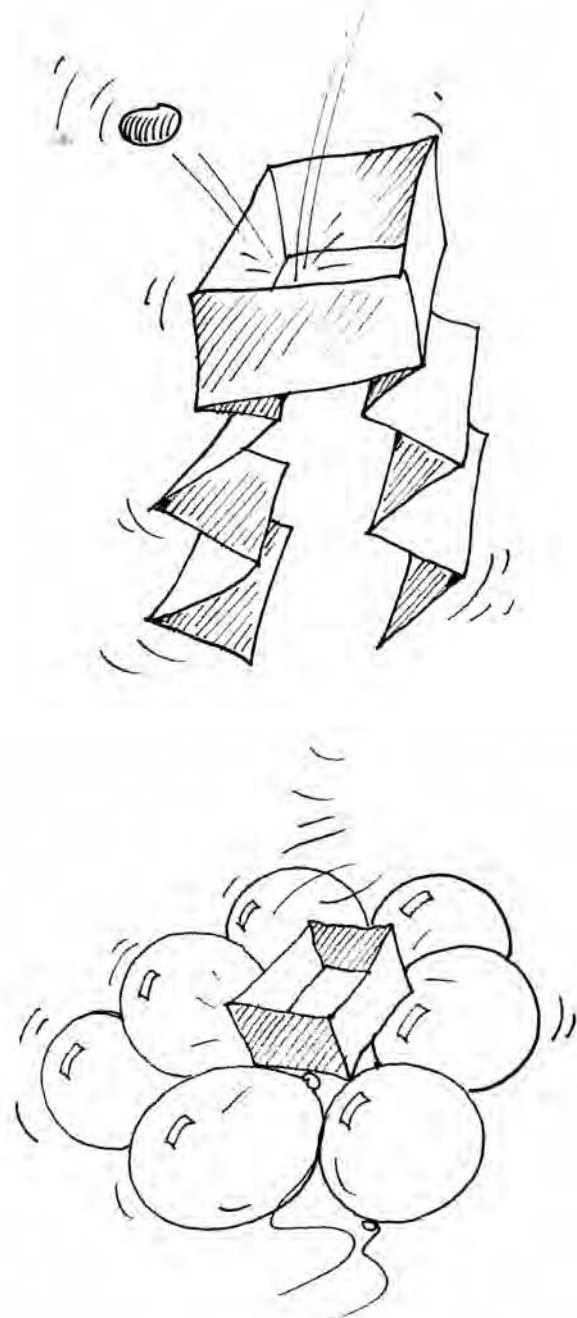
You may wish to brainstorm some ideas before the children begin to plan.

Cutting and folding paper into springs that will cushion the landing also works well. These designs tend to roll over on landing and the designers will have to bear this in mind.

Parachutes are a popular choice, although they can be unpredictable – they rarely give the same result twice!



The use of balloons to cushion landing works well – although the balloons must cover the whole of the Roamer as these designs tend to roll as well.



Mars Landing

On 25th December 2003, the UK-led 'Beagle 2' team tried to put a robot vehicle on the surface of the planet Mars. It was designed to search for signs of life.

However, disaster struck and the robot vehicle crashed on landing and was unable to transmit any data back to Earth.

The robot vehicle was protected by heat resistant panels. As it neared the planet, a main parachute opened that slowed it down. When it was 200 metres above the surface of Mars, three large airbags inflated to protect the robot vehicle on landing.

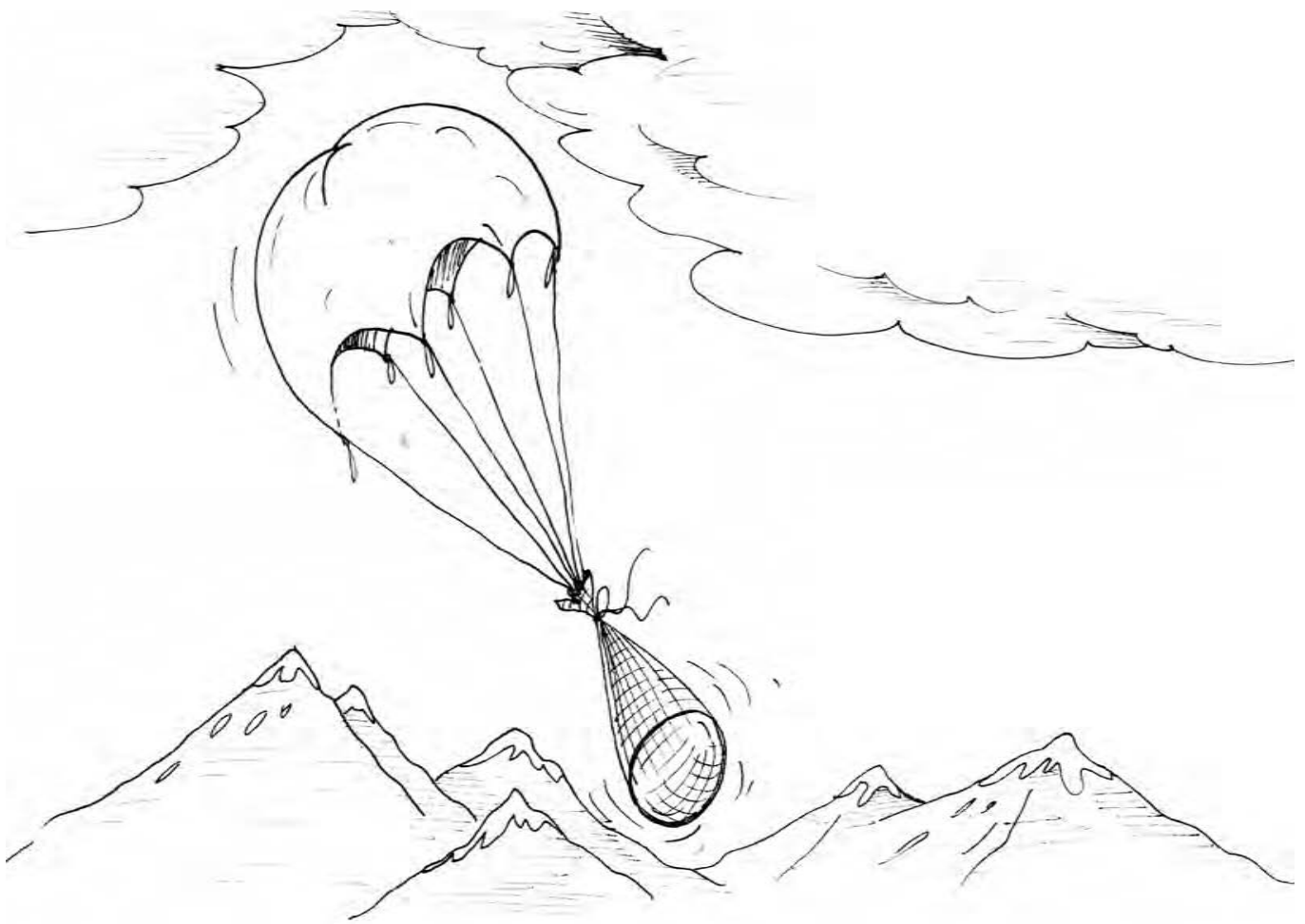
Something went wrong ... but what?

Your task is to design and make a device for protecting a robot vehicle as it lands on Mars.

Unfortunately, robot vehicles are very expensive and you will have to make do with a hard boiled egg! Like a real robot vehicle, it is small and very fragile.

Use junk materials of your choice that will protect your egg when it is dropped from a height!

Bring your egg and landing device into school. Your teacher will help you organize a fair test in order to see whose Mars Lander is the most effective!



The children's task is to design secret 'spy kit' gadgets to help them in their mission!

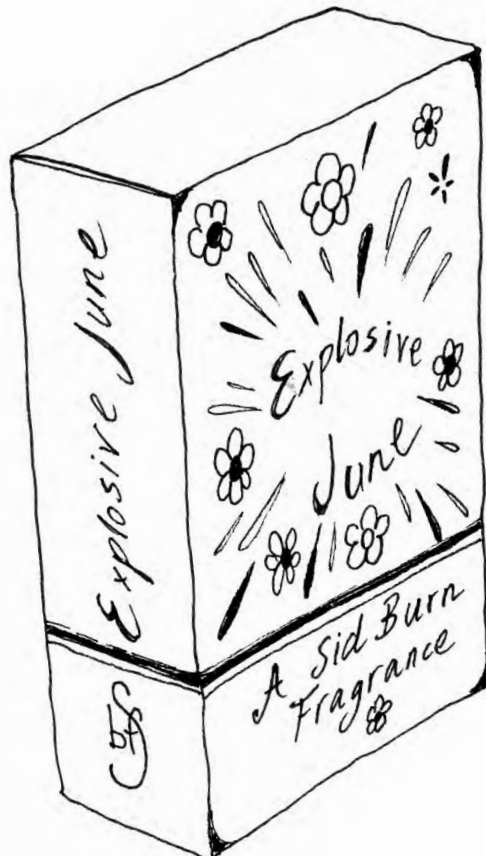
Introduce 'The Mission' and collaborate in naming TV spy films/cartoons (James Bond, Mission Impossible, Spy Kids, Agent Cody Banks, and Danger Mouse and Penfold – the cartoon). The children's task is to invent and design their own 'Spy Kit'. Talk about items that might be include in a spy kit:

- A bottle of perfume** Spray into the face of an enemy and it knocks them out instantly!
- A tube of hair gel** This acts as a super-strength glue, useful for slowing enemies down!
- Lipstick** One application of this lipstick will make the wearer tell the truth. Great for extracting secrets from tight-lipped agents!
- Dental floss** This is actually super-strong thread which can be used for tying up enemy agents or to help you make quick exits from tall buildings!
- Mascara** Simply apply this mascara to your eyes and you will have x-ray vision!

Would they include anything different? What would their inventions be?

It's worth looking at the Alex Rider books by Anthony Horowitz. This teenage spy will appeal to the children – he uses loads of gadgets!

There is a book devoted to his gadgets - Alex Rider: The Gadgets and a web site at www.alexrider.com/Alexs-World/Gadgets/Viewer. (**Please note:** in order to view more than two gadgets on this site, users will need to give their names and email addresses.)



Spy Kit

Imagine you are a top spy for MI5 – just like James Bond!

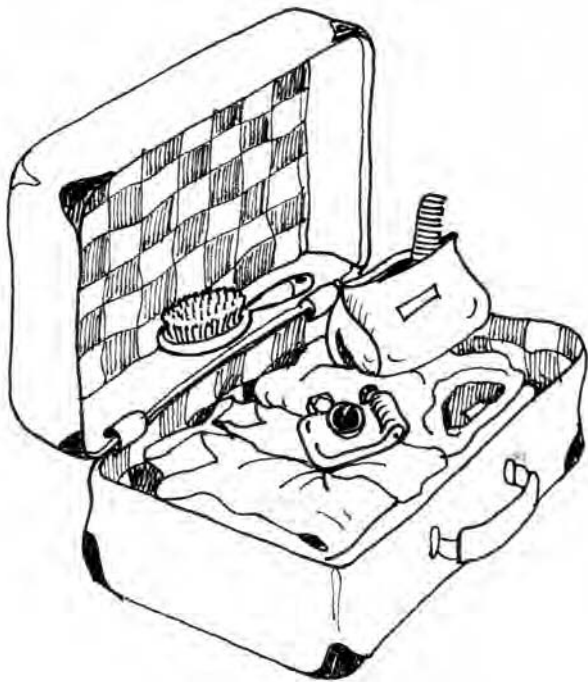
You have been asked to carry out a dangerous mission in another country. You will need to pack a suitcase with all the gadgets you will need.

What gadgets will you need to pack?

What gadgets do you think a spy might need?

- a camera?
- a gun?
- a disguise?
- explosives?
- a voice recorder?
- 'bugging' equipment?
- a tracking device?

However, your gadgets will need to be disguised as harmless everyday objects. If your suitcase is opened and checked at the airport it is vital that nothing inside it arouses suspicion.



Design your own spy kit – draw and label your inventions and say how they are disguised and how they will work!



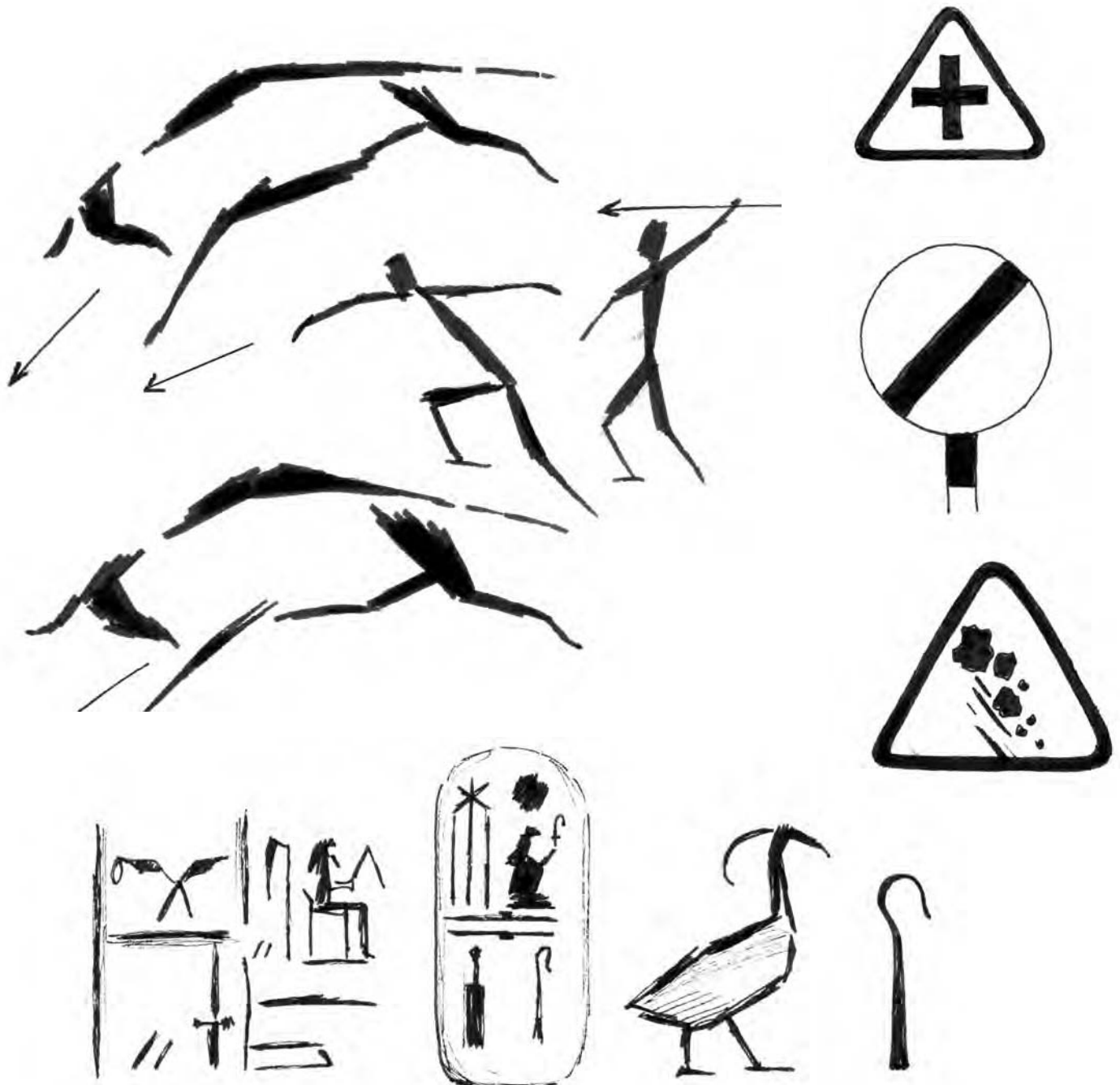
Symbolism

The task for the children is to use and invent symbols that will tell a story about themselves.

Introduce the concept of symbols and briefly talk about the history of symbols from prehistoric man and his cave paintings to Egyptian hieroglyphs to the use of symbols today in our everyday life.

There are a great number of paintings and pieces of art that contain symbolism. Many of these examples are religious works and need explaining with care and sensitivity. A safe place to introduce and explore symbolism in art is at the Tate website: www.tate.org.uk/kids. Here you can find an interactive game based on symbols in artwork by Picasso, Caulfield and Hirst, to name a few. Choose *Game* and then *Memento Mori*.

As an extension, explore the Egyptian alphabet – hieroglyphics; to write your own name in the ancient script see www.eyelid.co.uk.



Symbolism

Using Symbols in Art

For hundreds of years artists have used symbols in their paintings and drawings.

Symbols can be used to represent anything – objects, people, feelings and emotions.

For example, a skull might be a symbol of death!

Or Fire might be a symbol of anger.

A tree to symbolize new life.

A heart to symbolize love.

Bird in flight to symbolize freedom.

A white dove to symbolize peace.

The sun to symbolize happiness.

The sun rising on the horizon to symbolize a new day.

A whirlpool to symbolize confusion.

A brick wall to symbolize Secrets.

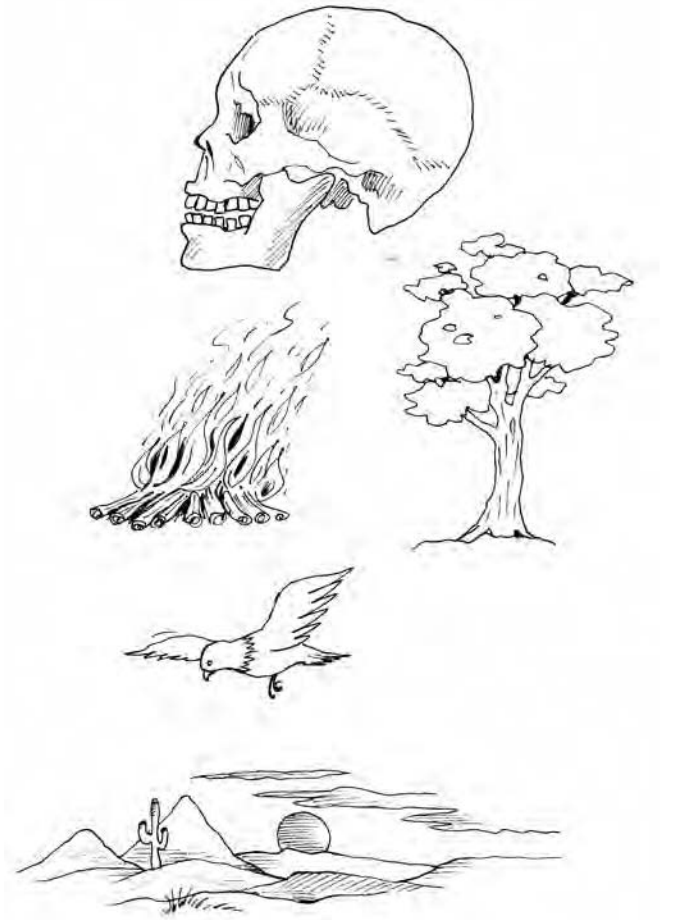
What might you draw to symbolize:

Your home?

Your mother?

A feeling of joy?

A favourite birthday present?



Symbolism

Symbols can be used to tell a story, choose from the symbols below, and redraw them in the appropriate boxes to tell the story.

1 My Mum told me she was going to have a baby.

2 I didn't want a baby brother or sister and I was angry!

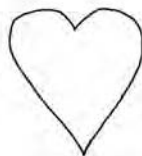
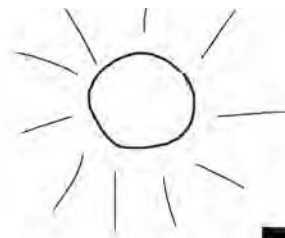
3 One day my Mum felt ill and was rushed into hospital.

4 I was very upset and cried a lot.

5 A nurse led my Dad and me into a room. My Mum was OK and had a baby in her arms. We were so happy!

6 My little brother is great and I love him a lot!

7 Now we play together every day.



Your task is to use symbols to create a piece of artwork to tell a story about you. Think of a time in your life when you were really happy, sad or angry.

Don't forget to use colour! Remember, that some colours can be symbolic too.

Looking Down

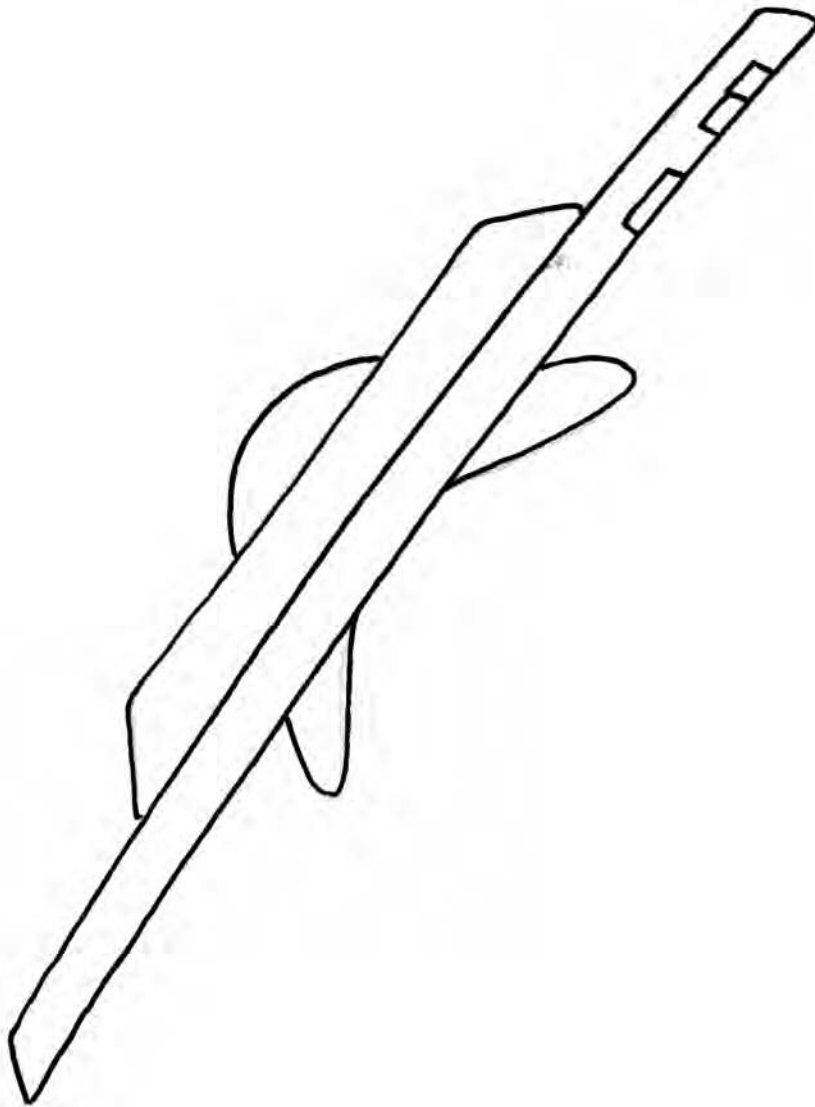
The task for the children is to observe everyday objects from directly above.

This activity challenges children to look at everyday objects in a different way. Many of us sit in front of the TV each night, but how many would recognize the TV from another angle, looking down?

Sketching this example on the board is a great way of introducing this activity.

Why not challenge a group of children to take looking down photographs around school with a digital camera. With a little guidance they could organize a guessing game for their classmates.

Once the homework task has been completed, photocopy a selection of the children's looking down illustrations and challenge the class to identify the objects shown in the drawings!

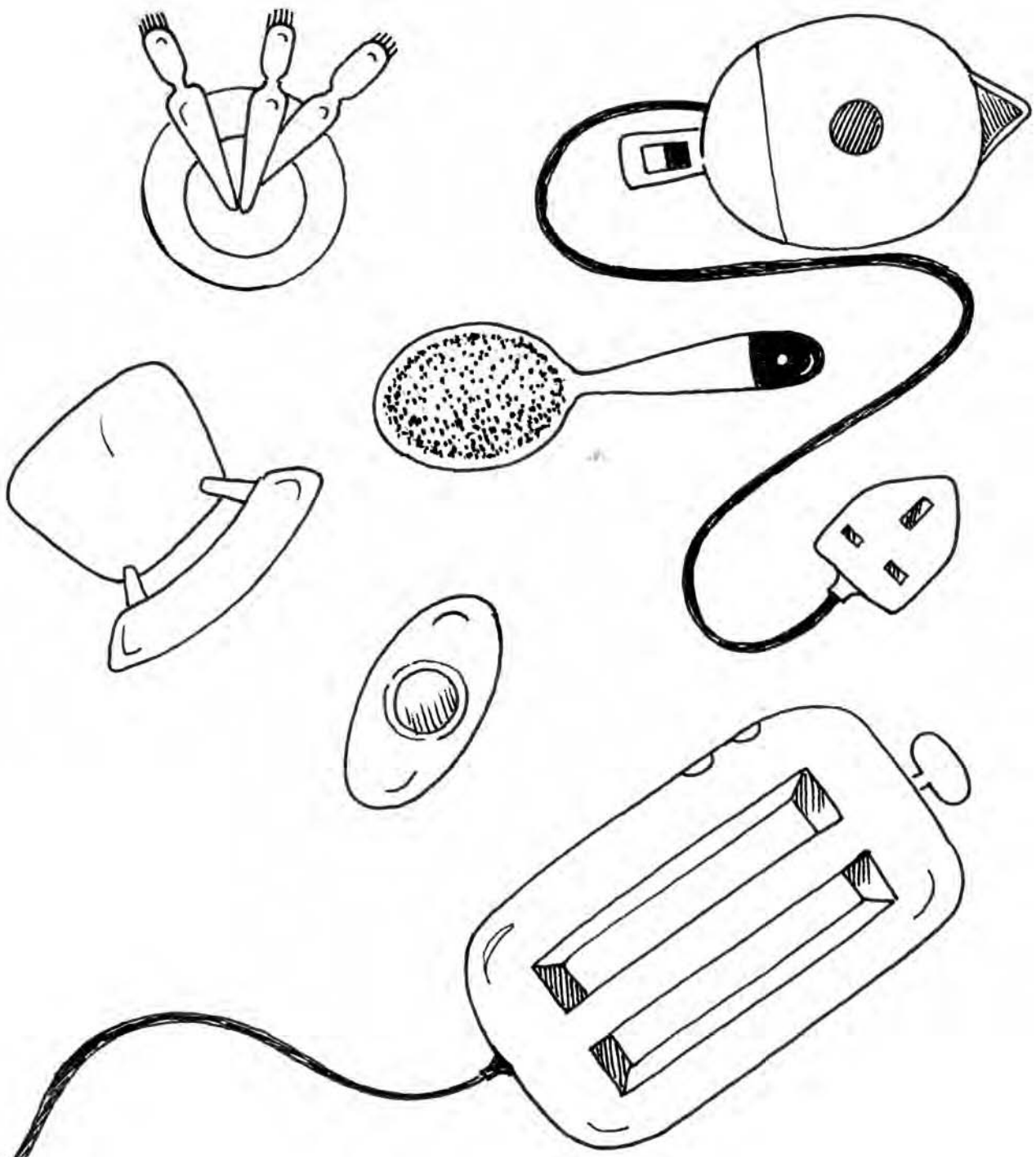


Looking Down

Find some everyday objects in and around your home. Try looking at them from different angles. Do they look different?

Try drawing the object from another angle. Don't forget to label each drawing saying what it is and from which view.

Select a few of these items and make a number of sketches in your sketchbook looking from directly above.



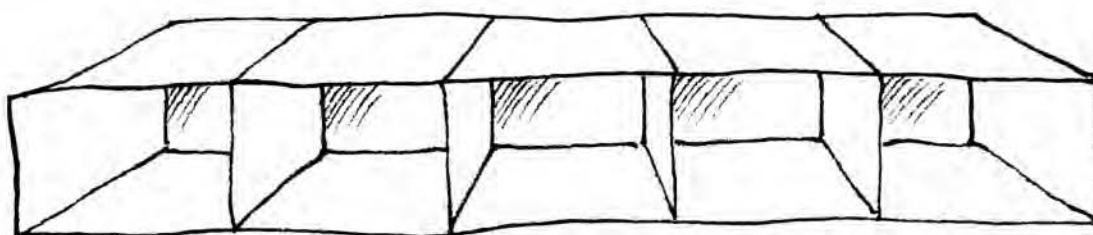
3-D Scene in a Box

The task is to design and make a 3-D scene in a box.

Let children choose their own theme for their 3-D Scene in a Box. Or try giving the whole class the same theme, for example an underwater kingdom. Then the 3-D boxes can be stuck together to produce a group panoramic scene. These group pieces can display beautifully and have greater visual impact than individual pieces.

Extension/variation

Challenge the children to design and make a 3-D Scene in a Box of a view in your own school. In preparation for the task, the children could make sketches around school and plan what to include in their background, middle ground and foreground.



3-D Scene in a Box

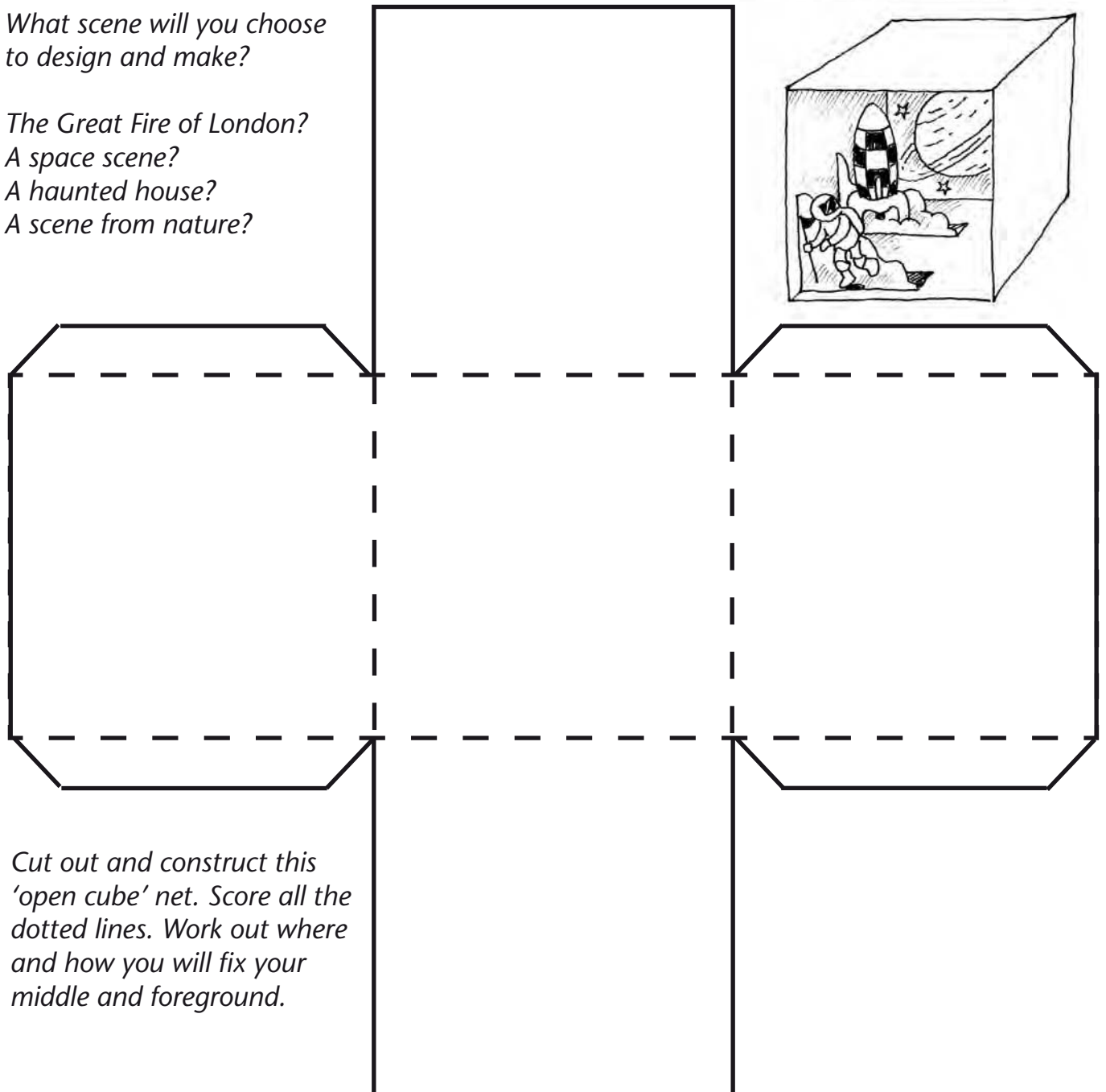
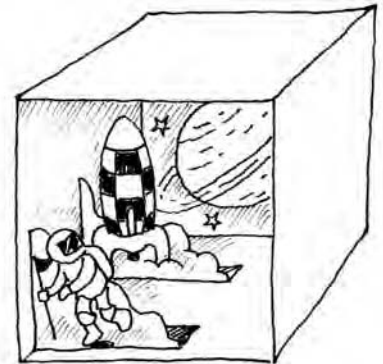
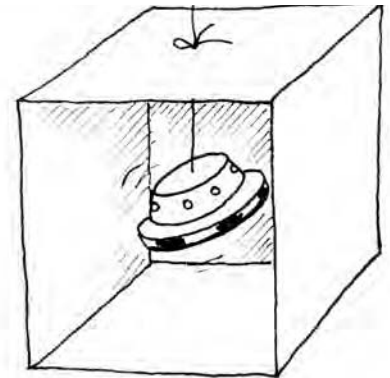
Cut out and construct the **Viking Invaders** 3-D scene in a box. Note how the scene looks more three dimensional because it has a background, middle ground and a foreground.

For added effect, use a length of cotton to suspend items/objects in the air.

Your task is to design and make a 3-D scene in a box of your own. Your design will need to include a background, middle ground and a foreground. For added realism, draw in the details on the sides of the cube too.

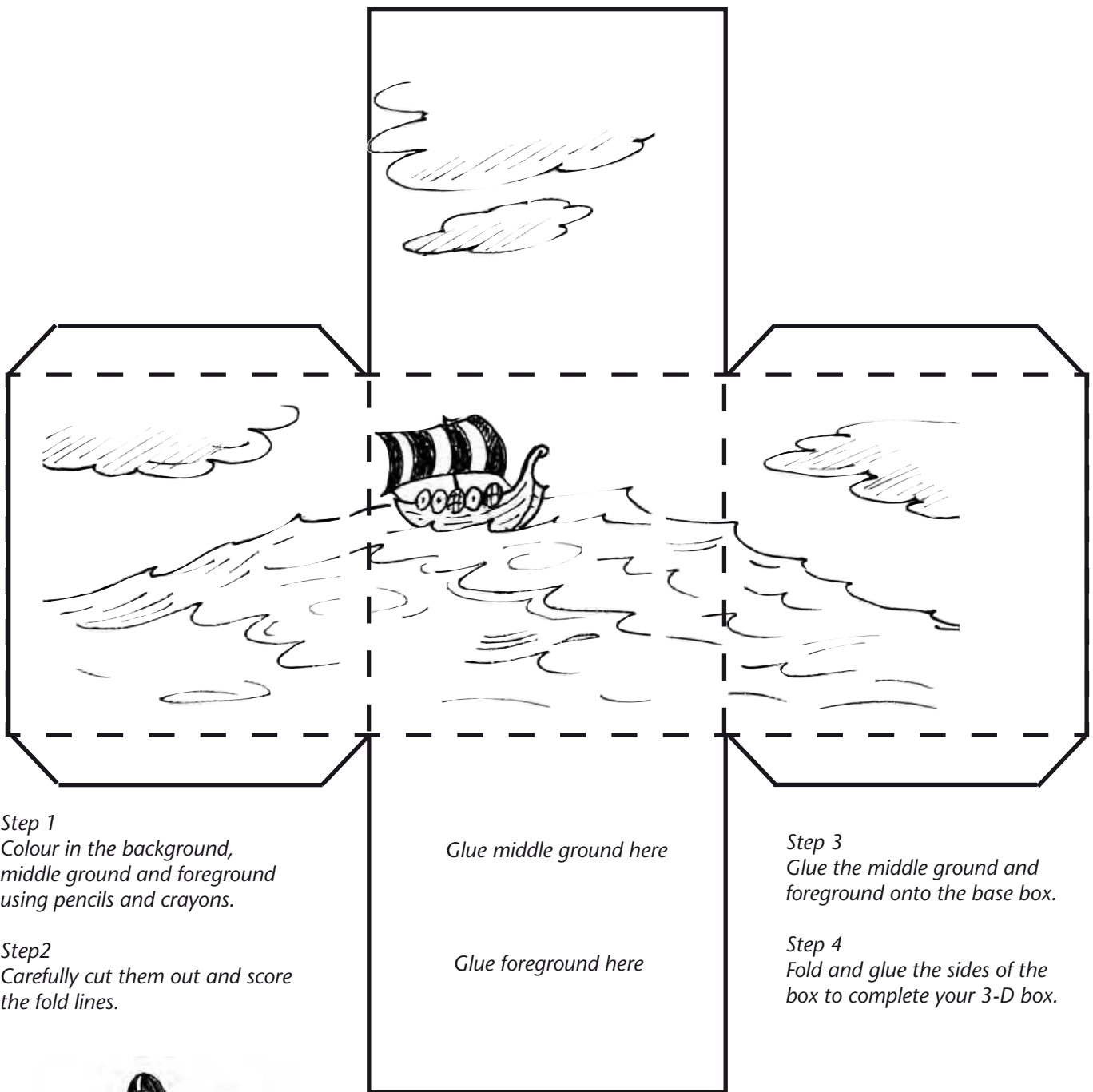
What scene will you choose to design and make?

- The Great Fire of London?
- A space scene?
- A haunted house?
- A scene from nature?



Cut out and construct this 'open cube' net. Score all the dotted lines. Work out where and how you will fix your middle and foreground.

3-D Scene in a Box



Step 1
Colour in the background,
middle ground and foreground
using pencils and crayons.

Step 2
Carefully cut them out and score
the fold lines.

Glue middle ground here

Glue foreground here

Step 3
Glue the middle ground and
foreground onto the base box.

Step 4
Fold and glue the sides of the
box to complete your 3-D box.



Foreground
Fold and glue to bottom of box.



Middle ground
Fold and glue to bottom of box.

The task is to design and plan out an ideal garden that meets the needs of the whole family.

Designing gardens on more than one level can lead to problems with sketching out the designs. Keeping the garden on one level is advisable.

Some children might prefer being given a plan view of the house that shows the site of the garden. You could label details of the house such as where the French windows are, which rooms look out over the garden or what the neighbours are like – these considerations might form aspects of their design.

Many children will benefit from seeing some garden designs sketched out by professional artists. There are plenty available on the Internet. Try looking at the designs on **www.suzienicholsdesign.co.uk**.

If the children choose to include features like a tree house or garden sculpture, they may wish to sketch these separately in the margins of their design sheet as drawing an aerial view of objects like these can be quite complicated.

Green Garden

Meet the Green family! They want you to design the ideal garden for them that will meet all their needs.

Dad
Age: 43
Occupation: firefighter
Dad loves the outdoors and DIY. He likes to keep busy at the weekends doing jobs around the house.

Mum
Age: 39
Occupation: florist
Mum is a keen cook and likes to use organic food in her recipes. She loves the sun and reading books.



Danny
Age: 11
Danny is mad about sport. Football is his favourite and he likes to invite his friends around to play sports together.

Lucy
Age: 3
Lucy is a bundle of energy. Mum needs eyes in the back of her head to keep track of Lucy! She loves nature and all animals.

The Greens have just moved into a new house. The house has a huge open space for a garden. **Your task is to draw and label a plan for their new garden.** Try to ensure that the garden has something for everyone in the family.

Things to Think About:

Lawned Areas
BBQ
Decking
Fruit
Potted Plants

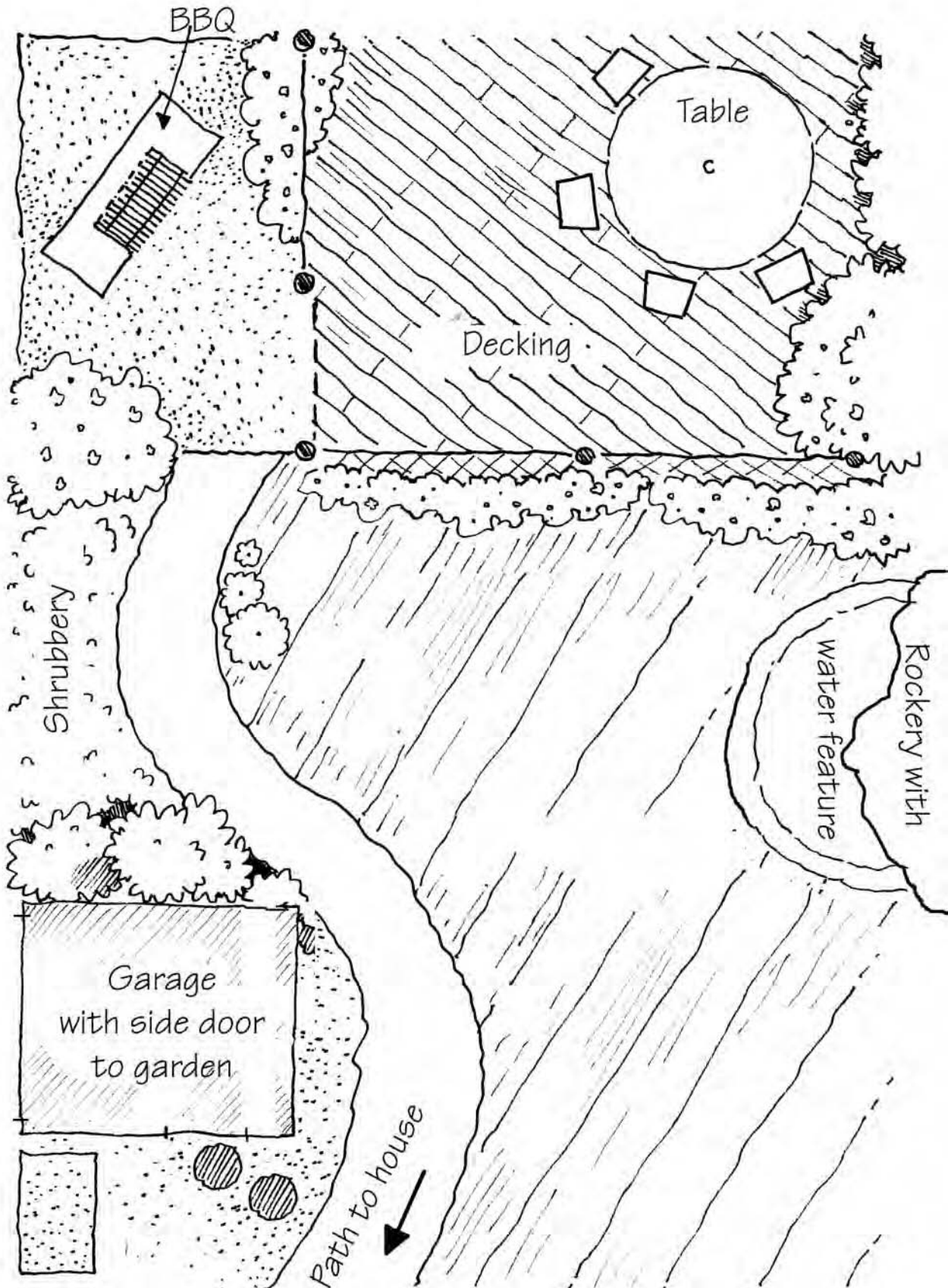
Tables
Paving
Shaded areas
Fencing
Vegetables

Gravel areas
Seating
Trees
Ponds
Hedges

Water features
Flowers
Sheds
Bushes
Paths

Green Garden

Here is a drawing of a garden plan. Look at the way it has been drawn and how the different features have been labelled. Remember to include things for all the family when designing your garden!



Have a class discussion about ways in which people can disguise themselves.

The 15 ways in which Shirley Combs can disguise herself are:

Hat	Hat & beard	Hat, glasses & beard
Glasses	Hat & moustache	Hat, glasses & moustache
Beard	Glasses & beard	Hat, beard & moustache
Moustache	Glasses & moustache	Glasses, beard & moustache
Hat & glasses	Beard & moustache	Hat, glasses, beard & moustache

If she couldn't see out of the glasses, she can disguise herself in 7 ways:

Hat	Hat & beard	Hat, beard & moustache
Beard	Hat & moustache	
Moustache	Beard & moustache	

If the hat didn't fit she could only manage 3 disguises:

Beard	Moustache	Beard & moustache
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If she bought a wig, 30 disguises would be possible:

- | | | |
|---------------------|------------------------------|--|
| 1. Hat | 11. Glasses & moustache | 21. Hat, moustache & wig |
| 2. Glasses | 12. Glasses & wig | 22. Glasses, beard & moustache |
| 3. Beard | 13. Beard & moustache | 23. Glasses, beard & wig |
| 4. Moustache | 14. Beard & wig | 24. Glasses, moustache & wig |
| 5. Wig | 15. Moustache & wig | 25. Beard, moustache & wig |
| 6. Hat & glasses | 16. Hat, glasses & beard | 26. Hat, glasses, beard & moustache |
| 7. Hat & beard | 17. Hat, glasses & moustache | 27. Hat, glasses, beard & wig |
| 8. Hat & moustache | 18. Hat, glasses & wig | 28. Hat, beard, moustache & wig |
| 9. Hat & wig | 19. Hat, beard & moustache | 29. Glasses, beard, moustache & wig |
| 10. Glasses & beard | 20. Hat, beard & wig | 30. Hat, glasses, beard, moustache & wig |

Extension ideas:

- Dress up in class
- Bring in objects
- Have an identity parade

Disguises

Shirley Combs, the great female detective, is working on a case and needs to disguise herself as a man.

She has cut her hair short, but she thinks that she needs to disguise herself further.

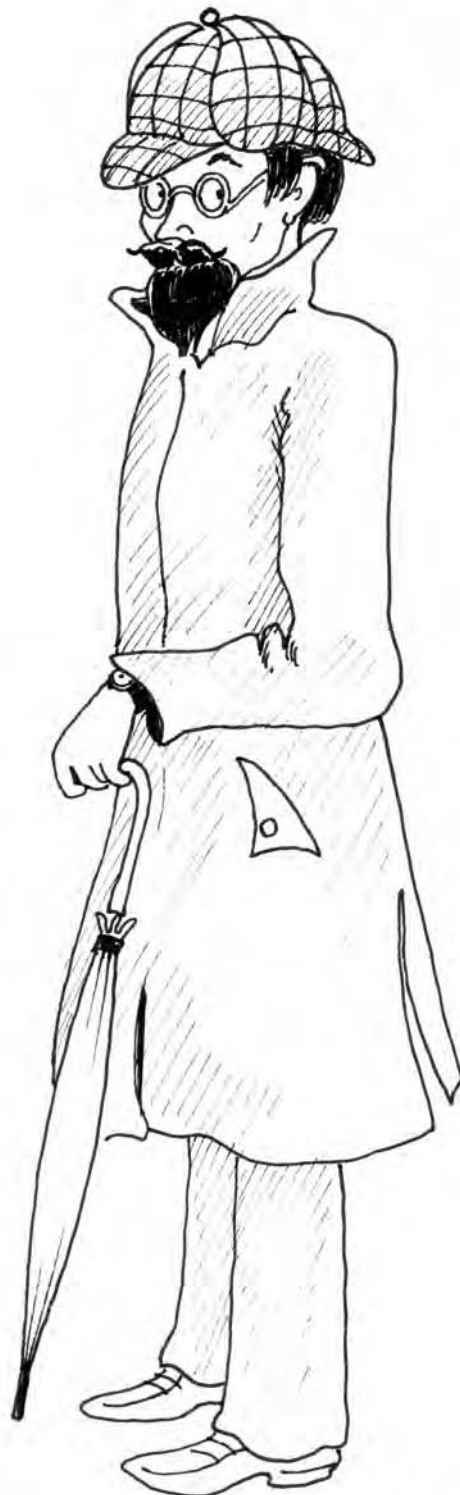
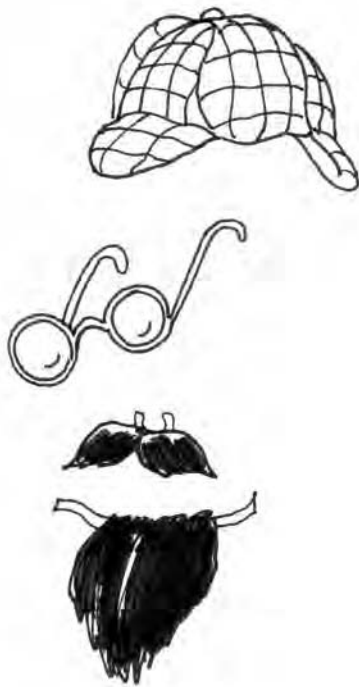
In her disguise kit, she has:

Hat

Moustache

Beard

Glasses



She thinks that she can disguise herself with these, and is trying to decide which is best.

For example, she could use:

Hat & glasses

Beard

Glasses, beard & moustache

Can you make a list of all the ways in which Shirley can disguise herself?

Suppose that Shirley can't see out of the glasses and can't use them. How many ways can she disguise herself then? What happens if the hat doesn't fit either?

If Shirley bought a wig, how many disguises could she have altogether then?

Coats of Arms

Discuss the concept of 'Coats of Arms' and tell the children that their task is to design their own 'Coats of Arms'.

At www.digiserve.com/heraldry/symbols.htm you can find a more extensive list of symbols and meanings found in heraldry and coats of arms.

If you want to design your coats of arms on a computer, you can find free Clipart for heraldry at www.heraldicclipart.com/catalog/index1.html.

Find the coat of arms for your surname at www.houseofnames.com.

Most of the coats of arms are made up of a shield, a crest, supporters and a motto.

This is the coat of arms for the city of Birmingham, many of the colours, pictures and symbols relate to the city's medieval origins. What do you think the badge tells us about the city of Birmingham?



Coats of Arms

For hundreds of years, many countries, cities, towns and families have devised a coat of arms (or badge) that they use to represent themselves. These coats of arms contain symbols, colours and pictures that tell us something about that country, city or family.

Most of the coats of arms are made up of a shield, a crest, supporters and a motto.

This is the coat of arms for the city of Birmingham, many of the colours, pictures and symbols relate to the city's medieval origins. What do you think the badge tells us about the city of Birmingham?

Shield

Always at the centre of the coat of arms

Motto

The motto is shown at the bottom of the badge in a scroll

Crest

The top section of the badge

Supporters

Figures standing at the sides of the badge

Over the years many rules and traditions have been established for coats of arms. Here are some examples that you might find useful.

Yellow or gold –

Means you are generous

Blue –

Means you are loyal and trustworthy

White or silver –

Represents peace and sincerity

Lion –

Means you are courageous

Dolphin –

Means you are kind and affectionate to children

Lamb –

Means you are gentle and patient

Spider –

Means you are wise and a hard worker

Pen –

Means you are well-educated and intelligent

Cushions –

These are symbols of authority

Leg or foot –

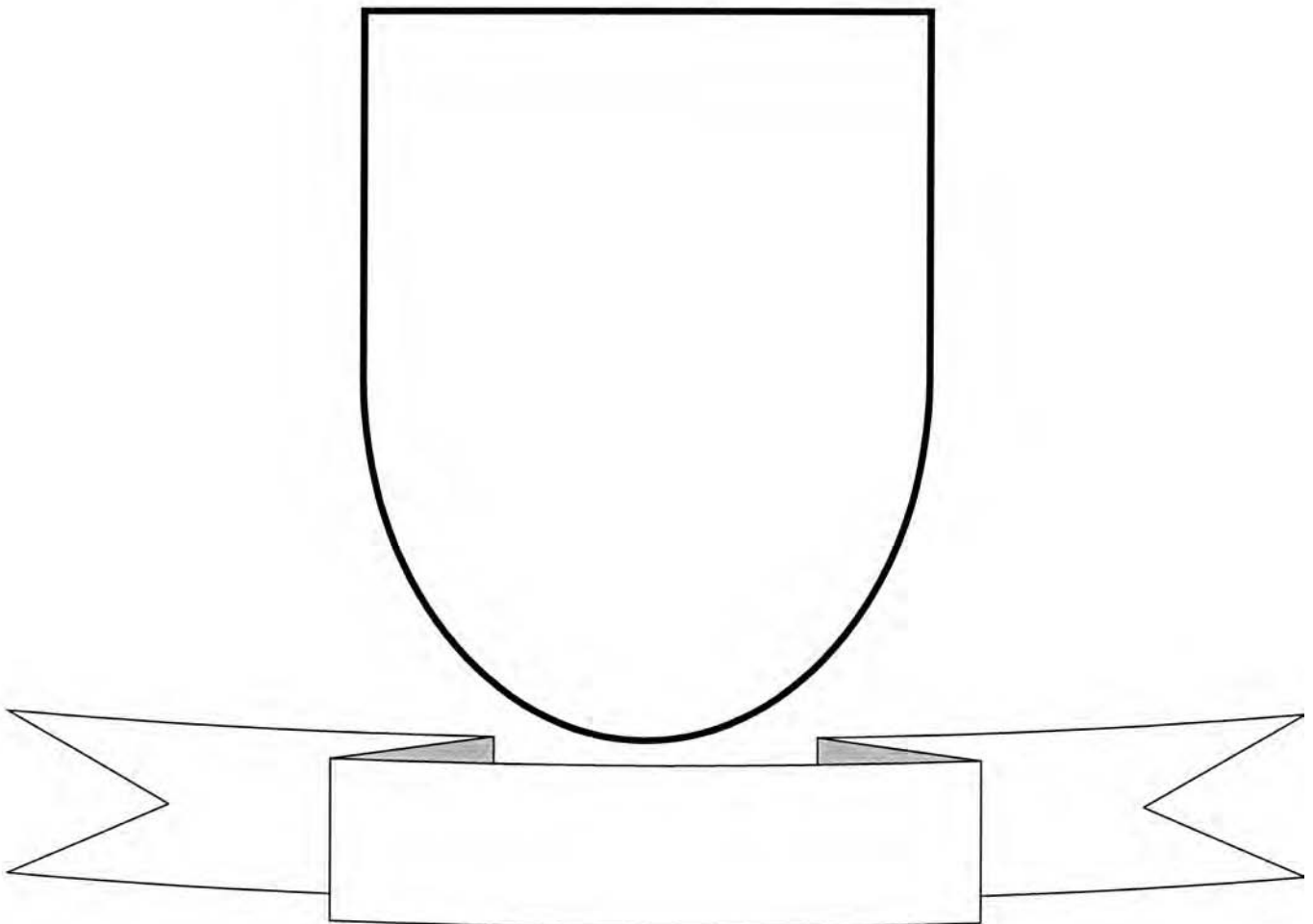
A symbol of strength or that you are an explorer.



Coats of Arms

Your task is to design your own coat of arms.

- Your coat of arms should have a shield, a crest, a motto and supporters.
- The coat of arms needs to tell us something about you.
- What are you good at?
- What kind of person are you?
- What are your hobbies and interests?
- What do you value and treasure?
- Do you have family traditions?
- Where does your family come from?



Message in a Bottle!

The task for the children is to read the instructions and the message on the activity sheets (pages 63 and 64) and draw a map representing the island where Captain Rhodes and his men washed up. Talk about the message and give tips for making their map look authentic.

The Message in full is:

Our ship 'Adventurer' has perished along with all hands save myself and eight lucky shipmates.

We were sailing in uncharted waters 200 miles south of Tahiti when a typhoon struck. The storm ripped loose the sails and we were driven onto the rocks.

Myself and the lucky few struggled through the waves to the shore.

The island we washed up on seems uninhabited, although we spotted strange footprints on the beach yesterday!

Our island is unlike any land I have experienced before! The animal and plant life is most unusual and in some cases quite terrifying!

We are running low on supplies and are becoming desperate! Please send help!

Captain Charles Rhodes

Tips for producing a map

- Sketch the island and its features using an HB pencil.
- Use coloured pencils to add colour to the main features. Sticking to 'earth colours' works best (reds, oranges, greens, browns).
- Paint over the entire map with a thin wash of yellow ochre – water colour paint works best.
- While the paper and paint is still wet, gently screw the paper into a ball. Carefully open the paper out and rip the edges off.
- Leave to dry!

Message in a Bottle!

Imagine you find a message in a bottle washed up on the beach. The message is well over 100 years old and whoever sent it died many years ago.

The message has been badly damaged over the years, some words are unreadable and some parts are missing.

Carefully read the message on page 64.

Imagine where the survivors landed ... what was the island like?

What dangers did they face? How did they survive?

Are there any clues in the letter?

Your task is to draw a map of the island that the men were washed up on!

Draw the main features of the island.

Which areas are safe?

Which are dangerous?

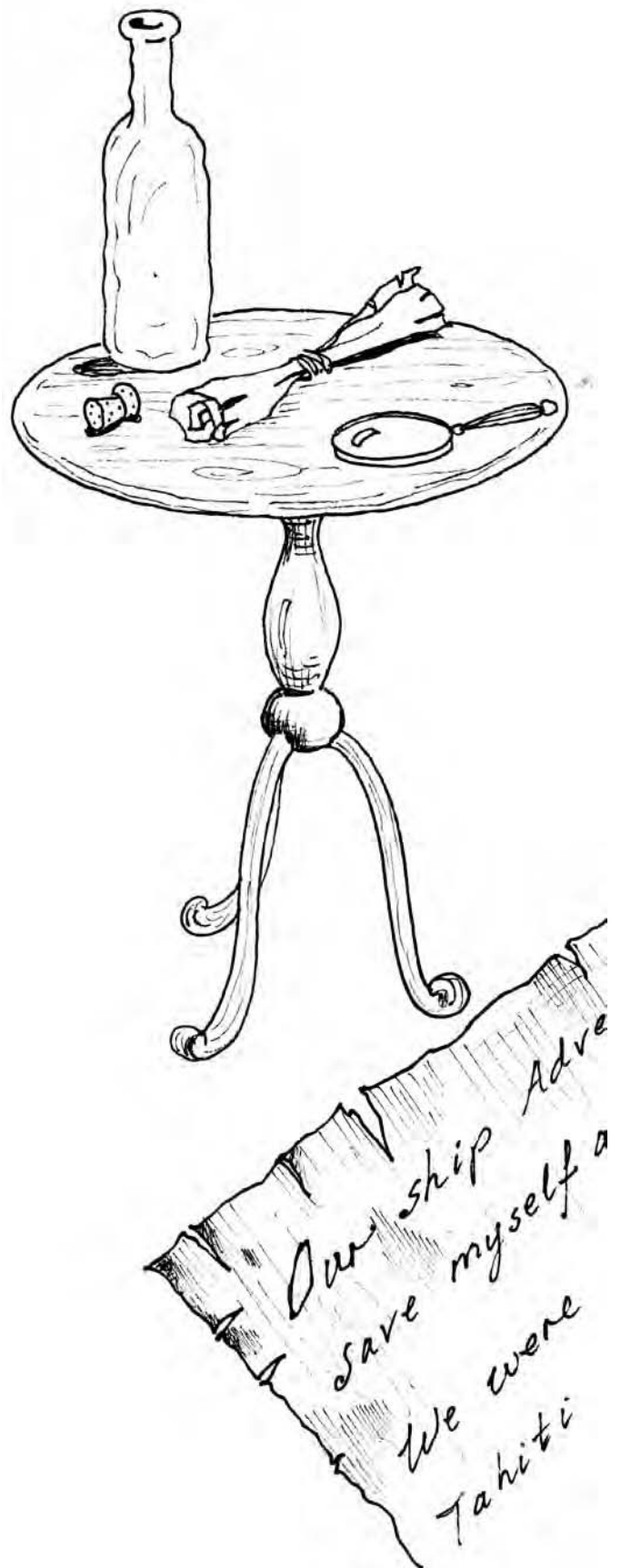
Where is there fresh running water?

Where can you find your food?

What unusual features or animals does the island have?

Is the island uninhabited?

Think about how you could make your map look more authentic.



Message in a Bottle!

The year is 1866. No word has been received from Captain Charles Rhodes and his ship 'Adventurer' since the summer of 1862.

Can you work out the missing words and read the message?

November 15th, 1862

Our ship 'Adventurer' has perished along with all hands, save myself and eight lucky souls.

We were sailing in uncharted waters 200 miles south of Tahiti when a typhoon struck. The storm ripped loose the sails and we were driven onto the rocks.

Myself and the other few struggled through the waves to the shore.

The island we washed up on seems uninhabited, although we spotted strange footprints on the beach yesterday!

Our island is unlike any land I have experienced before. The animal and plant life is most unusual and in some cases quite terrifying!

We are running low on supplies and are becoming desperate. Please send help!

Captain Charles Rhodes.

Secret Codes!

Secret codes are ideal to pass on or share messages with friends without anybody else being able to understand your secret! The children's task is to decipher Mary's code and then to invent one of their own!

The message from Mary should read, 'Let the great plot go ahead signed Mary.'

If the children are stuck for ideas when inventing their own codes, the font 'Wingdings' is installed on most computers and uses lots of interesting symbols.

There are many interesting stories in history concerning codes. Julius Caesar used a secret code, the ancient Spartans had an ingenious method of sending secret messages and the breaking of the German Enigma codes in World War II are just a few.

There are a number of fun websites with secret codes suitable for children. Here are a few worth investigating www.youthonline.ca/spykids/ or www.puzzlepixies.com/activites/activites/make-secret-codes.html



Secret Codes!

A secret code is the perfect way to share notes with your friends, and nobody else will understand your secrets! Secret codes are a great way to talk to your friends in class, stop your family reading your diary, or just to show how clever you are!

Queen Elizabeth I found out that Mary Queen of Scots was involved in a plot to kill her! Mary wrote letters about the plot using a secret code, Elizabeth cracked the code and Mary lost her head!

Here is Mary's code, can you decipher it?

A	B	C	D	E	F	G	H	I	J	K
○	≠	∧	⦶	∩	□	⊖	∞	!		♁
L	M	N	O	P	Q	R	S	T	U	V
∩	∪	∅	▽	S	m	⊖	△	ε	C	V
W	X	Y	Z	of	the	not	from	you		
W	7	8	9	m	∩	x	≠	†		

This is part of one of the messages Mary sent, use the code to read it:

naε ∩ ⊖⊖∩∩ε snvε ⊖▽ ○∞∩○≠
 △!⊖∅∩≠
 ∪○⊖8

Inventing your own code is easy, simply replace each letter of the alphabet with another letter, a symbol or a picture.

Try not to make your substitutions too complicated – it means that writing your messages could take ages!

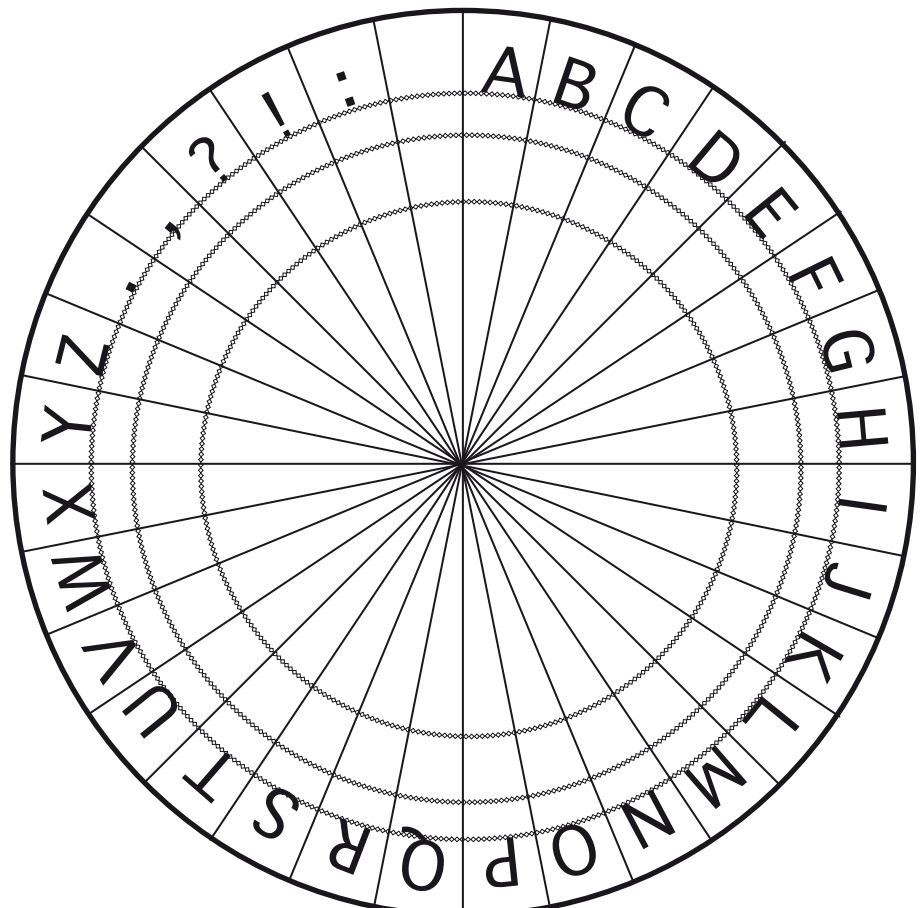
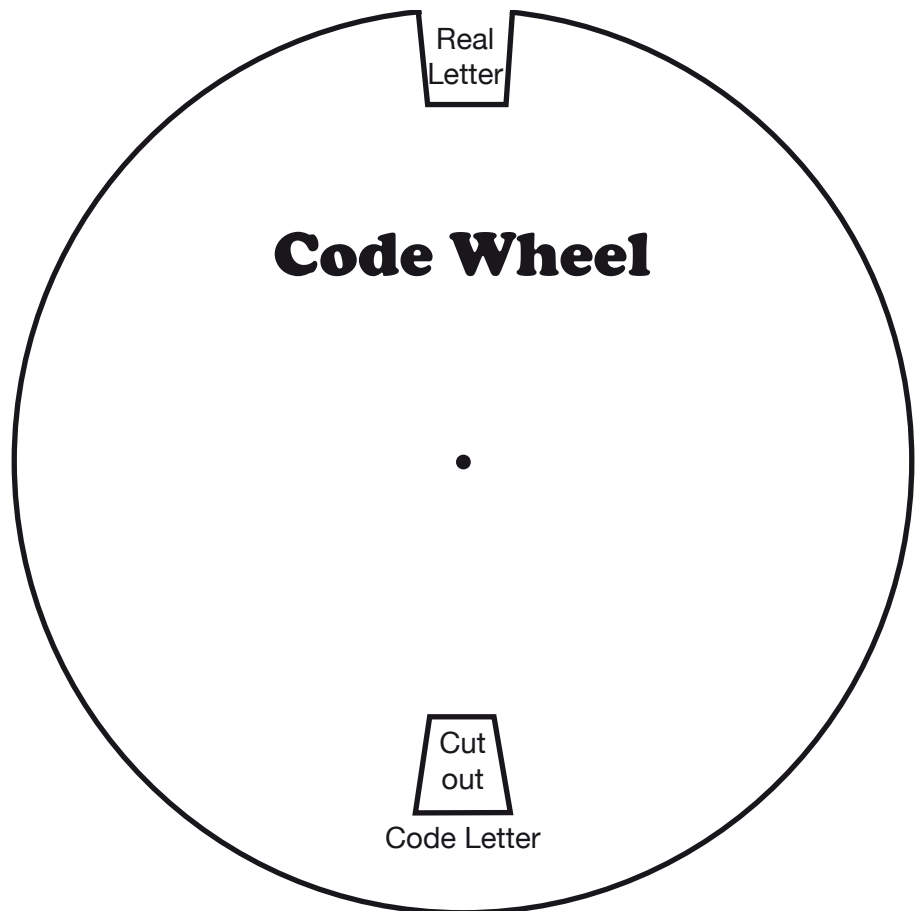
Your task is to invent your own code. Try using a 'Code Wheel', it can make it quicker and easier to write and read your messages!

Secret Codes!

How to use your code wheel.

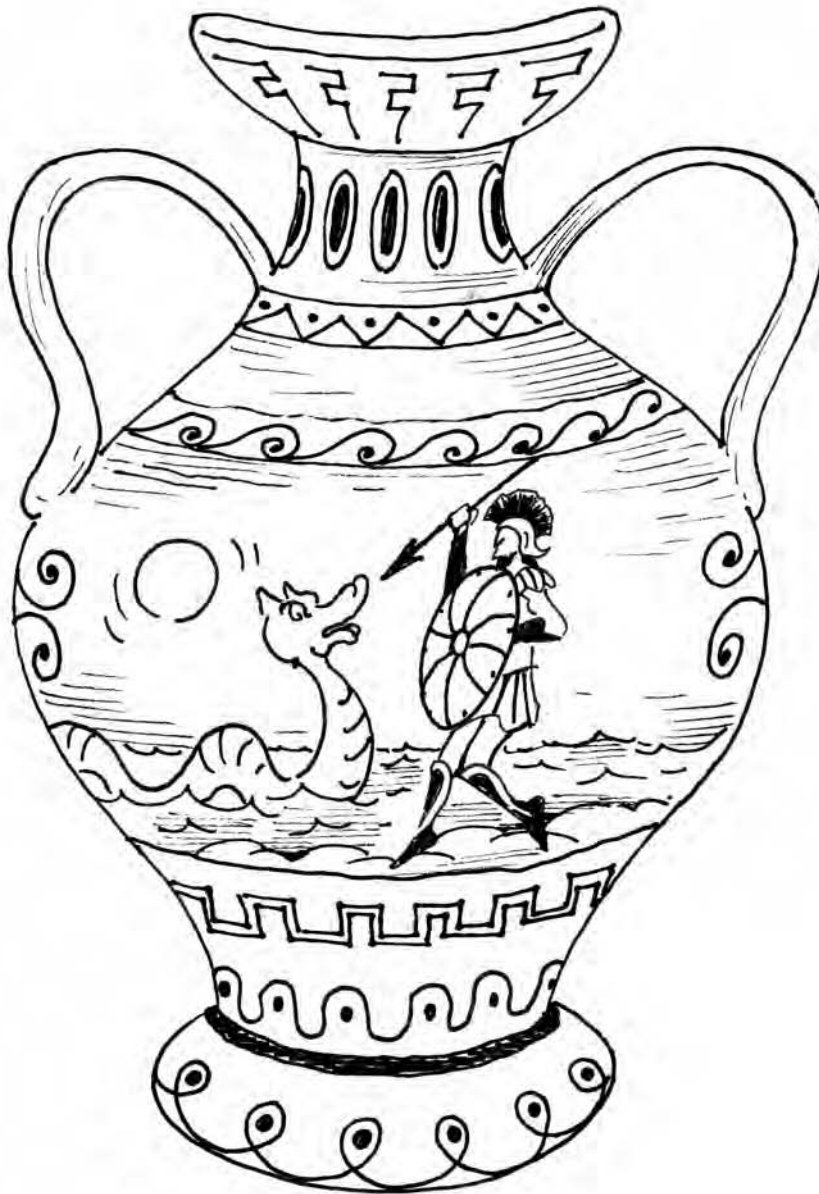
1. Cut out both wheels
2. Make sure that you cut out the window in the first wheel.
3. Join the two wheels together using a split pin.
4. Turn the first wheel until a letter of the alphabet is revealed.
5. In the cut out window draw your coded letter.
6. Complete for all the letters of the alphabet.

Your code wheel is now ready to use.



The children's task is to piece together an ancient vase and write a story about it.

The children should carefully cut out the pieces on the activity sheet and re-arrange them on a sheet of paper. Only glue them down once the jigsaw is complete. The completed vase should look like the one below.



As an extension activity (in class), you could try breaking an old cup, plate or vase. Push the broken pieces into a tub of sand. Challenge the children to retrieve the pieces and rebuild the original pot using masking tape. After completing the challenge the children can peel off the masking tape and set up the activity for the next child. (**Please note:** this activity needs to be done carefully. Only break materials that will not leave sharp edges that could harm the children. We do not hold any responsibility for any accidents, while doing this task.) As an alternative, there are plenty of 3-D jigsaws, made either from metal or wood, that can be purchased from most games stores.

This activity is perfect as part of a treasure hunt, rebuilding a pot to find as a clue etc.

Time Detective

Imagine that you are exploring the ruins of an ancient civilisation and you find these pieces of broken pottery.

Can you cut out the pieces of the vase below and put it back together again?

What image do you think is shown on the completed pot?

Invent a story that explains the images!

Remember the Ancient Greeks used to draw scenes and characters from myths and legends on their pottery!



Mystery of the Iceman!

Teacher's
Notes

The children's task is to solve the mystery of the Iceman.

Search the net and you will find many theories about how Ötzi met his end, some more believable than others; here are a few! The body of Ötzi is located in the South Tyrol Museum of Archaeology: www.archaeologiemuseum.it. Look at his body; see how well preserved it is, discuss why; look at the tools he used and the clothing he wore.

At first, scientists believed that Ötzi was caught in a heavy snowfall, fell asleep, and froze to death. They concluded this because there were no signs of predator attacks. They believed that the body must have been covered with snow almost immediately or else the body would have been preyed upon. Other experts speculated that the Iceman may have been shot by a hunter who buried Ötzi immediately after – this does not explain why none of his possessions were taken.

Some people suggest that the Iceman was the victim of attempted robbery. Someone wanted his copper axe. Ötzi fought him off, injuring his hand in a knife fight. As he retreated up the mountain, the robber shot him in the shoulder with an arrow and followed him. Ötzi then placed his belongings on top of some rocks and covered himself in a snowdrift using a peephole to watch for his attacker. However, the snowfall was heavy and the attacker gave up. Ötzi waited, fell asleep and froze to death. He was protected from predators by the snowdrift he had used for cover.

It could have been that Ötzi was a shaman and a highly respected member of his group. Another group of individuals may have wanted to overthrow him. Some think Ötzi was a shaman because of the possessions he had with him, in particular the copper axe which was not a common object. Maybe the attackers kept at a distance during their attack because they were afraid of the shaman and what he might do. When Ötzi was wounded, he may have tried to descend the mountain but was overcome. By killing him in the mountains, well out of sight, his attackers may have hoped that his death (or disappearance) was seen as an accident.

Currently it is believed that his death was caused by a blow to the head, though researchers are unsure if this was due to a fall, or from being struck with a rock by another person. It could have been that Ötzi killed two individuals with the same arrow, and was able to retrieve it on both occasions, and the blood on his coat was from a wounded comrade he may have carried over his back. The DNA evidence suggests that he was assisted by companions who were also wounded; pollen and food analysis suggests that he was out of his home territory. Also, the copper axe could not have been made by him alone. It would have required a concerted group tribal effort to mine, smelt and cast the copper axe head. This may indicate that Ötzi was actually part of an armed raiding party involved in a skirmish, perhaps with a neighbouring tribe, and this skirmish had gone badly. It may also indicate that he was ambushed or attacked by a rival tribe's raiding party on his way to deliver the axe.

Some people believe there is a curse on the body of Ötzi – many people related to the discovery of his body have died!

Mystery of the Iceman!

In 1991 two German tourists stumbled upon a body while out walking in the Alps. The body was encased in ice and had clearly been there for a long time. In fact the body had been trapped in the ice for over 5000 years!

The body was nicknamed Ötzi the Iceman. He was about 45 years old when he died.

Alongside the body were many tools and artefacts:

- *He wore a cloak made of woven grass and a vest, a belt, a pair of leggings, a loincloth and shoes, all made of leather. He also wore a bearskin cap with a leather chin strap.*
- *His belt had a pouch sewn to it that contained a cache of useful items: a scraper, drill, flint flake, bone arrow, and a dried fungus to be used as tinder.*
- *He also had a copper axe with a wooden handle.*
- *Other tools included a bow with 14 arrows and a flint knife.*

Scientists have analysed his body and have found out that:

- *Ötzi was about 165cm tall and weighed about 50kg.*
- *Ötzi did not live in the place where he died.*
- *Ötzi had recently eaten two meals of meat, bread and fruit.*
- *Ötzi's lifestyle included long walks over hilly terrain.*
- *He had approximately 57 tattoos consisting of simple dots and lines on his lower spine, behind his left knee, and on his right ankle.*

Ötzi also had several wounds and injuries:

- *Ötzi had an arrow head lodged in his shoulder.*
- *Ötzi had bruises and cuts to his hands, wrists and chest.*
- *Ötzi had suffered a severe blow to the head.*
- *Ötzi had a cut to the base of his thumb that reached down to the bone.*

DNA analysis showed traces of blood from other people on his gear:

- *One from his knife.*
- *Two from the same arrowhead.*
- *Blood from another person on his coat.*

Mystery of the Iceman!

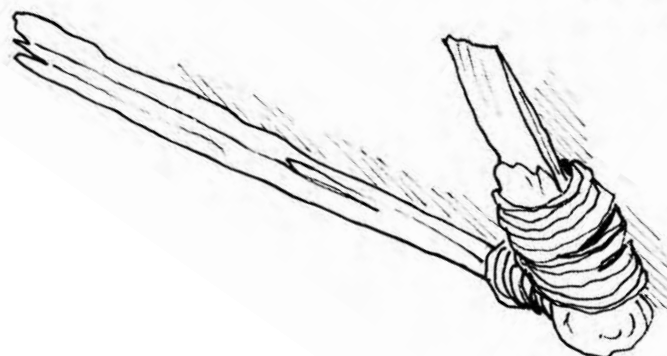
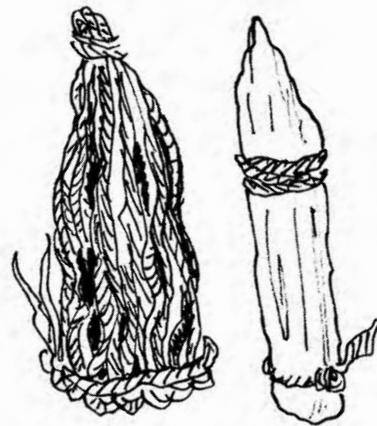
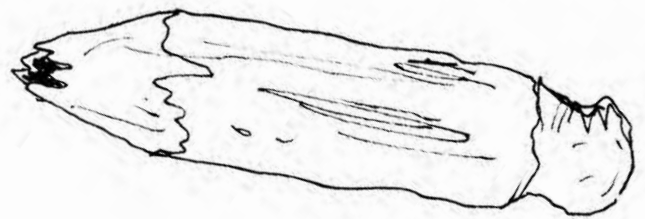
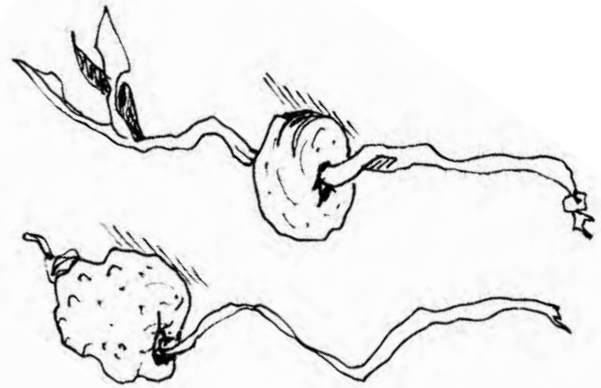
Your task is to solve the mystery:

- Who was Ötzi?
- How did he die?
- Who was involved in his death?
- What was Ötzi doing in the Alps?
- Why were none of his possessions stolen after his death?
- Whose blood was on his gear?
- Did his tattoos have any significance?
- Was he important – a King or a Chief?
- Was he a soldier, an outcast, a thief?
- Was he a victim of crime or the aggressor?

Scientists still argue about these questions – but none can prove that their ideas are the true story!

Piece together your theory using as much of the evidence as you can to back up your ideas.

You can present your ideas as a story, in diagrams or in the form of a cartoon strip.



The Crystal Ball

The task for the children is to map out a possible future for themselves.

There are many elements of citizenship, PSHE and Every Child Matters that can feed into this activity. Enlarge both pages 74 and 75 to A3 size, to enable the children enough space to write their answers and draw their portraits. For the best results talk through the task with the children first. Some themes to explore include:

Appearance – How might you change physically? Talk about weight, hair, glasses, skin and how your chosen lifestyle might affect these.

Happiness – What makes you happy now might not make you happy in 10, 20 or 40 years. What do you think makes your Mum, Dad or Grandparents happy?

Lifestyle – Where might you like to live? What kind of house will you live in, what kind of car will you drive? How might your choices change as you get older?

Occupation – Your choice of job will affect your lifestyle. Which jobs will pay well? Will a lot of money make you happy? Will you choose a job that helps contribute to society?

Family – Will you get married, have children? Think about how children might affect your lifestyle.

Hobbies/interests - How will these change as you get older? How will you keep fit? What might you do in your spare time when you retire?

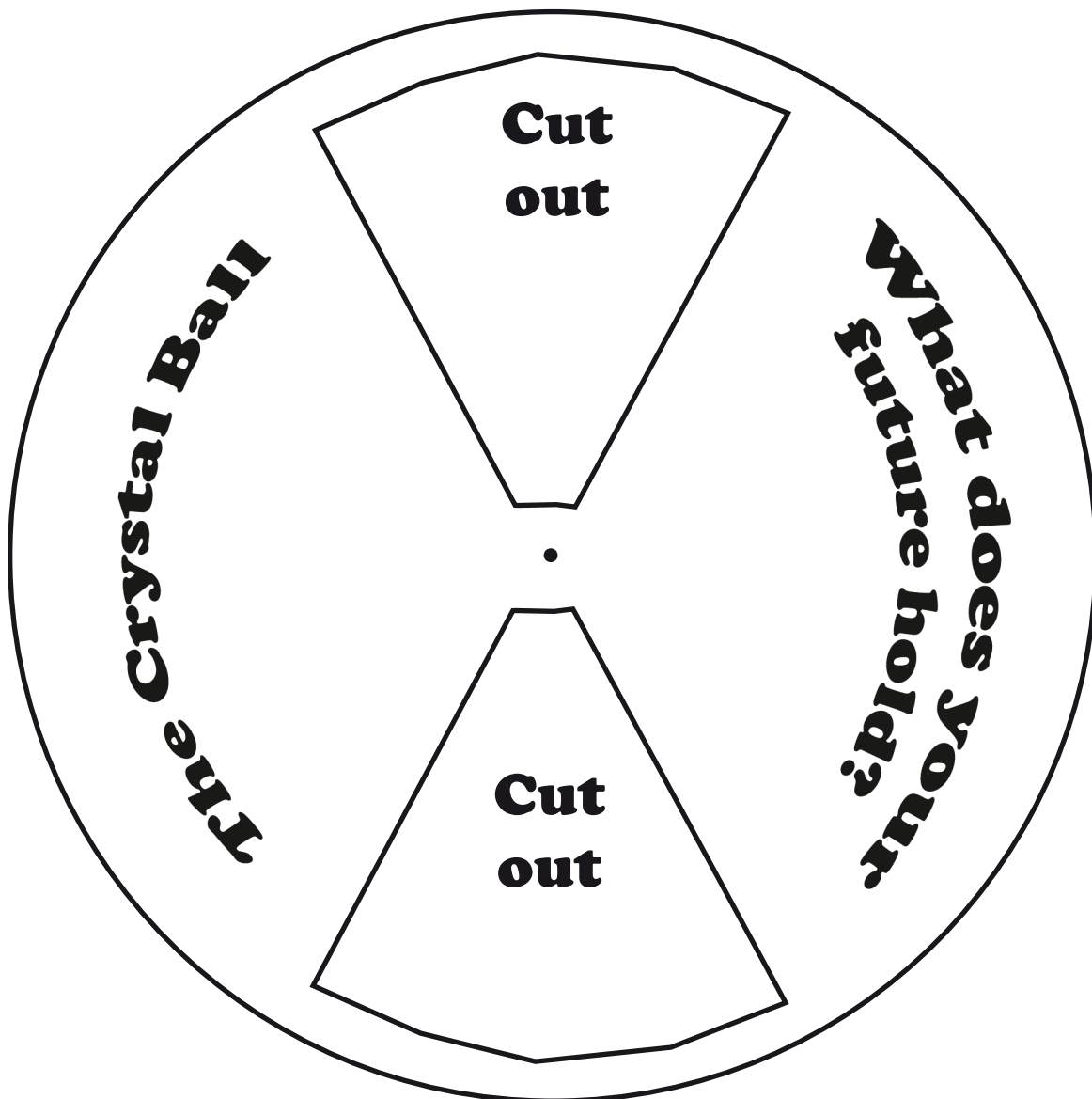
The Crystal Ball

Carefully cut out the wheel below and on page 75. Cut out the two windows below. Use a paper fastener to fix the two wheels together.

Move the window to 'Me at 20!' and draw your self portrait. Write words to describe yourself in the window below your portrait, Repeat for 'Me at 40!' and 'Me at 60!'.

What will you be doing when you are 20?
How about when you are 40?
Can you imagine being 60?

Think about what job you might have, what friends you will have, where you might be living, how much money you might be earning. What do you think your family will be like? What things will be important to you in the future? Will you have any pets and what will your hobbies be?



The Crystal Ball

Write in the descriptive window what you expect to be doing at these stages in your life. Some examples are listed below.

- Occupation:** Student Astronaut
 Chemist Salesman Farmer
 Footballer Hairdresser Beautician
 Nurse Teacher Zoo keeper
Status: Rich Wealthy
 Poor Married Single
 Familyman Wife Mother
 Father Grandad
 Grandma

- Accommodation:** Big house Small house
 Sky scraper Tree Underground
Location: Town Countryside
 City Abroad Yatch
Transport: Big car Small car
 Chauffeur-driven Bicycle Scooter
Pets: Dog Cat
 Crocodile Guinea pig Goat
Hobbies: Sailing Tennis
 Darts Knitting Golf
 Football Climbing trees

The worksheet is a large circle divided into six equal segments by three lines meeting at the center. The segments are labeled as follows:

- Top-left: **Me at 60!**
- Top-right: **When I am 20 ...**
- Middle-right: **When I am 40 ...**
- Bottom-right: **When I am 60 ...**
- Bottom-left: **Me at 20!**
- Middle-left: **Me at 40!**

Each segment contains several horizontal lines for writing.

Diary Entry

Teacher's
Notes

Read out and discuss the diary entry for the child's first day in Mrs McNutt's class. The children must then write a diary entry for Mrs McNutt for the same day!

The children's responses to this task depend entirely on how they view the teacher, Mrs McNutt.

Maybe Mrs McNutt shows no discipline on her first day with new classes so she can tell who the troublemakers are. If this is the case, some children are in for a rude awakening tomorrow! What might Mrs McNutt be planning?

It could be that Mrs McNutt really is totally useless. She could be at her wits end after just one day with the class. What if she really is going deaf and has been trying to hide it for years?

Mrs McNutt might actually be a witch! Maybe she sits at home each evening inventing evil spells and curses to try out on the children! What spells might she be scheming up for Keith and the girls?



Diary Entry

Here is a diary entry from a child's diary. It recounts their first day back at school after the summer holidays with their new teacher Mrs McNutt.

Notice how the diary entry is informal in style; it can include diagrams and illustrations, private thoughts and personal opinions.

Your task is to write a diary entry for Mrs McNutt for the same day! How might her day be different?

How do you think she felt about the day's events? What might she be planning for tomorrow?

You decide ...

Monday 3rd September

1st day back at school = boring! Hilarious more like!! We got put in old McNutter's class, I think she taught my Dad. (She looks old enough - bet she's still wearing the same clothes + hairdo, could be a wig!)

Darren Potts said she looked like a witch ... and she heard him. Then Keith put a 'whoopie cushion' on her chair. When it went off she nearly jumped out of her skin! Amrit asked her if she needed the toilet - she didn't but I DID - nearly WET MYSELF LAUGHING!! Tracey and Laura kept humming and McNutter couldn't tell who it was - probably thinks she's hearing things! First sign of madness!!

PE tomorrow, so mustn't forget kit.



The children's task is to imagine they are stranded on a desert island. They have been left with several items, which they must decide upon from reading the list given. They must explain their choices.

This activity can generate a lot of discussion and debate. Once the children begin to scratch beneath the surface and think more deeply about their choices, it becomes even more interesting!

The following suggestions and considerations may be of use when introducing or reviewing the task:

CDs: Selecting a CD by a single singer or band may lead to boredom, would a compilation album featuring a variety of artists be a better choice? It might be a relief to hear another human voice so how about an audio book or a comedy CD?

DVDs: Missing home? How about a DVD of friends and family?

Tools: A knife of some kind would be essential, but how much use would a hammer be without nails? What tools would help you to build a shelter – A saw? A drill?

Book: A Bible is a popular choice, but would a survival guide be more useful? How about a diary to record your adventure, a cookbook, your photo album, or even a book of spells?

Animal: Affectionate animals that are good companions, like cats and dogs, are popular but fairly useless. They are also carnivorous and will need feeding ... by you! A chicken might be of more use – an egg a day or roast chicken if you get fed up with the eggs! A goat is good company and could provide milk too.

Luxury Item: A waterproof tent could be invaluable, but how well would you sleep with a blanket, pillow or sleeping bag?

Feeling ill or injured? Would a first aid kit be useful? If you needed help to hunt would you take a fishing rod, a gun, a bow and arrows? An inflatable boat could be used for fishing, as a bed and as a waterproof shelter. An obvious item is a pan – for cooking and carrying and storing water.

You are sure to need fire, would matches be needed?

How about life's little luxuries like toothpaste and toilet paper?

The story of Robinson Crusoe was based on the real life adventure of a sailor called Alexander Selkirk. He survived on an island for four years. His only equipment was the clothes he was wearing, a musket, gunpowder, carpenter's tools, a knife and a Bible.

Living on an Island

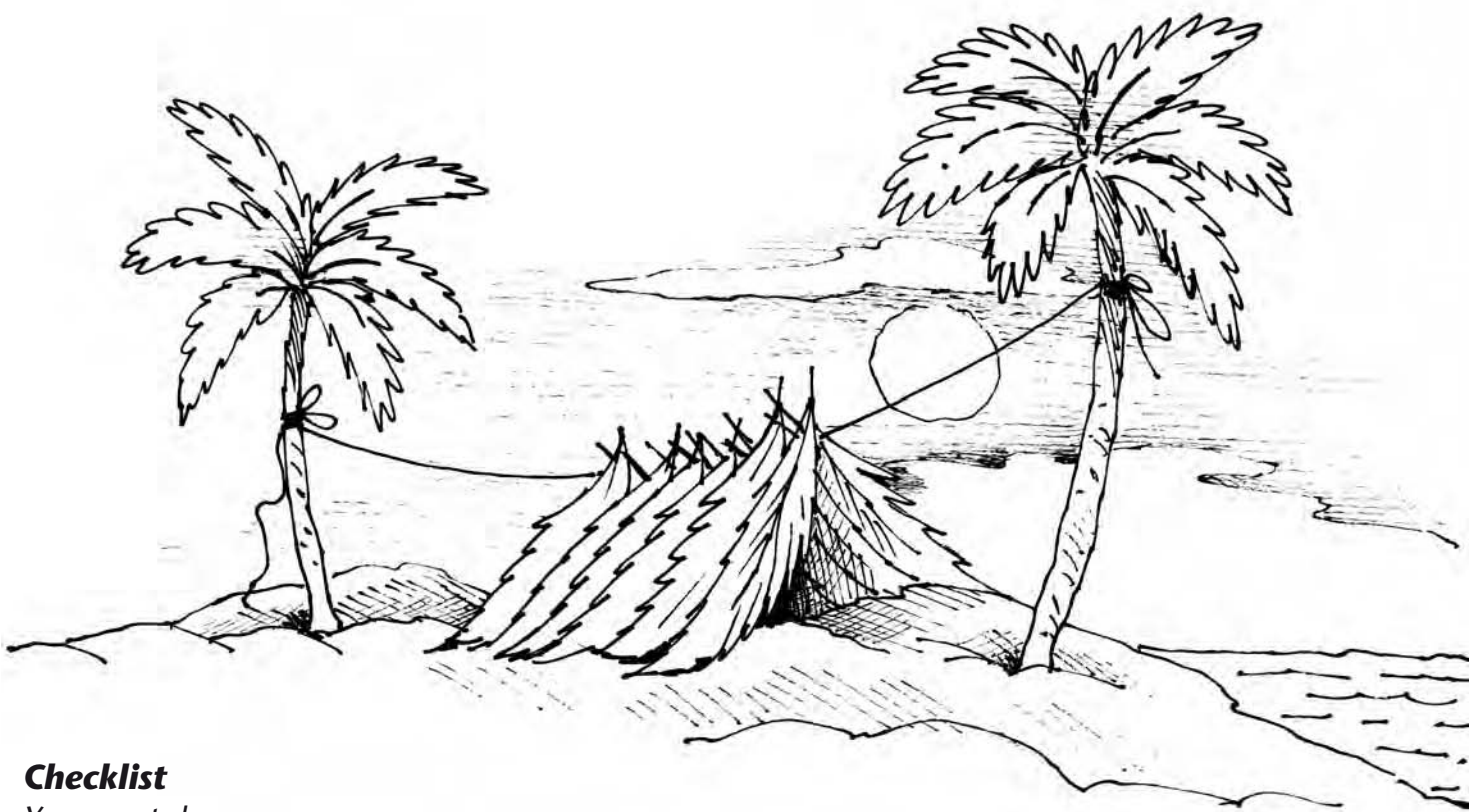
Imagine that you are going to be left stranded on an uninhabited desert island for one year.

There is plenty of fresh drinking water and food (fish, fruit and vegetables) available.

The climate is warm and pleasant, although it rains briefly each day. You only have the clothes you are wearing and will need to build your own shelter.

One of the items that you have access to is a prototype DVD/CD player running on solar energy only, that has been left on the island. Remember to keep it out of the rain, but in full view of the sun!

You can take a number of luxury items with you for your stay on the island. Read carefully through your checklist before making your decisions. Don't forget to explain your choices.



Checklist

You can take:

- *three books*
- *two DVDs*
- *three CDs*
- *three tools (remember – you will have no electricity!)*
- *one animal (for companionship or food!)*
- *one luxury item (this must be no bigger than a suitcase!)*

Once a week, as a treat, you will have one luxury meal and one luxury drink delivered. What will you choose? Why?

The children's task is to write about themselves as an explorer who has discovered a new island and its inhabitants. They must invent a traditional event that takes place every year on the island.

Island traditions and stories are usually a form of stories and festivals relaying information down from one generation to the next.

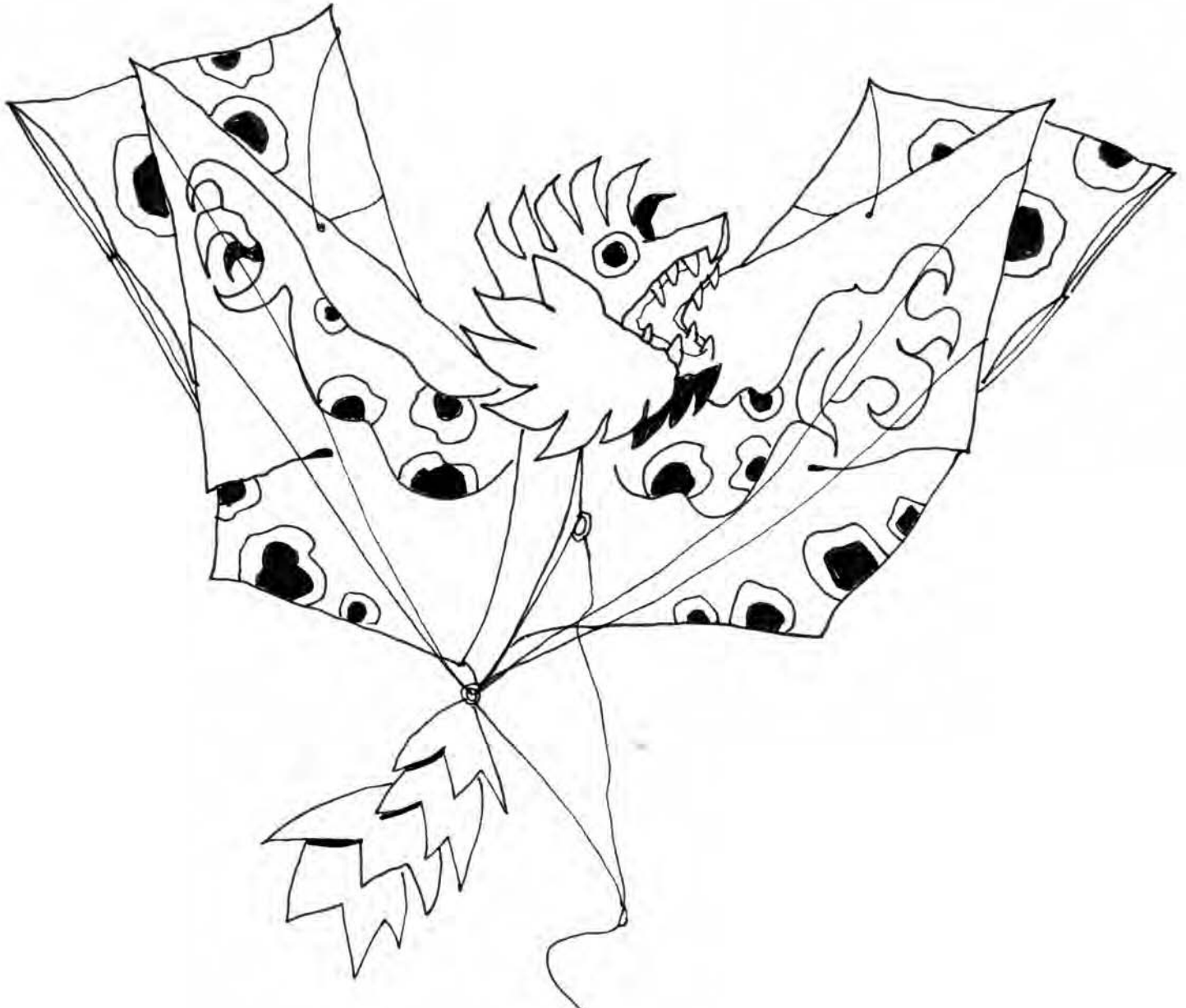
A good source for additional images and ideas for this task is the on-line database at the British Museum, www.thebritishmuseum.ac.uk

Try looking for stories from island communities on the Hawaiian islands, Kiribati, Mangareva, the Marquesas islands, Samoa, Tahiti, Tahuata, Tonga and Tuamotu.

For example:

Each year the men from Bali fly giant kites in competitions. There are different categories of kite that include fish kites, kites that look like leaves, sacred dragon kites and fantasy kites.

In Bali, a kite can also be a religious symbol of a link between heaven and earth.



Island Traditions

Throughout history, island communities have developed their own beliefs, rituals and traditions.

For example, on Easter Island in Polynesia there was an annual race to celebrate the feast of the birdman. The most powerful leaders in the community each sent a champion to swim out to the nearby island of Moto Nui. There they had to collect one of the first eggs laid by the Sooty Tern and bring it back undamaged. The winner of the race then held the title of 'birdman' until the following year and was given a new name and the title *Tangata manu*, and great power on the island, including his clan having the sole rights to collect that season's harvest of wild bird eggs and fledglings from Moto Nui.

This picture was painted on a rock by the people of Easter Island and depicts the 'Birdman.'



Imagine you are an explorer who has discovered a new island. The island is inhabited by communities of people who have developed customs and traditions that are very different from ours.

Your task is to invent a traditional event that takes place on the island. It can be a religious event, a sporting event, an artistic event – anything you can think of!

Draw a cartoon strip that explains what happens during your event.

Explain why it takes place, how it takes place, where it takes place and what is the history of the event. What do the islanders think will happen if the event doesn't go ahead? Does the event have any special religious significance? Do the islanders believe it will bring them good luck? What is the outcome of the event.

Artistic Challenge – Find a stone and paint a picture on it that represents your event. Pretend it is an artefact you find on the island. Can any of your friends guess what your event is by studying your stone?

Creative Homework Tasks

Giles Hughes

Having problems retrieving the homework you set for the weekend? Has it been eaten by the dog or left on the bus again? All that is about to change. This book will spark enthusiasm and lead to unprecedented behaviour – children asking YOU for homework!

The tasks in this book have been trialled by the author in a number of schools and are a culmination of months of research, feedback and editing. They have been specifically designed to stimulate the children's imaginations and bring out the creative element in every child, whilst providing genuine opportunities to use and apply language and numeracy skills.

The tasks are designed to appeal to all learning styles but particularly to kinaesthetic and visual learners. Even the most reluctant children will be keen to meet the challenge of these homework tasks.