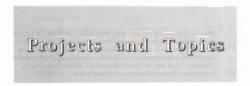


# The BBC Domesday Discs Resource Booklet for



RESOURCE BOOKLET CO-ORDINATORS: Len Iggulden - Bulmershe College of Education William Smyth - North Eastern Education and Library Board

#### AUTHORS:

Pat Deane, Lesley Green The Berkshire Local Education Authority Mary Bone, Tony Cox, Guy Bruwn The Hampshire Education Authority Sharon Adams Beffast Education and Library Board, N. Ireland Vine Haugh, Geoffrey McGoagh, Archie Reid, Richard Wallace North Eastern Education and Library Board, N. Ireland Victor Branif, Kenneth McClelland Southern Education and Library Board, N. Ireland Jenny Thompson, Somus Carlin Western Education and Library Board, N. Ireland

#### SERIES EDITOR:

Phyllis Gove





# ACKNOWLEDGEMENTS

The co-ordinators, authors and series editor wish to thank the teachers and pupils of the schools in the various LEAs who have helped to trial the materials contained in this resource booklet. We are also grateful for the support and encouragement of the Directors of Education of the Berkshire and Hampshire LEAs and the Chief Officers of the Belfast, North Eastern, Southern and Western Education and Library Boards.

Gallery Plan courtesy of the Gateshead Domesday Team.

The BBC is most grateful for design work by the North Eastern Education and Library Board's Area Resource Centre, Antrim, Northern Ireland.

'BBC', 'The Domesday Project' and 'Domesday Project' logo, 'AIV' and the 'AIV' logo and 'Domesday' are trade marks of the British Broadcasting Corporation.

Published by BBC Enterprises Ltd Woodlands, 80 Wood Lane London W12 OTT First published 1987

©BBC Enterprises Ltd 1987

ISBN 0-563-21338-8

Design by Angelika Mathews

Layout and Typesetting



Area Resource Centre, Antrim, N. Ireland

Printed by The Artigraf Press Ltd, London

# **CONTENTS**

PREFACE	5
INTRODUCTION	7
READ THIS FIRST	10
MAPPING SKILLS	11
TRAILS	14
LET'S GO TO LONDON	16
SUPERNATURAL	19
CHILDREN'S GAMES	21
BREAKFAST SURVEY	24
THE NATIONAL DISC	29
THE DOMESDAY GALLERY	31
CONTENTS	34
BMX BIKES	37
MAKING MONEY	45
DIVERS	49
CHART DATA	54
THE DOMESDAY SYSTEM IN COMPUTER STUDIES	59

# PREFACE

The BBC launched the Domesday Discs and the Advanced Interactive Video System in November 1986 to celebrate the 900th anniversary of the original Domesday Book, commissioned by William the Conqueror.

These two vidoediscs, the results of a project co-ordinated by the BBC in 1985 and 1986, present a portrait of Britain in the 1980s. Well over a million people in the UK were involved in creating this massive database, an interactive resource for education, commerce, industry, government and the information services. Information suppliers have included university and government statistical data banks, photo and print agencies, and nationally recognised experts in specialist subjects. However, the largest number of contributors has been the school children of the United Kingdom who surveyed their local areas in the Summer Term of 1985, supervised and assisted by their teachers and members of the local community.

This booklet, along with the others in the series, carries the Domesday Project one step further by illustrating how the Domesday Discs provide an invaluable educational resource. The BBC once again gratefully acknowledges this project work generously supported by the listed LEAs and institutions, produced by practising teachers, and trialled by young people in schools during the Spring and Summer Terms of 1987. These first steps in exploring the Domesday Discs are offered as a source of ideas to encourage others.

# Booklets in this series

Curricular area	LEA/Institution
Projects and Topics	N. Ireland Education and LibraryBoards, Bulmershe College, Reading, Berkshire and Hampshire LEAs
Mathematics	School of Education, University of Exeter
Social Sciences	Gwent LEA and Gwent Institute of Higher Education
Art; Craft, Design and Technology	Gateshead LEA, North Eastern ELB, N. Ireland
Environmental Education	Moray House College of Education, Edinburgh and Scottish LEAs
Geography	University of Loughborough
In-Service	Christ Church College, Canterbury
	Phyllis Gove

Series Editor

# INTRODUCTION

## Why was this booklet written ?

Even before the Domesday System was completed it was realised that material in addition to the Domesday Video Disc User Guide would be useful and necessary for educational users. The BBC invited groups of teachers who had been involved in the collection of the data for the Community Disc to investigate the potential of the complete Domesday System for use in schools.

Two areas were initially identified as being important: a quicker introduction than the Domesday Video Disc User Guide and suggestions for classroom use of both discs, based on the practical experiences of teachers given the opportunity to use the system in a classroom environment.

## Aims of the booklet

To enable the novice user to become familiar with the operation of the system, to illustrate some applications for teachers using the system with pupils in the seven to sixteen age range and to indicate some further avenues for investigation.

All the ideas in this booklet have been trialled in the classroom with pupils varying in age from seven to sixteen. In the project work suggested in this booklet the Domesday System takes its place alongside the usual variety of research material gathered together by the teacher. The Domesday System should not be used unsupported or considered as a total replacement for traditional teaching/learning materials. There are areas where traditional resources are more effective than the Domesday System.

Although the Domesday System contains a vast quantity of pictorial information it is not an expensive and elaborate slide projector nor simply an electronic encyclopaedia. The essence of the system lies in the interaction between pupil and machine, and the interaction between pupils and pupils and between teachers and pupils brought about by the nature of the medium. There are facilities on the Domesday System that enable pupils and teachers to access and manipulate information in ways hitherto impossible to achieve. These facilities give the Domesday System its unique character and it is these facilities which this booklet hopes to highlight.

Experience with the Domesday System suggests that the initial encounter with the machine leaves teachers both amazed and dismayed: amazed at the facilities offered and dismayed at the prospect of coping with yet another 'new technology'. In short they see the potential but find it difficult to grasp the practical applications. Only actual 'hands on' experience of the system can counter such a reaction; and this booklet makes this process a little less painful, allowing the amazement to generate imaginative and innovative projects based on an imaginative and innovative piece of new technology. The trialling process has produced a few guidelines for using the system effectively:

provide initial guidance on use of the system to pupils, point out the HELP facility with the DEMO.

conduct preliminary research in order to structure the pupils' approaches.

allow the young people to send text and data to a printer or to a disc for individual study away from the system.

guide young people to select material carefully thereby maintaining their enthusiasm to research freely.

provide generous support in the use of the statistical data sets on the National Disc, potentially the richest aspect of the material on the disc.

weave the use of the Domesday System into well planned and researched projects which use traditional materials.

The projects in this booklet are not presented either as complete in themselves or as exemplars of project work. Their purpose is to give a practical introduction to particular aspects of the Domesday System with the underlying hope that teachers and pupils will be encouraged to explore the potential of the system and produce their own projects.

# **R**EAD THIS FIRST

It is assumed that teachers have read the appropriate pages in the Domesday Video Disc User Guide before attempting the topics in this booklet.

The Domesday Discs pages 18

STARTING UP pages 9 - 11

Closing down the system;

using ACTION + CHANGE; pages 33 - 35

Function keys

In the booklet all movements of the arrow are made using the trackerball.

The In-Service Resource Booklet in this series also covers the essential functions of the Domesday System.

When in doubt about the operation of the system select HELP, ACTION and then DEMO, ACTION for an explanation.

# MAPPING SKILLS

## **INSERT COMMUNITY DISC - (Northern Side)**

Aim: To create further understanding and use of Ordnance Survey Maps.

Objectives: To understand O.S. symbols, to experience varying scales, to estimate and use standard units of measurement of area and distance, and to interpret maps.

Target Group: Pupils will have established and experienced the following skills and concepts:

an understanding of a plan view and its development into a map.

use of symbols.

use of standard measures up to km and sq km.

use of 1 : 50,000 O.S. maps.

## Activity 1

Use the 'Community Disc', either side.

Go to Level 2 map, e.g. 40 x 30km block.

Select OPTIONS then SCALE and note scale.

Select UNITS to change units.

Select MAIN to return.

Select an area by moving the arrow and pressing ACTION.

Return using OUT.

Repeat selection of area and note scale, until level 3, a 4 x 3km block with 1km squares is reached.

#### DISTANCE

Select two features on the map and estimate the distance between them.

Select OPTIONS then SCALE from the Menu Bar.

Move arrow to first feature and press ACTION. A blue cross appears and moving the arrow causes a blue line to be drawn.

Move to second feature and press ACTION. The distance will be displayed at the top of the screen.

Repeat following a road etc., instead of 'as the crow flies'.

#### <u>CLEAR</u>

Allows another distance to be measured, or measurement of area.

#### AREA

Select AREA from the Menu Bar.

Now outline the required area, pressing ACTION at each vertex. Start and finish in the centre of the blue cross. The smaller the steps the more accurate the measurement.

# Activity 2

To use O.S. symbols.

Select a map then OPTIONS and KEY from the Menu Bar to enter symbol descriptions.

Point at right hand side of screen and press CHANGE to see other pages.

Select MAIN, move to a level 4 map for a city centre. OPTIONS. KEY for more descriptions.

After working on measurements and symbols the children should be able to take imaginary walks on most maps, interpreting to give vivid accounts of what they might expect to see. Various methods of recording could be utilised: painting, writing or the tape recorder.

# TRAILS

Aim:

To be aware of change in environment.

#### **Objectives:**

To note change on a given route or journey

To seek out evidence for change using photographs, maps and text.

Decide on type of trail, i.e. road, rail, river, canal or track.

Choose start and end points e.g. R. Thames between Abingdon and Maidenhead.

Locate appropriate level 3 map. (4 x 3km block).

Trace the route with the arrow.

Move to adjacent maps using arrow and CHANGE.

Select possible sampling points at which to call up text and photos.

#### Aim:

To study two environments, compare and contrast them.

#### **Objectives:**

Interpretations of maps and photographs and text.

Draw conclusions about life styles of people in the two areas.

Go to level 1 map and select AREA.

Look at text for level 2 map (40 x 30km) to form a general impression of the geographical, industrial, historical and social features of the area.

More specific information can be gathered by focusing on different places using level 3 maps / text / photographs.

Repeat the process for another area.

Discuss the findings, suggesting reasons for and against wanting to live in one of the areas.

# LET'S GO TO LONDON

The Domesday Disc can help you plan a visit to London. All you have to do is follow the instructions and you can learn to find your way around without leaving your classroom.

## INSERT THE COMMUNITY DISC - (Southern Side)

A map of the whole of Britain will be displayed

1. Move arrow to England, this part of the map will be highlighted in white.

2. Press ACTION, map of England will be displayed.

Move arrow to London, press ACTION, map of London will be displayed.

 Move arrow to the middle of the word Westminster, press ACTION, map of Westminster and Thames appears.

#### Can you identify some famous landmarks?

River Thames, Houses of Parliament, St. James Park.

#### If you found that easy, use clues to identify:

- a home for red robed pensioners.
- a strange shaped cricket ground.
- a housing area where once there were trees.
- a station named after a battle.

The yellow grid divides London into areas of 3 by 4 kilometres and we will be visiting several. To begin with let's visit that Royal Residence you have just spotted.

Move arrow to the Palace and press ACTION and Street Plan appears.

1 Find the forecourt where the guard is changed each morning.

Did you know there was a central courtyard as well?

2 Find where the royal guards have their barracks.

3 What is the view from the balcony in front of the palace?

4 Which parks are close to Buckingham Palace?

5 Can you find where other members of the royal family live nearby?

#### Follow the Royal Route to Parliament

Each year the Queen drives from the Palace to open Parliament and we are now ready to follow that route. When you are in London you can walk the way we are going and explore it in a morning.

Move arrow to PHOTO and press ACTION.

Have a close look at the photograph and discuss.

- 1 At what speed is it likely to travel?
- 2 Is it made from gold?
- 3 How is the interior fitted?
- 4 What are the pictures on the sides?
- 5 Why is it used for ceremonial occasions?

Move arrow to MAP and press ACTION.

Use the arrow to trace the way the coach leaves the palace to go along the Mall.

- 1 Which monument must it go around?
- 2 What roadway does it follow?
- 3 What would the Queen see to left and to right?

When arrow reaches top right of screen press CHANGE to move onward.

- 1 Find the Mall again now at bottom left of map.
- 2 Which parade ground can you see on the right?

3 What happens here on the Queen's official birthday?

- 4 Go under Admiralty Arch to Charing Cross.
- 5 Turn right down Whitehall.
- 6 What is the common use of many buildings?

Position arrow at the bottom of the screen, press CHANGE.

1 Who lives in the Street beside the Treasury Buildings?

2 What happens at the monument in the middle of Whitehall?

- 3 What can you see at the end of Parliament Street?
- 4 Which street would take you to the river?

# S-U-P-E-R-N-A-T-U-R-A-L

In Ireland and Scotland there are still many superstitions and beliefs about the supernatural, the unexplained and the unearthly. You are going to investigate some of these.

Before you use the computer you will need some sheets. Print one of the following categories on each.

LUCK \* BIRTH \* DEATH \* MARRIAGE \* CURES \*

FAIRIES \* MONEY \* ANIMALS

As you read the various accounts note down references on the appropriate sheet including where the superstition comes from.

## **INSERT THE COMMUNITY DISC - (Northern Side)**

When the map of Britain appears move arrow to FIND and ACTION.

To make an enquiry move arrow to TEXT & PHOTOS BY TOPIC box.

Type in the word SUPERSTITIONS and RETURN

The Domesday System will locate 52 references and list them for you.

To select from the index move arrow to line and press ACTION.

To turn to the next page move arrow to right and press CHANGE.

SELECT Item 7 and read about what pupils in Cullyhanna found in South Down.

Can you offer a sensible explanation of any of these?

SELECT Item 16 and research 'first footing' in Scotland.

Does this happen where you live?

SELECT Item 4 to discover the mystery of the Black Nun.

SELECT Item 6 to investigate curing.

SELECT Items 27, 28 to see Creggan School's list of superstitions.

SELECT Item 39 for some animal stories.

SELECT Item 45 for little folk near Templepatrick.

SELECT Item 43 to learn about fairy trees.

There are many more but these will get you started. When you have collected your evidence on your worksheets you may like to discuss.

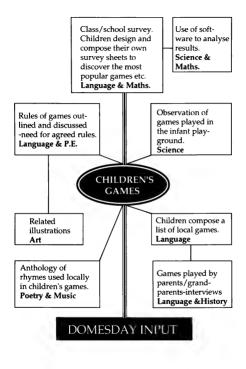
> (a) Why do some people still believe in the supernatural?

(b) Why are so many customs common to Scotland and Ireland?

(c) Why are several connected with animals?

(d) Are there still unexplained mysteries?

You may now like to investigate 'GHOSTS' using the same method.



# An exploration of 'children's games'

## Target group: 10 - 11 years

This topic is ideally suited for exploration since it fulfils many of the criteria needed for the success of a topic. As with all topics it helps to set a deadline date for a display.

The Community Disc is the more interesting and rewarding for this particular topic. Whilst contributing schools were not originally asked to write on specific topics, nevertheless most seem to have instinctively chosen 'children's games'. There consequently exists what amounts to a nationwide database of the games played by children throughout the UK. Such is the volume of the information that there is the danger of the children being overwhelmed. It is advisable therefore to impose reasonable geographic limits to the scope of the investigation.

Familiarity with the following is needed before the system can be used independently for researching this topic.

How to select an area and zoom in and out.

How to 'tour' from block to block using the CHANGE button.

How to use the FIND command for a particular area.

How to print out text.

How to get the grid reference for an area and then return to resume the search.

This list may seem daunting but in reality it is well within the ability range of the average ten year old.

## **Discussion of patterns**

Having read through the descriptions of games, children could be encouraged, through discussion, to explore any underlying patterns:

> boys' and girls' games games played by both games with a widespread appeal our local games played elsewhere names of games varying from district to district

the influence of the geographical area on games - coastal, mining

# Games linked

A possible means of linking games with certain areas might be as follows.

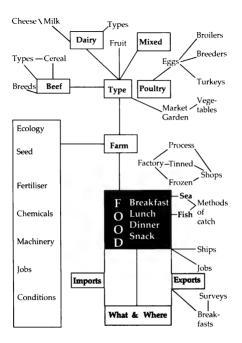
Get ten shoe boxes each labelled with one of the most popular games.

Highlight the names of games appearing in the printout.

When a game is found, the grid reference number (already recorded on the printout) is recorded on a piece of paper and put in the appropriate box.

These can then be shown on the map so that the distribution of these is clearly recorded.

Another 'hands on' activity might involve children 'touring' coastal areas to determine whether any of the games mentioned have an association with the sea.



# **BREAKFAST SURVEY**

In one day you will be able to carry out a national survey on Breakfasts just by using the Domesday Disc.

Write down what you and your friend/s had for breakfast this morning

Now write down what you 'expect' people will have for breakfast in your survey throughout the British Isles.

You are going to look at the country by regions, starting with Scotland

## LOAD COMMUNITY DISC - (Northern Side)

Let us start with the ORKNEYS

Select Scotland by placing arrow on it then press ACTION.

Select Orkneys by same method and press ACTION.

Select the town of Kirkwall and press ACTION.

You can now get the information you want in two different ways.

# Method A

Select TEXT then press ACTION.

Select INDEX then press ACTION.

Select Item 14 ORKNEY FOOD then press ACTION.

## Method B

Select FIND on Menu Bar and press ACTION

Type in BREAKFAST FOOD in the 'Text and Photos by Topic' box, press ACTION.

When search is completed select Item 1 - ORKNEY FOOD and press ACTION.

Select TEXT from the Menu Bar and press ACTION.

Karen lives in LEVERBURGH on the Island of Harris, one of the chain of islands off the North West Coast of Scotland called the Outer Hebrides.

To find out what Karen had for breakfast do the following:-

Select Scotland, press ACTION.

Select Outer Hebrides, southern part of Northern Island, press ACTION.

Select Leverburgh (on Isle of Harris) press ACTION.

Select TEXT from Menu Bar, press ACTION.

Select Item 4 'A DAY IN THE LIFE OF KAREN' press ACTION.

Again you could try another way of getting the same information.

Select Scotland, press ACTION.

Select FIND from Menu Bar.

Type in LEVERBURGH in the highlighted 'Map by Place Name' box, press ACTION.

Select TEXT from Menu Bar, press ACTION.

Select Item 4 'A DAY IN THE LIFE OF KAREN' press ACTION.

Now you are going to Northern Ireland to Cookstown.

Here you will do something slightly different.

Place arrow on 'o' of 'town' in Cookstown ACTION

Place arrow on FIND in Menu Bar, ACTION

Type BREAKFAST FOOD in 'Text and Photos by Topic' box

Select 2 'A DAY'S FOOD' and record breakfast of 11 year old girl.

Place arrow on map on Menu Bar, press ACTION return to Map

Place arrow near Cookstown on right and press CHANGE

Map will move to right and Cookstown will be on left.

Select FIND from Menu Bar and type in 'BREAKFAST FOOD', ACTION.

This is the same as coming out to the 40 x 30km area and then typing in 'BREAKFAST FOOD'.

Select Item 7, 'OUR FAVOURITE FOODS' and record:

If you wish to know which school likes "Frosties"

Select INDEX from Menu Bar, ACTION.

Select MAP from Menu Bar, ACTION to see the location of the school.

Select OUT from Menu Bar, ACTION.

Repeat until map of N. Ireland is on screen.

Turn disc over and replace. Start up as earlier

CTRL/Q/BREAK

SHIFT/BREAK.

Go to Oxford and find out what Michelle has for Breakfast.

Go to Exeter, in Devon, to find out about a Breakfast Survey carried out by Ladysmith First School.

Go to Bangor in North Wales to find out about Home Life - Food and especially breakfasts.

Now you have completed this survey. Check and section how many Cereal/ Milk Breakfasts you have recorded over the country.

Where do Milk and Cereal come from?

# THE NATIONAL DISC

The National Disc offers three possibilities in approach for topics:

## Walking through the Gallery

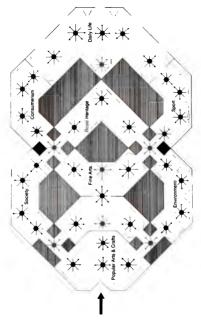
Select GALLERY then MOVE and it is possible to 'walk' through the gallery. The possible 'standing places' are shown on the plan of the gallery. At any position it is possible to turn through a complete turn in 8 parts, thus allowing a full view of the available pictures.

## Using CONTENTS

The contents allows a hierarchical approach to the information based initially on four areas: Society, Economy, Culture and Environment. On selecting one of these areas further menus are offered, sometimes to more than 4 levels before the information (text, pic, map or chart) is available for display. At any stage of a search it is possible to move either up or down the levels.

#### Through FIND

This is potentially the easiest route into the contents of this disc but it requires some careful handling.

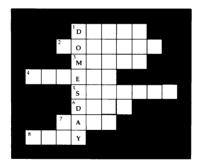


# THE GALLERY

# THE DOMESDAY GALLERY

These questions will take you on a journey through the Domesday Gallery. Before you begin your journey choose HELP press ACTION on the Menu Bar. From a new Menu Bar select DEMO press ACTION.

> To return to the Gallery select EXIT press ACTION. Now you are ready to begin. Find the answers to the following questions by walking around the Gallery, enter your answers on the answer sheet.



If at any time you are lost select HELP or return to the beginning by choosing GALLERY on the Menu Bar or press ESCAPE. 1. Call up the Gallery plan.

Q What kind of life is represented here?

 Select MAIN, ACTION return to Gallery. Look around the Gallery. Observe a clown. Enter picture by putting arrow at bottom left-hand corner of it and pressing ACTION.

Q To whose circus does he belong?

 Select MAIN, ACTION. Look around the Gallery. Look for a picture of open hands, move forward, then to the left and 2 paces forward through the open door. You have now entered the Environment Room. Look around you, select a picture of a frog. Enter the picture. Call up the index.

Q What is another name given to the Laughing Frog? - Find the picture.

 Select MAIN, ACTION. Look around you. Find a door leading outside, move forward. Select the door which appears on your right. Move one pace outside. Look at the view around you by moving only Left or Right.

Call up PLAN on the Menu Bar.

Q Use the key to find which feature runs North to South on the West of your plan.

5. Select MAIN. Turn around, ACTION. Can you find a green doorway? Move one pace into the Gallery. Look around. Can you find a red doorway? Move to the right of it. Step one pace forward and return to the left. Now enter the Royal Heritage Room moving forward as far as possible. Look to find the Duke and Duchess of York. Enter picture. Q Who took a photograph of the Royal Christening? (Use DESCRIPTION on menu bar).

6. Select MAIN, ACTION. Leave the Royal Gallery by looking for a green doorway with a picture of a cow. Move forward into the doorway, do not enter this gallery but turn twice to the left and forward once to view the Sport Gallery. Find a picture of Sebastian Coe wrapped in a Union Jack. Enter picture.

Q Name one of the famous ice-skating couple who won a gold medal in the 1984 Winter Olympics.

 Select MAIN, ACTION. Search for a blue doorway and go forwards through it as far as possible. Turn right twice and move forward twice into Society Room. Find the amusing puppet television series. Enter picture. Entertain yourself by viewing these pictures.

Q On your travels find the Christian name of a famous magician.

8. Select MAIN, ACTION. A trumpet player can easily be found. Move forward and enter this picture.

Q Search the index to find the Christian name of a fine young singer at number 29.

Select MAIN, ACTION. Move around and forward, can you return to the spot where you began your journey. Explore the Gallery for yourself, see what you can find.

# **C**ONTENTS

## The Hierarchical Approach

Accessing the National Disc through CONTENTS is described in Chapter 12 (pages 125 - 129) of the Domesday Video Disc User Guide. The following short exercises, used with pupils of all ages and abilities, can help pupils understand the hierarchical structure of the information and motivate them to think through a search. Each can be done in under five minutes and enable large numbers of pupils to have some use of the system with a reasonable chance of success.

Having completed some of these, many pupils produced their own worksheets for their peer group to complete.

> **HINT** - The words in **bold** form the clues. Pupils often found them easier than teachers did!

## THE BODY IN THE BOG



I hadn't much to go on but **contents** told me he was definitely a **society** guy ... but which part of society?

The people along the street all checked out clean ... but **Number 9** didn't answer my calls ... so I followed it up.

More leads ... the boys in the precinct told me he had only been discovered recently and forensic couldn't identify him even with the **newest technology**.

Where to now? ... did this guy really exist or was he a product of pure invention?

I plodded on ... but I desperately needed something more ... even a **picture**.

Time was scarce ... too scarce to be wasted on flicking though all 63 mugshots ... I wish they would put an **index** on these things.

At last ... a clue ... there was a

photo ... he did exist! ... but who was he!

I needed a description for the chief.

... so who was he and what was his name or alias?

## WHO AND WHAT!!

The call came through at 11.00 p.m. - it sounded urgent. By 11.30 p.m. I was in the GALLERY.

The **contents** of the safe had disappeared ..... but no-one knew exactly what had been in it.

I was assigned to the case with 3 other detectives; all men of culture. This wasn't exactly my area of expertise so I called in the guys from the world of Arts and Entertainment.

We arranged to meet at the cinema next morning.

An old western was showing and we had watched a good part of it before he asked me if I had an interest in the **film industry**.

I said that I had, especially in 1980s Films.

His nod of approval told me that I was on the right track.

Back at H.Q. I gathered up all 82 prints on these movies and indexed them. I was looking for any clue to the raider's identity.

It took a while but I found him - caught in the act.

But what was his name? ... What was he taking! and who was directing operations?

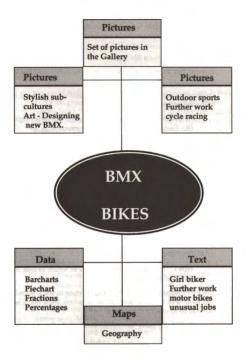
The description told me all.

Name of film? \_\_\_\_\_

What was stolen?\_\_\_\_\_

Who directed?\_\_\_\_\_

Who was the man in the photograph?\_\_\_\_\_



# Вмх віке

Do you have a BMX bike?

If you'd like to find out more about them, follow this BMX course.

To move around the Gallery you will need to understand the following terms:-

Turn (pivot) can be made to the left (L) or to the right (R). Each turn means a change of direction by 45 degrees. A turn is made by moving the arrow to the right or left of the screen and pressing CHANGE.

To move forward place the arrow in the centre of the screen and press CHANGE.

Instructions for moving from one part of the Gallery to another can be written in 'shorthand' e.g. 2R, F, L, 3F, L, F, L, 2F, 2R, F. This means two turns to the right, move forward one step, turn left once, move forward three steps, turn left once, move forward one step, turn left once, move forward two steps, turn right twice, move forward one step.

If you follow the above directions from the main entrance to the Gallery which room will you arrive in?

**HINT** - It is the appropriate room in which to look for BMX Bikes.

Can you find any picture which might relate to BMX Bikes? You may have to think carefully about where BMX Bikes are likely to be in use.

1. In how many moves can you find the Sports Gallery?

You can also obtain information about BMX Bikes using the FIND function from the Menu Bar. To do this, place the arrow on MAIN, press ACTION, place arrow on FIND, press ACTION.

Type BMX BIKES and press RETURN.

In the first set of pictures of Outdoor Sports there is only one picture of BMX bikes. To find it place arrow on item 1, press ACTION, place arrow on INDEX, press ACTION. Which picture is it? To find out you will have to move through the index by placing the arrow to the right of the screen and pressing CHANGE.

Answer the following by selecting the appropriate items from the index and reading captions and descriptions. They are not necessarily in the order in which they appear in the index.

1. Find a description of a BMX race track and answer these questions.

- a) What was the BMX race track built on?
- b) Where was it built?

c) What are the race numbers of the two young BMX riders leaping a beam?

d) Which 2 groups of riders can you see on the banking?

Note that some of these might be partly answered from one or more pictures but only one picture can provide answers to all four questions.

Look at the TEXT of the girl biker. Arrow to 6, ACTION

> a) What are these tearaways? Arrow to right,CHANGE

b) What was Nina Watson's former job? Arrow to right, CHANGE

c) Which bike did K9 ride? Arrow to right, CHANGE

 d) How much did Mike Davis earn in one week? Arrow to right, CHANGE

e) What was the messenger's previous job? Arrow to right, CHANGE

f) Would you like a job like this? Arrow to right, CHANGE

3. On the index select number 7. Data- Means of travel work/school. Arrow to Menu Bar, MAIN, ACTION.

a) Estimate who go to work by bicycle. (pedal)

b) How many go to school by bicycle. Arrow to 7,ACTION.

Can you change the bar chart to a pie chart. Arrow to bar chart, CHANGE.

Record your results from this pie chart. Arrow to menu bar, REPLOT, ACTION.

4. Go back to the index and select number 8. Data. Number of bicycles in household 1. Arrow to Menu Bar, MAIN, ACTION.

a) Can you find what A,B,C,D mean?
Arrow to letter, CHANGE.

b) What is the sum of the data that is recorded?

c) Find which regions this data covers. Menu Bar, TEXT, ACTION.

d) Who collected the data?
Replot from a bar chart to a pie chart.
Move arrow to Chart Types, select Pie chart, CHANGE.

e) Which is the largest group? Arrow to menu bar, REPLOT, ACTION.

f) Estimate what fraction of the total this is.

g) Which two groups are similar?

Are you a successful rider to-day? The course has been tough but now you are on the last lap!

You are now going to see what percentage of people living in London travel by bike.

> 5. Go back to index and select number 4. MAPS. % Trav by push bike - by residence, ACTION.

Type of area (eg County): and type in COUNTY

COUNTY Press ACTION

Name of area (eg Kent): and type in GREATER LONDON

GREATER LONDON Press ACTION a) What are the grid references?

Arrow to Menu Bar, MAIN, ACTION to select data for map.

b) Make a list of the names of the places mentioned and make up a copy of the colour key. To find the key place arrow on KEY, press ACTION.

Now select:

MAPS. % Trav by push bike - by wk place. Menu bar, MAIN, ACTION. Type 'Y' to exit. Arrow to 5, ACTION.

c) Note the changes to the names of places and check the colour key.

d) Which census was used to find this information? Menu bar, TEXT, ACTION.

e) Which area is now a different colour in the second diagram?

You are nearly finished! One last jump!

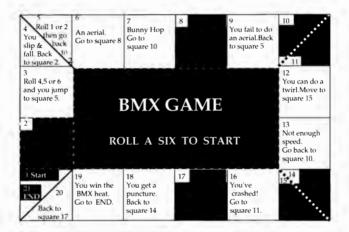
There are some fun pictures of stylish sub-cultures.

They may give you new ideas for designing some new gear to wear when you are riding your BMX Bike.

#### BMX BIKES

Some ideas for further work:- perhaps a set of illustrated workcards

- 1. Graphs to show types of bikes in class.
- 2. Road safety work: visit from police
- 3. Work on different types and styles of bikes.
- 4. Famous bikers Andy Ruffell etc.
- 5. Letter writing to famous bike rider / companies.
- 6. Children pretend they are a famous stunt rider.
- 7. History of bikes or other forms of transport.
- 8. Transport today and of the future.
- 9. Design a BMX track construct one using scrap materials.
- 10. A bike trip to local place of interest.
- 11. Picture stories of a biking adventure.
- 12. Story of a bike from factory to scrapheap.
- 13. Design Road Safety poster or advert for new type of bike.
- 14. Bike party BMX track in playground /hold competitions.
- 15. Visits to local museum to study history of bikes.
- 16. Local survey about people who use bikes.
- 17. Crosswords, word puzzles.
- 18. Children construct a board game an example enclosed.
- 19. Display of older bikes for school fete.





## MAKING MONEY

Money is very important to us; whether we have just a little or are very rich. Most of us have to earn it, but we all handle it and spend it.

Let us learn about money in the 1980s using the National Disc. When you have completed the search activities you may wish to return to one of the topics and find out more about it.

Select FIND, Press ACTION.

Enter MONEY in the

'What do you want to know about'?

List of titles appears on the screen. Arrow to right, press CHANGE to see the second page.

Select Item 38, COINS, ACTION.

Select INDEX, ACTION.

You will need the pictures 33 to 38, the Isle of Man coins, to answer these questions. You will also need to select DESCRIPTION from the menu bar for each coin.

1 Which coin shows a cormorant or shag?

2 What type of bird is featured on the 2p coin?

3 One coin features a mounted knight, how many pence is it worth?

4 What precious metal is the Angel made of?

5 What is the special coin, made of platinum, called?

Return to index; arrow to INDEX, ACTION.

6 The portrait of the Queen on decimal coins changed from one designed by Arnold Machfin to one by Raphael Maklouf.

In which year did this happen?

Why do you think the change was made?

To return to the main index, select MAIN, ACTION.

Select Item 79, PAPER MONEY, a picture set

1 What is the largest amount of money for which the Bank of England issues a note?

2 Who is States Treasurer in Guernsey?

3 Whose picture is featured on the back of a Bank of England  $\pounds 20$  note?

4 What do you notice about the backs of all Bank of Ireland notes?

5 A famous place in Ulster is featured on the front, bottom right-hand corner, of all Ulster Bank notes. Where is it?

6 What is the lowest amount of money for which the Isle of Man issues a note?

7 What type of ship is featured on the back of this note?

8 Return to the Bank of England notes and try to find out more about the person whose picture is on the back of each note. To return to the main index, select MAIN, ACTION.

Select Item 81, PRESS RELEASE ON BAND AID 1985, text

Draw a box around the correct answer in each question.

1 How many ships are in the Band Aid fleet?

1 12 9

2 Two special vehicles have been bought. What are they?

Motor-bicycles Land Rovers Bulldozers

3 Enough cloth and clothing have been bought to fill how many containers?

0 15 22

4 Page 4 shows that Band Aid has not forgotten that a lack of

water fuel medicine

helped cause the famine, since special equipment has been sent to provide it.

5 Use an atlas to draw a sketch map and mark on it the seven African countries in which money is already being spent.

# DIVERS

This has been chosen as it can be interpreted in several ways.

#### Using FIND

Select FIND, enter Divers and RETURN. 1 perfect match found.

Picture set of Divers, Grebes and Cormorants

19 pictures

See end for alternative key words used.

Through the GALLERY

#### Select GALLERY

Problem: which of the 8 areas is most likely to have material relating to a diver? Decide on Environment and Sport.

Using the map (screen or page) as a guide, move to Environment Area, view the pictures. Select Fish and Kingfisher as possibles to investigate further.

Step into picture of a FISH

Sets of photos on underwater life

Freshwater Marine Marine

fish fish life

Look at each set: no reference to diver.

Return and step into picture of

KINGFISHER

11 sets of pictures of birds

Divers, Grebes & Cormorants

This is the same set as that found through FIND.

Select MAIN and move to SPORT section.

View pictures, two possibly have relevance to divers: angling and canoeing.

Step into picture of ANGLING

Photos of: hunting, shooting, fishing

Step into picture of CANOEING

46 photos of water sports

including: champion diver, aqualung and subaqua but no other diving.

For this particular idea, searching the Gallery has not proved very rewarding.

#### Using CONTENTS

This can also be a time consuming approach but is useful since it can open up associated areas of investigation that may not have been thought of initially. In this it resembles the Gallery but is more structured, whilst contrasting with the Find facility. Select CONTENTS, decide to investigate Society, Culture and Environment for divers.

At Level 1 select SOCIETY

List with 11 options

At Level 2 select ARMED FORCES

4 options

At Level 3 select DEFENCE EQUIPMENT & SITES

options

At Level 4 select BENEATH THE OCEAN WAVE

Set of 14 pictures on submarines

END OF THIS ROUTE

Select MAIN then UP to return to level 2.

At Level 2 select SCIENCE & TECHNOLOGY

At Level 3 select Text - SCIENCE AND TECHNOLOGY

not appropriate

Return to level 3 list

At Level 3 select NEW TECHNOLOGY

At Level 4 select INVENTIONS

At level 5 select Text - MARY ROSE

At Level 5 select UNDERWATER VEHICLES

SOCIETY yielded little directly about the technique of diving but information found could support a related project. Return to level 1 and select CULTURE Level 2 list contains 3 possibilities At Level 2 select LEISURE & RECREATION At Level 3 select LEISURE ACTIVITIES At Level 4 select LEISURE PARTICIPATION END OF THIS ROUTE

Return to level 2 At Level 2 select SPORTS & GAMES At Level 3 select INDOOR/OUTDOOR W/SPORTS At Level 4 select WATER SPORTS At Level 5 set of 46 pictures NB this is the same set as found previously. Return to level 2 At level 2 select TOURISM At Level 3 select TEXTOURISM At Level 4 select BESIDE THE SEASIDE END OF THIS ROUTE Return to level 1

At Level 1 select ENVIRONMENT 15 items for selection At Level 2 select SEAS

## At Level 3 select OCEANOGRAPHY At Level 4 select TIDES, CURRENTS & SEA END OF THIS ROUTE

Return to level 2 At Level 2 select WATER RESOURCES At Level 3 select Text - WATER RESOURCES END OF THIS ROUTE

Return to level 2 At Level 2 select WILDLIFE At Level 3 select BIRD & MAMMALS At Level 4 select BIRDS At Level 5 select SEABIRDS At Level 6 set of pictures of Divers, Grebes & Cormorants At Level 6 set of pictures of Waders & Wildfowl not appropriate

Whilst recognising that this was a peculiar topic to research, due to the usage of the word, it is a useful exercise for illustrating the potential of the system.

Alternative FIND searches eg DIVING and DEEP SEA DIVING only located the Water Sports Picture set.

## CHART DATA

References on the National disc to 'DATA' indicate data sets which will produce charts, usually bar charts, which can be manipulated in various ways. The following example shows how these variations can be produced.

(Further detail from page 211, Domesday Video Disc User Guide).

Select FIND

Type "CONSUMER SPENDING: LEISURE"

N.B. This must be entered exactly, including quotes and spaces so that the data will be loaded directly.

Select TEXT.

Next page.

Select MAIN to return to chart.

Move arrow to A=TELEVISION AND VIDEO

Press CHANGE to cycle through the variable names on the horizontal axis.

Select REGROUP.

Move arrow to LEISURE IT (key variable)

Press ACTION, RETURN

Move arrow to select a category to move (M+)

Now move the arrow to select a group to move this category into. ACTION.

Repeat until the first group has 4 categories, second 8, third 4. (N.B. to move to the second page use f8), fourth 2, fifth 3 and f7 to return.

Select REPLOT Note names now read A E P T V. Move arrow to Bar Chart. Press CHANGE, Loop bar Move arrow to YEAR Press CHANGE, ALL disappears. Select REPLOT Chart cycles through years: all, 1978, 1979, 1980, 1981, 1982, 1983 To re-scale axis: Move arrow to vertical axis. Press CHANGE. To stop looping: Move arrow to Loop bar in chart type, Press CHANGE twice to show Pie chart Select REPLOT To display data for a particular year: Move arrow to ALL Press CHANGE, 1978 displayed Select REPLOT.

Move arrow to Pie chart Press CHANGE to display Back-Back Select REGROUP Move arrow to LEISURE IT Press ACTION Press CONTINUE (f4) twice: to select groups to omit Select 1, press ACTION Colour changes Repeat for 2 and 3. Move arrow to YEAR

Press CHANGE, ALL disappears

Select REPLOT

To plot Pie chart for particular activity:

Move arrow to Back-Back, change to Pie chart

Select REPLOT

Two possible applications of some of these techniques follow:

A: To enhance/supplement a study already undertaken.

Select FIND and enter SAFETY

Select 35 Data Incidence: accident in home 1.

The data can be displayed selectively by adjusting the chosen variables e.g. sex, type of dwelling, size of family and region

of the country, thus giving scope for discussion and critical comparisons.

Select FIND and enter TRANSPORT

Select 80 Commuting Central London and use the looping facility.

Select FIND and enter PETS

Select 14 Data Pet Owners

A simple bar chart.

Change pet owners by years and/or sex, employment, household, which will produce a good variety of information but not for a variety of pets.

B: The use of the Data sets as a mathematical exercise.

The two basic charts available are Bar charts and Pie charts, with the former having variants in Loop and Back-to-Back.

Pre-requisites are that the teacher finds the topic for the chart to be used by the group, thus matching the content to their ability.

Points which can be illustrated/discussed:

title axes - scale, variables including re-grouping clarity of presentation - is purpose met? replotting accuracy - particularly in pie charts easy change between different charts. A useful example:

Select FIND and enter SPORT

Select 50: Football League Average Attendances.

#### **Research skills strategies**

The problems sometimes encountered when using the system for specific purposes in any of the three search modes: FIND, CONTENT or GALLERY can be turned to good educational purpose.

These can range from predicting the contents of a picture set in the gallery, to word association training using FIND or CONTENT. Both types of activity can foster a more lateral thinking approach to searching for information.

Earlier in the booklet we have made comparisons between the methods of search and it is clear that depending on the nature of the requirements and the searcher's knowledge of the subject, together with the data on the disc, no rules can be given for a single search strategy.

Users must be prepared to attempt different methods and in particular vary the search words and build on answers or partial answers given by the system.

"If at first you don't succeed, try a variant."

# THE DOMESDAY SYSTEM IN COMPUTER STUDIES

It is obvious that the Domesday System will have a place in the Computer Studies classroom. Many of the features of Information Retrieval can be demonstrated by using the very sophisticated software that is supplied with the package. It is also possible to use the system at a more elementary level that would be suited to post-primary pupils who could use it as a useful piece of coursework for GCSE.

Each slide on the Domesday National Disc has a number which can be displayed and recorded. The recording of the slide number and the corresponding captions have to be done manually.

#### **Displaying slide numbers**

Choose HELP from the menu bar

Choose SYSTEM from new menu bar

Read instructions on screen

Enter FCODE D1 then press RETURN

Return to Domesday System by selecting MAIN and pressing ACTION

Slide numbers should now appear at the top of the screen

Note: A full list of FCODES are given on pages 51 - 53 of the BBC Master AIV User Guide.

The slide numbers can be turned off by repeating the process and entering FCODE D0 at the appropriate place.

#### **Displaying slides on Game Birds**

Use the FIND facility to locate the set of slides on GAME BIRDS. Turn on the slide numbers and you will discover that the first of the 15 slides has the number 18154.

These slides can be shown then using a simple program. (See Prog. 1 at end)

The 5 modes of display that are available on VFS are:

\*VOCOMPUTER Computer only

\*VODISC Laservision only

\*VOSOPERIMPOSE Computer overlaid on Laservision

\*VOTRANSPARENT Computer & Laservision mixed

\*VOHIGHLIGHT Laservision enhanced by computer

There are also various commands similar to \*STILL - these are described more fully on pages 34 and 35 of the AIV User Guide.

The OSCLI command is used so that "STILL can be followed by a variable slide number (see page 223 of BBC Welcome Manual for a fuller description of the OSCLI command) Note that there is a space after "STILL in the quotation marks.

#### **Slide Shows**

It is possible then to extend this idea to a customised slide show. For instance program 2 which is obviously based on the previous one but at a more visually impressive standard will give a menu driven slide show on Birds.

Decide on topic

FIND the relevant slide numbers

Record the slide numbers

Note the number of slides in section

(Take the captions from INDEX)

Design the Menu

Insert data for menu

Invite user to choose from menu

Spacebar to continue

Esc to return to menu

The captions could also be included by the use of DATA statements or DATA files. As you can see it is relatively easy to use this program to make your own slide show by changing the data statements on lines 690 - 770.

#### Assignments

Design your own slide show for:

A visit to the zoo Favourite sports Dogs and cats TV programmes Fashion The human body

#### Programmed Surrogate Walks

As an extension it is possible to produce a surrogate walk without the excitement and frustration of finding your way around. This program was done in exactly the same way by displaying the slide numbers on the countryside walk (using \*FCODE D1) and choosing the relevant ones. Again this is an elementary program to illustrate the initial procedure but the possibilities for development are left to you and your students.

This documented walk has captions included but these could even be questions or anything you wish.

The program could be enhanced by allowing the user to see where he/she is on the forest plan (slide 38516). As you can see there are many possibilities here.

#### The Data on The Disc

Finally, remember that the data and text on the disc can be saved as files. These can serve as further coursework ideas using VIEW or VIEWCHART since the format of the files is explained in the Domesday Video Disc User Guide.

#### PROGRAMME 1

10MODF7 20VDU23:8202:0:0:0:0::REM \*\* TURN OFF CURSOR\*\*\* 30REM \*\*\* CHOOSE VIDEO FILING SYSTEM \*\*\* 40\*VFS 50REM \*\*\* COMPUTER OVERLAID ON LASERVISION \*\*\* 60\*VOSUPERIMPOSE 70FOR slidenumber=18154 TO 18168 80REM \*\*\* USE \*STILL TO DISPLAY THE SLIDE 90OSCLI ("\*STILL "+STR\$(slidenumber)) 100PROCspacebar 110NEXT slidenumber 120CLS 130REM \*\*\* COMPUTER ONLY \*\*\* 140\*VOCOMPLITER 150END 160DEFPROCspacebar 170REPEAT 180PRINT TAB(12,23);CHR\$(131);"Press Space Bar" 190G=GFT 200UNTIL G=32 210ENDPROC

#### PROGRAMME 2

10\*VFS 20\*VOCOMPUTER 30REM Birdy Assignment 40RFM 50\*TV255 60\*ADFS 70REMDimension arrays ! 80DIM no(10).name\$(10).slide(10).frame(10) 90REMRead in data to arrays! 100FOR I=1 TO 9 110READ no(I).name\$(I).slide(I).frame(I) 120NEXT I 130REMESCAPE = MENU ! 140ON FRROR PROCmenu 150PROCmenu 160END 170. 180REM MENU ! 190DEF PROCmenu 200\*VFS 210\*VOCOMPUTER 220VDU22.7:CLS:REM \*\*\* CHOOSE MODE 7 AND CLEAR SCREEN 230VDU23:8202:0:0:0:0:::REM TURN OFF CURSOR 240FOR L=3 TO 24:PRINTTAB (0.L) " " 250NEXT L 260PRINTTAB(0,1)"> MAKE YOUR CHOICE FROM THE OPTIONS" 270PRINTTAB(0,2)"> GIVEN BELOW:" 280REMDisplay options ! 290PRINTTAB(4,6);"0 End" 300PRINT

310FOR I=1 TO 9 320PRINTTAB(4,I+7)CHR\$(132):no(I):CHR\$(132):name\$(I) 330NEXT I 340PRINT ' ' 350PRINTTAB(0.23)"> Enter choice :: ": 360choice=GET-48 370IE choice<0 OR choice>9 THEN 350 380PRINTTAB(24,23):choice 390IF choice=0 THEN PROCend 400K=INKEY(100) 410\*VOSUPERIMPOSE 420CLS 430REMPrint frame & slide ! 440VDU132.157:PRINTCHR\$(135):choice.name\$(choice) 450VDI 1132 157 460frame=frame(choice) 470FOR slide=slide(choice) TO 1 STEP-1 480PRINTTAB(15.1)"Slide ":slide(choice)+1-slide;" " 490PRINTTAB(24.1)"(max = ":slide(choice):")" 500PRINTTAB(2.1)"Frame ":frame 510OSCLI ("\*STILL "+STR\$(frame)) 520frame=frame+1 530PRINTTAB(0.23)" 540IF slide=1 THEN PRINTTAB(5.23)"Press SPACE BAR for MENU " ELSE PRINTTAB (5.23)"Press SPACE BAR to continue" 550REPEAT UNTIL GET=32 560NEXT slide 570PROCmenu 580ENDPROC 590 600REM End program ! 610DEF PROCend 620CLS

630INPUTTAB(1,10)"End program ... Are you sure (Y/N) :" 640end\$=GET\$ 650IF end\$="Y" THEN CLS:END:ELSE PROCmenu 660ENDPROC 670: 680REM Data ! 690DATA 1,Birds,22,16641 700DATA 2,Seabirds,44,17732 710DATA 4,Swans & Geses.52,18206 730DATA 5,Birds of Prey.36,17493 740DATA 6,Perching Birds,35,17103 750DATA 7,Pet & Showbirds,19,1942 760DATA 8,Game Birds,15,18154 770DATA 9,Divers,20,17562

#### PROGRAMME 3

10MODE 7 20CLS 30REM \*\*\* CHOOSE VIDEO FILING SYSTEM 40\*VFS 50REM \*\*\* COMPUTER OVERLAID ON LASERVISION\*\*\* 60\*VOSUPERIMPOSE 70VDU23:8202:0:0:0:0::REM\*\*\*TURN OFF CURSOR\*\*\* 80REPEAT 90READ A. DESCRIPTION\$ 100OSCLI("\*STILL " +STR\$(A)) 110PROC description 120PROCspacebar 130UNTIL A=38342 140\*VOCOMPUTER 150END 160DEFPROCdescription 170L=LEN(DESCRIPTION\$) 180XCOORD=INT((40-L)/2) 190PRINTTAB(XCOORD.21):CHR\$(129):DESCRIPTION\$ 200ENDPROC 210DEFPROCspacebar 220PRINT TAB(15,23);CHR\$(131);"Space Bar" 230REPEAT:G=GET:UNTIL G=32 240REM \*\*\* CLEAR TEXT FROM SCREEN 250PRINT TAB(15.23):" 260PRINTTAB(XCOORD.21):" 270ENDPROC 280DATA 37861,"Welcome to Scotland" 290DATA 37860." " 300DATA 38516,"The forest plan" 310DATA 37862." 320DATA 37867."Remember the river?"

330DATA 37893 "The Pine Trees" 340DATA 38579,"And a close up" 350DATA 37892,"Off we go" 360DATA 37900."Which bridge is this?" 370DATA 37908." 380DATA 37916 " 390DATA 38626."Typically marshy ground" 400DATA 37924,"Your first view of the pylons" 410DATA 38524,"Is the ground well drained?" 420DATA 37932."What kind of waather lies ahead" 430DATA 38632."Rushes" 440DATA 37940."Mist on high ground above" 450DATA 38534,"Snake on the ground" 460DATA 38535."Can you name it?" 470DATA 37948."Is this used often?" 480DATA 37956." 490DATA 37964."Let's go up the hillside" 500DATA 37970." 510DATA 38648." 520DATA 38680." " 530DATA 38656." " 540DATA 38663." 550DATA 38664,"See the path?" 560DATA 38669." 570DATA 38675." 580DATA 38677." 590DATA 38659,"A vehicle has passed recently" 600DATA 37964." 610DATA 37972." " 620DATA 37980,"Approaching the gates" 630DATA 37988,"Which way to turn?" 640DATA 37998."A new surface on this track" 650DATA 38006,"The third bridge" 660DATA 38542."

670DATA 38118."Pylons close by" 680DATA 38166."A short climb lies ahead" 690DATA 38174 " 700DATA 38190,"Keep going" 710DATA 38198." 720DATA 38206."Trees line the track" 730DATA 38222." 740DATA 38230,"The end is near" 750DATA 38238."The loch is just in sight" 760DATA 38246." 770DATA 38254."The sky is changing" 780DATA 38262." 790DATA 38270," 800DATA 38278,"Can you see the sun shining?" 810DATA 38286." 820DATA 38294,"The weather has brightened" 830DATA 38302." 840DATA 38310,"The dry stone wall is in sight" 850DATA 38318." 860DATA 38334." " 870DATA 38342,"The Loch at last!"

### NOTES

## NOTES





BBC ENTERPRISES LIMITED WOODLANDS 80 WOOD LANE LONDON W12 ENGLAND

