

WELCOME!  
ONE  
AND ALL!  
TO....

# THE FUNFAIR



Northern Micromedia



# **FUNFAIR**

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## **Integrated Resources Project**

Funfair was designed by Beryl Hughes, Kim Brooks, Ann Muxworthy, Edwina Cockerill, Clive Hodgson, Carol Mason, Sue Grigor, John Brown, Amy Bean of the Integrated Resources Project.

Designers and Producers of resource materials: Carol Etherington, Carol Mason, Michael Kenny, Ann Muxworthy and Beryl Hughes.

Programmer            Clive Hodgson

Artists                Alan Davison, Malcolm Fagan

Composer             Geoff Hughes

Documentation       Beryl Hughes

Many thanks to all the teachers who have trialled Funfair in schools.

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# INTRODUCTION

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FUNFAIR is a simulation of a visit to the fair. The pupils are given an amount of money and encouraged to explore the map of the fairground. They must make decisions as to which sideshows or stalls they wish to visit.

The pupils are told the price of each stall before entering except the 'food' stalls which have a price list, as the items on sale vary in price. The computer may do the calculations of the money for the pupils. (See Teacher Options Page 9).

At each stall or sideshow the pupils are given a problem (most of them are mathematical or mathematical language problems) and successful attempts are rewarded by the accumulation of vouchers. The pupils are allowed to continue exploring and attempting the problems which arise until the money left is small and then a decision must be made regarding sufficient money or leave the program via the prize stall. At the end of the program the pupils can exchange their vouchers for a choice of pictures or puzzles, which will be shown on screen and then printed out. (If a printer is not available (see optional hardware on page 5) the pupils can collect the appropriate photocopied picture from the teacher. These have been provided as some of the 'worksheets' in the package.)

- Alm - to use a thematic / topic approach to introduce pupils to the objectives.
- Objectives - to introduce the need for basic skills in as realistic a situation as possible using the simulation aspects of the micro and to encourage decision making.

## Curriculum areas

Basic skills in the areas of Language and Mathematics with problem solving and decision making.

## Approach

Thematic via a simulation of leisure activities.

# INTRODUCTION

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## Contents of pack

Two discs for BBC B or Master

OR

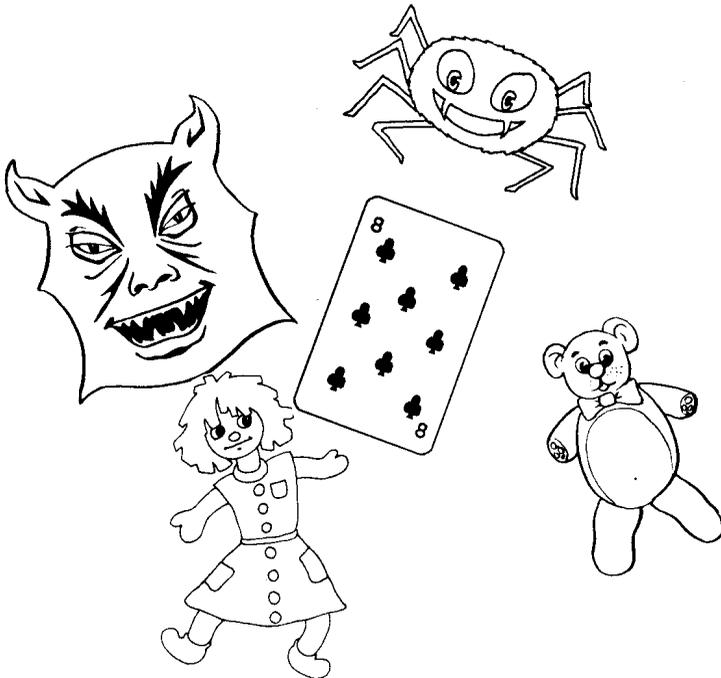
One disc for Master Compact or Nimbus

Resources

Documentation

Concept Keyboard overlay

An A4 sheet to show how to make a working copy (RM Nimbus only)



# SETTING UP

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## Optional Hardware

### Printer

There are several prizes (pictures and puzzles) for the pupil to print out at the end of the program. These can only be printed on Epson or Epson compatible dot matrix printers. (Photocopies are provided in the resource pack if no printer is available)

### Concept Keyboard

Use of a Concept Keyboard is optional (see overlay in pack). When the Concept Keyboard is connected the pupil doesn't need to use the computer keyboard as all the keys needed are on the overlay.

### Loading the program

BBC B, BBC Master and Master Compact.

The disc will autoboot.

i.e.

Place disc 1 into drive 0.

Hold down the SHIFT key.

Tap and release the BREAK key.

Release the SHIFT key.

The program will now load.

**N.B.** For BBC B users with double disc drive insert disc 2 into drive 1 and press number 1 when asked to insert disc 2.

### Rm Nimbus

Follow the enclosed A4 sheet to make a working copy of Funfair. Once your working copy has been made the disc will autoboot.

ie. Switch on the machine and insert the disc into the disc drive.

# STARTING OFF

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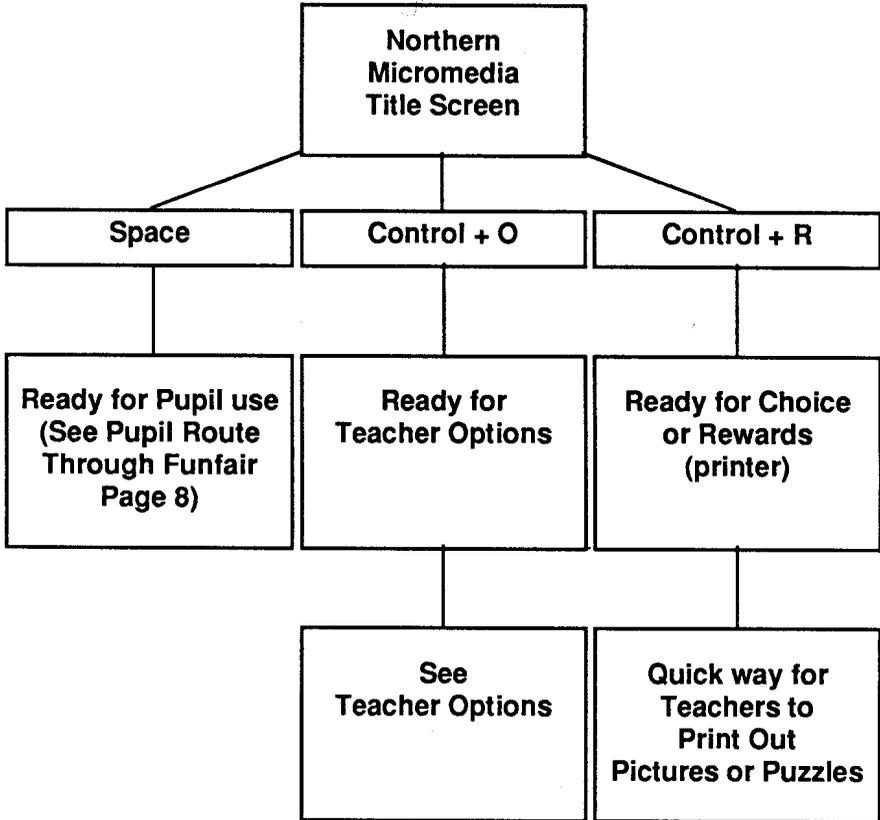
When the program has loaded it will stop at the NORICC/NORTHERN MICROMEDIA title screen. The teacher has three options from here.

- 1 Press space to use the program.
- 2 Hold down the **CONTROL** key and press **O**. This takes the teacher into a normally hidden part of the program which allows them to change the level of play as well as many other variables of the program. (See page 9)
- 3 Hold down the **CONTROL** key and press **R**. This allows the teacher to print any of the rewards without having to go through the program. (see optional hardware page 5)

See diagram on next page for further information on teacher routes through the program.

# TEACHER ROUTES

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# PUPIL'S ROUTE



# TEACHER OPTIONS

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**How to choose the level of difficulty and other factors.**

See **starting off (page 6)** to see how to access the teacher options page.

The program has three main levels and a teacher's level.

Each time the teacher changes the options they will be saved to disc. This can be useful for temporarily 'customizing' the Funfair disc for a pupil's or group of pupils' ability.

The blue band across the levels page indicates the position on the menu. Pressing the **space bar** moves the bar down the screen highlighting each option in turn. The **return** key cycles through the different settings for each option.

The options on screen are :-

## Level of play

<b>Level one</b>	(Easy) Mainstream Middle/Top Infants or older (S E N)
<b>Level two</b>	(Medium) Mainstream Lower Junior or older (S E N)
<b>Level three</b>	(Hard) Mainstream Upper Junior or older (S E N)
<b>Teacher option level</b>	This can be used to adapt the program to the individual needs of the pupil or group of pupils.

N.B. Levels 1,2 and 3 are fixed permanently.

# TEACHER OPTIONS

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## Starting money

£1.00, £2.00, £3.00 money given at start of program.

## Pupil answers sum

Off	Not shown on screen (but worked out by the computer).
Always	The sum is displayed and the pupil always works it out.
Sometimes	The sum is displayed and the pupil sometimes has to work it out.
Never	The sum is displayed and the pupil never has to work it out.

## Go to levels page

This takes the teacher to the 'teachers levels page' which allows the teacher to change the level of each stall to suit the pupil or group of pupils. (See Information regarding sideshows and stalls in **Teacher Options**)

## Use funfair

When selected will take the teacher out of the options page and into the main program.

## Route through the program

The pupils are invited to explore the FUNFAIR by using the arrow keys. They cannot leave the path. The route is therefore a matter of choice as are the amusements, sideshows and stalls.

# TEACHER OPTIONS

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Information regarding each sideshow and stall in Alphabetical order.

## Assault Course

The pupil is asked to choose the appropriate positional term for each part of the course before the figure proceeds to the next part of the course. Language used -up, down, along, over, under, through. No levels of difficulty. (Parts of the course may have more than one appropriate word which will be accepted)

## Big Dipper

In this amusement a number of cars scroll on to the screen and the pupil is told how many people are in the queue. When the cars stop the people get into the cars and the pupil is asked how many will be left in the queue.

The number of people who are in the queue is select randomly by the program. The number is however related to the number of cars and people per car.

Levels available	3 cars 1 person per car
	4 cars 1 person per car
	5 cars 1 person per car
	6 cars 1 person per car
	4 cars 2 people per car
	5 cars 2 people per car
	6 cars 2 people per car
	7 cars 2 people per car

# TEACHER OPTIONS

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## Big Slide

The pupil is asked to fill in missing numbers in a multiplication table as the pupil climbs the stairs.

Levels available 1, 2, 3 or 4, 5, 6 to 9, 10, 11 or 12 (These have been placed in numerical order for the ease of teacher selection, rather than order of difficulty.)

## Bingo

The pupil has a card with a range of numbers which he or she is asked to match from the words on screen, crossing off all the numbers to finish and gain a voucher.

Levels available 1 - 10, 10 - 20, 1 - 20, 10 - 30, 30 - 60, 60 - 90 and 1 - 99.

## Candy Floss

The pupil is required to identify and choose the colour word for the candy floss shown. When successful the pupil is shown the candy floss being eaten and rewarded with a voucher. No levels of difficulty.

## Cards

The pupil is given the answer to an addition or multiplication sum and must throw the darts accordingly to make a correct bond of numbers for the given number.

$n = \text{answer}$ ,  $? = \text{numbers to hit (from 1 - 5)}$

Levels available:

$n = ? + ?$	(ten or less)
$n = ? + ? + ?$	(fifteen or less)
$n = ? + ? + ? + ?$	(twenty or less)
$n = ? \times ?$	(twenty - five or less)

# TEACHER OPTIONS

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## Darts

The pupil is allowed to hit numbers on a modified dartboard. The pupil is asked to make an addition or multiplication sum with the stated number of elements. The numbers are awarded by throwing the darts and then the pupil is asked to give the correct answer.

? = number awarded by firing the dart ( 1 - 9)

n = answer to be typed in by pupil

### Levels available

$? + ? = n$	(eighteen or less)
$? + ? + ? = n$	(twenty seven or less)
$? + ? + ? + ? = n$	(thirty six or less)
$? \times ? = n$	(eighty one or less)

## Dodgems

A red dodgem car with a number on is shown to the pupil and the pupil is told that it is the number of the table. The pupil is then asked to bump into cars with multiples of the given (base) number.

Levels available: 2, 3, 4, 5, 6, 7, 8.

## Drinks

This stall is provided to give authenticity to the program and after selecting an item from the menu, the pupil is asked whether to go back to the map or deposit the litter in a bin. A voucher is awarded for the latter choice. The pupil may have to work out the subtraction if money is being calculated.

# TEACHER OPTIONS

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## Ghost Train

The pupil is taken on the ghost train and shown three creatures from (bats, skeleton, spook and spider) and then is asked to remember part or all of the sequence from memory.

Levels available:

First

Second

Last

First, Second and Last

Second and Last

First and Second

First and Last

## Hall of Mirrors

The pupil is shown reflections in a mirror and must identify and choose the correct words to describe the image in relation to a standard size (three times) The words used are thin, fat, tall, and short. There is no choice at this amusement.

## Hook the Duck

The pupil must hook two ducks and add the numbers on the ducks three times before being rewarded accordingly with vouchers. The computer will pick two random numbers and make sure the answer is within the range chosen in the levels.

Levels available:

5 - 9

5 - 20

10 - 30

30 - 50

50 - 70

70 - 99

# **TEACHER OPTIONS**

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## **Hot Dog Stall**

The pupil is allowed to choose from the menu and is rewarded if the litter is disposed of correctly. (Similar to Drinks Stall.)

## **Maze**

The pupil is put at the entrance to a maze and is required to find a way out.

Levels available:

- See maze and exit
- See maze but no exit
- See exit and path
- See path but no exit
- See exit but no path
- See no exit or path

(The teacher may need to try out these levels to help understand them)

## **Prize Stall**

This is at the exit to the Fairground. The pupil may enter this at any time, although doing so will terminate the pupil's turn if a prize (picture or puzzle) is chosen. The pupil will have a choice of prizes according to the number of vouchers won and level of the program.

# TEACHER OPTIONS

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## Roll a Ball

The pupil is required to stop the ball rolling before reaching a number which fits the required definition.

Levels available:

bigger than or smaller than 1 - 20  
bigger than or smaller than 20 - 50  
bigger than or smaller than 50 - 99

more than or less than 1 - 20  
more than or less than 20 - 50  
more than or less than 50 - 99

< or > 1 - 20  
< or > 20 - 50  
< or > 50 - 99

## Toffee Apple Stall

The pupil is allowed to choose items from the menu and if the litter is placed in the bin is rewarded with a voucher. Similar to Drinks and Hot Dog Stalls.

# **RESOURCE MATERIALS**

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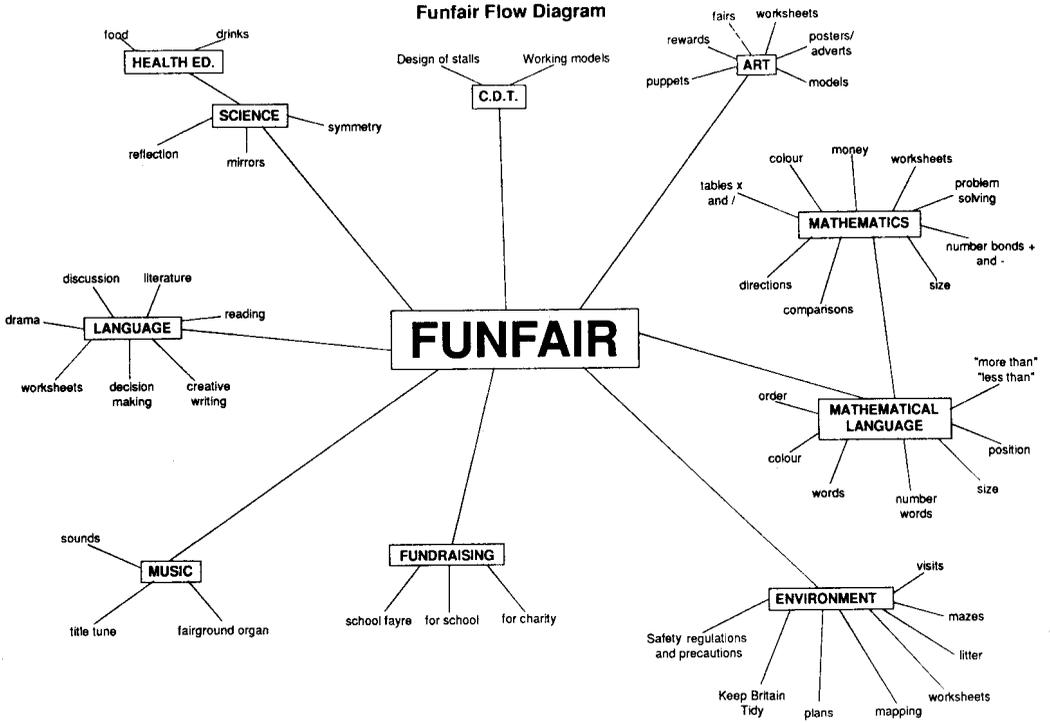
These include tasks to help the pupil before and after the program. They include a full set of pictures of the reward prizes for schools without a printer. The package includes art sheets which can be used in several ways.

N.B. The materials provided are only examples and not for one specific age group.

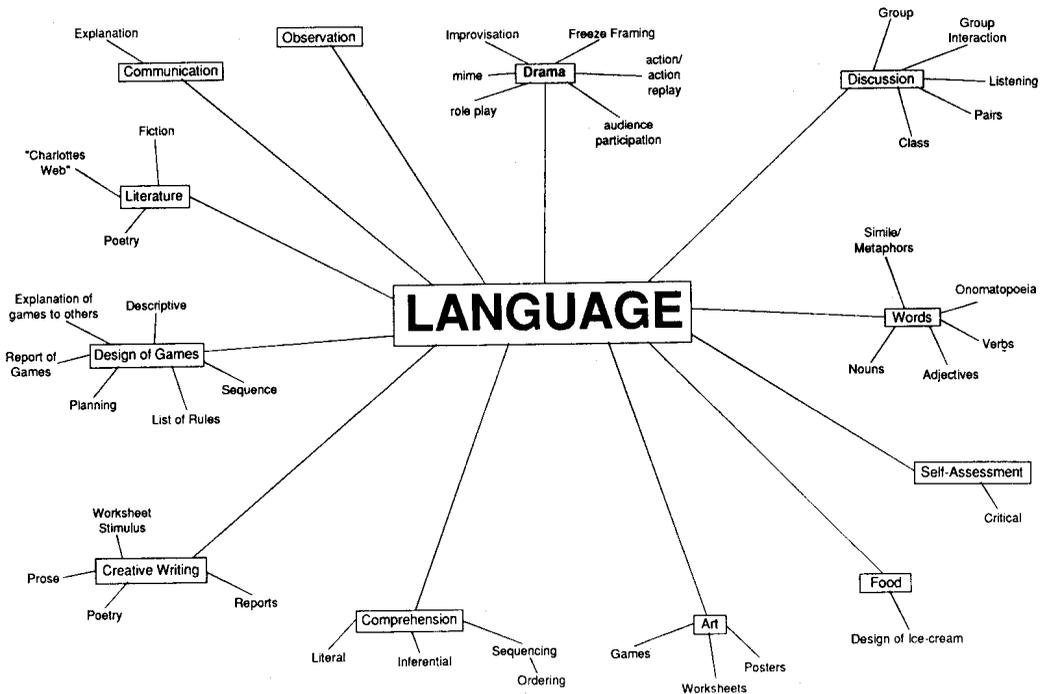
## **Other Curriculum Links**

see flow diagrams on	Funfair	Page 18
	Language	Page 19

**Funfair Flow Diagram**



**Funfair Language Flow Diagram**



# **CLASSROOM REPORTS**

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## **Using the Funfair Program**

As well as using this program to extend work in mathematics, I have also used it as a stimulus for oral and written work in English with a class of nine-year-old pupils. As part of the term's theme of Travel, it generated ideas for 'Travelling around the fairground'. Extracts were read from Christopher Russels's book 'Fairground', poetry about various rides and prose/verse expressing movement e.g. 'The Cataract of Lodre' by Southey. The children collected photographs of themselves at Funfairs, on swings etc. and also appropriate pictures and comic strips. They then wrote their own poetry and prose about their personal experiences and printed out the former using the word processor Folio.

**Norma Barker**  
**Stonelaw Middle School**

# CLASSROOM REPORTS

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I am a general subject teacher in a middle school (9-13 years) and I used "Funfair" with two of my English classes. These classes were a mixed ability group of 9-10 years old (this group was also my form class) and a lower band set of 12-13 years olds.

## **Work covered with mixed ability 9-10 year olds**

I first introduced the children to "Funfair" by allowing them to use the program in small groups while other activities were going on in the classroom. It was a very popular activity and the discussion work and group interaction that developed from this made it a useful addition to the curriculum. Once all the class had used "Funfair" and were familiar with it, I then spent the next half term of English lessons on the topic of the Funfair.

We commenced our work with a literal comprehension taken from an extract of "Charlotte's Web" (E.B. White) beginning at chapter 17 "Uncle". This is a good passage in that it not only gives good description of the rides available but it also sets the atmosphere of the fair through a series of sight and smell images. If more time had been available I intended to have a "smell lesson" with the children identifying a variety of substances using their noses and then having them write up about a day at a fair that they had had with particular emphasis upon the "smells" that they had experienced.

As the passage from "Charlottes Web" also contained a lot about food, through class discussion this led us onto our next piece of work which was to design a new ice cream desert to sell at a fair. This included writing down the recipe. The children used their imagination well to create some highly exotic and unusual deserts. Their recipes were also well written by the majority of the class and not just the more able pupils which was pleasing for me. Some good work on adjectives also arose as the children tried to outdo each other in making their desert appear more tantalizing than everybody else's.

# CLASSROOM REPORTS

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The adjective work proved to be a good link with our next assignment which was to design a poster for a funfair. Before we commenced this exercise we studied the format of a variety of posters and then we listed all the words that we could think of as a class to make a fair sound exciting. After further discussion the children then set out to work and produced some excellent posters. However, with hindsight I would have done this exercise after the children had produced their own funfair because it would have given them a more concrete and relevant base from which to work. I may also have changed the nature of the exercise slightly so that they designed a poster specifically for their own stall.

In the "Funfair" pack there is a picture of a boy and a man crashing into each other in dodgem cars with a few onlookers in the background. I used this scene to do some discussion work with my class. I split the children into groups and set them the task that they had to discuss what happened next and then report back to the group as a whole. The children thought that this was great because, as somebody shouted out, "It's just like what they do on that programme on the telly." She was of course referring to Noel Edmonds, "Whatever Next". A very lively discussion arose from this and the arguments as to who was right could have gone on well beyond the lesson time, and indeed, some heated discussion was continued in the playground. As I had little time I did not follow up this verbal work with any written work but there was definitely scope for this, as you can imagine.

The production of an actual Funfair must have been the highlight of the topic for the children. I organized this by first of all setting the children the task for homework to design a sideshow for a Funfair. I then put the children into small groups and in their groups they had to decide which of the designs was not only the best but also the most practical to make. This did not create as much friction as I anticipated and we were all soon in the building and developing stages of the games. Such was the enthusiasm of the children that they built and decorated many of the parts of the game at home (without being asked) and then tested them out in the classroom.

# CLASSROOM REPORTS

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The pupils willingly acted as guinea pigs for each others games and sometimes provided useful criticism on how to improve them. The children also introduced some interesting handicaps so as to make the games fair for all ages such as staggered starting lines and different weighted balls with which to knock things down. I was very pleased with the amount of thought put into the actual games and a wide variety were produced. Their titles varied from, "Peanut Cracker" to "Hoopla Horse."

The climax for the children though was when they could actually set up their fair for other classes. Such was their excitement for the big day that they brought in prizes to give to the children and somebody else organised a raffle without any prompting from me. As you can imagine the rest was a huge success with all those involved and my only advice would be to ensure that you invite all the nearby classes because the noise is such that they would not get any work done.

The "Spot the Stall" sheet provides a good framework for a piece of creative writing. In pairs the children had to identify the stalls and later we wrote a story about a day at the funfair which involved the eight scenes.

The children could use the scenes in any order but the numbered sequence provided an ordered framework for the less able children.

## Work Covered with Lower Band 12-13 Year Olds

Not as much work was covered with these children due to the fact I had them for less periods a week other than "Funfair".

# CLASSROOM REPORTS

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The first thing that these children covered was that in “twos” they had to arrange the small scene sheet into what they thought was the correct order (I had already pre-cut these) and then write down a brief framework of what they thought was happening. The children then discussed their sequencing and ideas with the rest of the class and through further discussion some ideas were modified. Then using their frameworks the children wrote up their stories. The pictures also provided a good link up for drama because a few weeks later the children, again in small groups, had to create four or five frozen scenes from a funfair which on my command they had to bring to life. The rest of class then had to guess which rides or sidestalls the children were trying to represent - a very enjoyable activity.

I also used the man and boy in bumper cars picture with the older children although in a slightly different way from the younger group. I divided the class into five groups and gave them each a character from the scene. They then had to put themselves in the characters “shoes” and explain how they had got to be in that position at the funfair and why they were behaving in that way. The children then had to report back their findings to the rest of the class and a discussion was held as to whether or not the opinions were reasonable. Following on from this the children had to produce a newspaper report on the incident which had to contain eyewitness accounts from the by-standers at the fair.

Another piece of work that I covered with the older children was to have them first draw a character from a funfair, using the three in the pack as examples. On their completion the children, working in twos had to introduce their character to their partner. After this they had to complete some notes on their character. We then discussed how the notes might take the shape of a poem. The children then went on to write their own poems.

# **CLASSROOM REPORTS**

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I hope that these ideas may be of use to stimulate further ideas from groups using this pack.

**N.B.** Please note that although I only used the program in English lessons it has immense potential for cross curriculum teaching.

**Kim Alison Brooks**  
**Killingworth Middle School**

# IDEAS FOR EXTENSION WORK

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Look at the history of Fairgrounds, as part of Entertainment through the ages eg. Bartholomew Fair. How have fairs changed? - do they have different stalls or sideshows now? Other types of fairs; horsefairs. goose fairs.

Follow-up the litter theme from the program - discuss "Keep Britain Tidy" campaign, make posters. Find out how litter is disposed of after a fair has moved on.

As part of your Funfair theme, aim to make your own version of each stall. Set these up in the school hall or yard. Make a charge, and raise funds for the school, or your class's favourite charity. This might be combined with your summer fair or sports day.

Cookery - make popcorn, toffee-apples, hot-dogs. These can be sold at break/lunch-time, again to raise money for charity, or at your summer fair or sports day, as above. Discuss "junk" or "fast-foods".

Visit your local funfair if you have a static one, or consult "World's Fair" trade newspaper to find out your nearest, with dates.

Mapwork - follow the routes, to and from various destinations, of a real fair. Have a map on the wall, plot the progress with coloured markers.

Plans - give different areas to represent typical fields of various shapes. Can a given number of stalls / caravans / rides be fitted in, in a logical layout? (Discuss which parts would have to be accessible to the public, would you need car-parking facilities? etc.) Use graph-paper and draw to scale.

Discuss the lifestyle of "Travelling" folk - how does it differ from ours? How are children educated? Life in a caravan - perhaps some of the class - members' families own holiday caravans, or some may have had caravan holidays. (See Camping and Farm software from Northern Micromedia)

# **IDEAS FOR EXTENSION WORK**

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Safety at the fairground - regulations/checks made. Find out who is responsible for this. Talk about sensible precautions to take when visiting the fair.

Find out if any of the local stately homes/country houses have a maze in the grounds. Let the children design their own mazes. Draw the best on the playground and test them out.

## **Maths/Number work**

Make missing number table-line / ladder / staircases.

Play card-games which require addition or multiplication.

Play "Hook the Duck" with numbered ducks and fishing-rods made from garden canes.

Draw a copy of the program's Dart Board on the play-ground, or in the hall or classroom, and play "Drop-Darts" with blunt-ended, home made darts.

Teddy (or spider) beetle - allocate numbers to parts of teddy ie head, body, arms, legs, eyes, nose 1-6. Throw a dice to score parts. First with a complete picture wins.

Follow up work on mirrors by studying reflection, convex and concave effects, symmetry.

Draw up own menus for food-stalls, decide prices. Give pupils a set amount to spend; they choose how to spend it. Or ask which combinations of coins would purchase each item. Or say what should be bought, and ask what change is due from original sum.

# **IDEAS FOR EXTENSION WORK**

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## **Language work**

Discuss feelings about the Funfair - how do you feel on a fairground ride? Choose one and describe the excitement, movement, colours, crowds etc.

The senses - What you can see, distinctive sounds, the smells particular to a fair.

Movement words - brainstorm these onto the blackboard. Use the words to stimulate creative writing; prose or poetry, incorporating shapes relevant to the fair eg. write out the poem in the shape of a Big-Wheel, Dodgem or Big-Dipper. (See Maker / User from Northern Micromedia)

Sequencing - write a description of a sequence of events connected with a particular stall or ride. Sentences then mixed up. Pupils to rearrange into a logical order.

Working in pairs or small groups, devise own crosswords using words from the program - colours, numbers, size words, vocabulary from assault course, names of stalls/rides. Write suitable clues, then test them out on other groups. (See Crossword Call-up from Northern Micromedia)

Lotto - word-matching game using words from the program, as above.

## **Art / Craft / Drama / Music**

Make a duck template and use to make duck mobiles, make wall frieze of the "Hook the Duck" - each pupil decorates a duck in own way. Make wool, felt, pottery or wooden ducks.

Look at Fairground Art eg. Carousel horses. Why is the style distinctive? Compare with Romany caravans, narrow-boats, circus trailers. Make a carousel frieze - decorate horses, and choose typical names for them.

# IDEAS FOR EXTENSION WORK

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Listen to fairground music, steam organs, barrel organs.

Punch and Judy show - make puppets, scenery and a booth. Write a script, and act out the traditional story-line.

Roleplay and improvisation based on various fairground scenes - children on their first visit to a fair, a lost child, stallholders advertising their stalls, a gypsy fortune-teller. Make origami "Fortune-Tellers".

Make posters advertising a travelling fair coming to town.

Design your own playing - cards; backs - discuss the kind of things already produced, traditional and more modern. Look at other sorts of cards e.g. tarot. Design new symbols to replace hearts / diamonds / spades / clubs. Illustrate the Jack / Queen / King figures as real people or animals etc. (Packs of blank cards are available from several educational suppliers, or use a template).

Build up a three-dimensional model of a Funfair using Lego or Junk-Modelling technique.

Use a mirror to look at yourself closely, then paint a self-portrait as accurately as possible. Or work in twos - pretend you are the mirror, and make an accurate image of your partner. In each case, put them all up on the wall. Can everyone guess who they are meant to be?

# BOOKLIST

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<b>Title</b>	<b>Author</b>	<b>Publisher</b>
Fairground Architecture	David Braithwaite	Hugh Evelyn (1968)
Fairground Machines	Christine Hahn	Wayland (1979)
Fairground! Teachers notes	Mary Hoffman	BBC TV "Look and Read" series, spring 1982
Popular Entertainments through the Ages	Samuel McKechnie	Sampson Low
Charlotte's Web	E.B. White	H. Hamilton (1952)
Memories of Bartholomew Fair	Henry Morly	Chapman & Hall, London (1859)
Recreations	J.A.R. Pimlott	Studio Vista (1968)
English Fairs	Ian Satrsmore	Thames & Hudson (1975)
At the Fair	P. Usborne	MacDonald (1974)
World's Fair	Weekly trade newspaper, giving lists of fairs with dates, can be ordered from newsagents.	

# **RELATED N.M. SOFTWARE**

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<b>Farm</b>	An adventure based around a Farm.
<b>Camping</b>	A decision making program about a Camping weekend.
<b>Crossword Call-up</b>	Generate your own crosswords with this latest release.
<b>Maker / User</b>	Program to help develop descriptive vocabulary.

# NOTES

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