

Contents

Introduction.....	6-7	The Fairground – teachers’ notes.....	51-55
Curriculum Overview.....	8	The Fairground.....	56-57
Interior Designer – teachers’ notes.....	9-12	Activity sheet 1: Fairground Ride.....	58
Interior Designer.....	13-17	Activity sheet 2: Fairground Sign.....	59
Activity sheet 1: Arrange the Furniture.....	18	Activity sheet 3: Control Storyboard.....	60
Activity sheet 2: Design a Bedroom.....	19	Activity sheet 4: Fairground Poem.....	61
Activity sheet 3: Measurements.....	20	Save The Polar Bear	
Activity sheet 4: Classroom Design.....	21	– teachers’ notes.....	62-67
Victorian Childhood – teachers’ notes...22-27		Save The Polar Bear.....	68-69
Victorian Childhood.....	28-32	Activity sheet 1: Monitoring.....	70
Activity sheet 1: Finding Out.....	33	Activity sheet 2: Melting Ice.....	71
Activity sheet 2: Website Evaluation.....	34	Activity sheet 3:	
Activity sheet 3: Victorian Life.....	35	Control and Monitoring.....	72
Activity sheet 4: Graphs.....	36	Activity sheet 4: Analysis.....	73
Activity sheet 5: Improve Conditions.....	37	Activity sheet 5: Hyperlinked Pages.....	74
Surprise Party – teachers’ notes.....	38-41	Security Alert – teachers’ notes.....	75-79
Surprise Party.....	42-46	Security Alert.....	80-85
Activity sheet 1: Entering Data.....	47	Activity sheet 1:	
Activity sheet 2: Formulae.....	48	Monitoring Systems.....	86
Activity sheet 3: Party Planner.....	49	Activity sheet 2: Lighthouse.....	87
Activity sheet 4: Invitation.....	50	Activity sheet 3: Security System.....	88
		Activity sheet 4: Here is the News.....	89

Introduction



ICT and the Primary Curriculum

Today children will arrive at school with an extensive knowledge of ICT and its capabilities. They have a knowledge and understanding that can sometimes be beyond some adults. The aim in school today is to harness their experiences and use them to enhance their learning in school.

ICT today is one of the best and fastest growing tools available for learning. It helps to:

- Make difficult and abstract concepts easier to explore
- Make learners partners in their formal learning
- Motivate learners and keep them engaged in learning
- Open up dialogue with parents and extend learning
- Personalise learning and give learners a voice
- Raise standards
- Reach the hard-to-reach.
- Save you time and be more efficient.

In order for children to use and apply their ICT knowledge and understanding confidently and competently in their learning and everyday contexts, exciting and stimulating lessons must be provided.

ICT is no longer viewed as a separate curriculum subject but permeates all the other subjects. The children should be provided with stimulating activities that allow them to explore and become familiar with the technology resources available in the school, across a wide range of different subject areas.

About the series

The 'Using Stories to teach ICT' series of books demonstrates how ICT skills can be taught and extended whilst linking to a wide variety of other subject areas. There are four books in the series – two at Key Stage 1 and two at Key Stage 2.

They offer a structured approach with the non-specialist in mind and provide detailed lesson plans to teach specific ICT skills whilst linking to other areas of the curriculum. Each book contains ideas for communication, modelling, presentation, databases and control.

The aim is for ICT to be presented in a format that shows how information technology is used in our

everyday lives. The imaginary situations portrayed in the stories act as a stimulus for the children's own investigations and creative work. The ideas in this series can be adapted to teach all areas of the curriculum.

Format of the books

Each book contains six stories that require the children to use and extend different ICT skills. Each story is accompanied by teachers' notes containing four separate lessons that can be used in conjunction with the story. Every lesson plan has a corresponding activity sheet.

The teachers' notes are broken down into the learning objective and the curriculum links with some suggestions for the type of hardware and software that will need to be made available. The activities have been sub-divided into:

- Resources – this is a list of what you will need to do the lesson
- Introduction – ideas to introduce the activities, with key questions and discussion points to reinforce the concepts and vocabulary required for the lesson
- Main activity – ideas for grouping and using the activity sheets
- Plenary – an opportunity to review and discuss the learning outcomes so children reflect on what they have learnt
- Extension – further ideas to extend their skills and technological knowledge.

The activity sheets can be found at the end of each chapter.

About the stories

The stories are designed to be a springboard to develop ICT within the classroom throughout a wide range of subjects due to the broad selection of cross-curricular links.

If possible enlarge copies of the story or project it on to a whiteboard so the children are able to see the illustrations and may be able to follow along as you read it aloud to the class. As the children get older and their vocabulary improves, encourage the children to read the stories aloud to each other.

There is a lot of scope for initiating a discussion about the wide range of technology used in our everyday

lives and for extending from the given lesson ideas to your own ICT based projects.

.....

Using the lesson plans

Within the planning we have added reference statements headed WALT, WILF and TIB as these or similar systems are often used to ensure lessons are focused, objective led and in context for the learner. They help summarise the purpose of the lesson, what is required of the children in order for them to successfully learn that lesson and why what they are learning is important.



WALT stands for "We Are Learning Today"



WILF stands for "What I'm Looking For"



TIB stands for "This Is Because"

Curriculum Overview

This chart gives an overview of the ICT covered by each story and the cross-curricular links covered by the activities over all four books in the *Using Story to Teach ICT* series. The relevant information for this book, aged 9-11+, is shaded.

Book	Story	ICT	Cross-curricular link
Ages 5-6	Playground Proposal	Modelling	Design & Technology
	Football Crazy	Word Banks	Geography
	Song Quest	Presenting Information	Music
	The Cycle of Life	Labelling and Classifying	Science
	In the Garden	Pictograms	Mathematics
	How Does this Work?	Instructions	Literacy
Ages 6-7	The Pen Friend Diaries	Communicating Information	Literacy
	Celebrations	Communicate Ideas	RE
	Why do we Remember?	Finding Information	History
	Robot Postman	Routes	Geography
	Magic Carpet	Creating Pictures	Art
	Ice Cream Parlour Break-in	Questions and Answers	Mathematics/Science
Ages 7-9	School Play	Combining Text and Graphics	Literacy
	Jack and the Beanstalk	Manipulating Sound	Music
	Tiger Adventure	Databases	Geography/Mathematics
	It's Not Right!	Email	PSHE/Citizenship
	Mosaic	Repeating Patterns	Art/History
	Labyrinth	Simulations	Mathematics
Ages 9-11+	Interior Designer	Graphical Modelling	Art
	Victorian Childhood	Complex Searches	Mathematics /History
	Surprise Party	Spreadsheets	Mathematics
	The Fairground	Control and Monitoring	Design & Technology
	Save the Polar Bear	Monitoring Environment	Literacy
	Security Alert	Multimedia Presentation	Design & Technology

Surprise Party – teachers' notes

Learning Objective

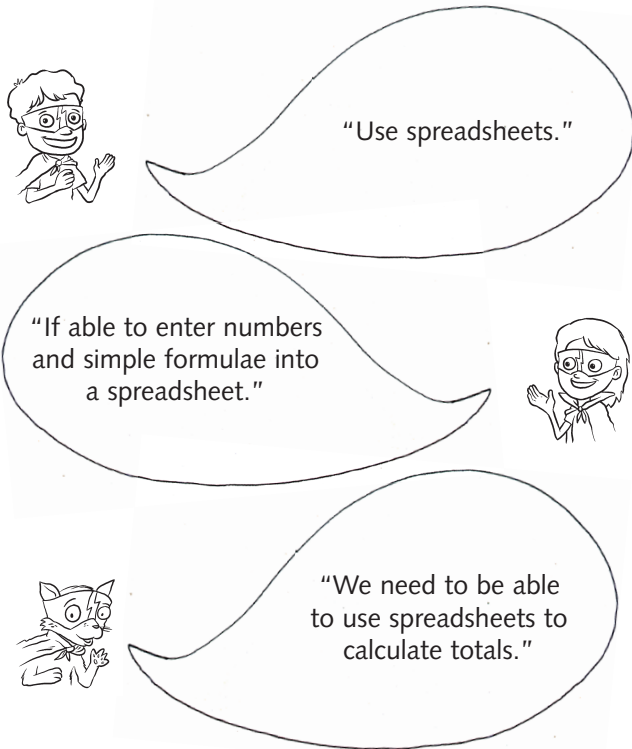
To use spreadsheets to carry out calculations.

Curriculum Links

Mathematics

- Explore the effects of changing the data in a spreadsheet
- Represent data using graphs
- Use simple formulae.

Activity One – Entering Data



Resources

- 'Surprise Party' story
- 'Entering Data' activity sheet
- Computers
- Printer
- Digital projector
- Whiteboard
- Laptop
- Spreadsheet software, such as Excel.

Introduction

Read the 'Surprise Party' story to the class. What is Monica's budget? If necessary re-read the paragraph:

"I'm making a list of things I need for Trisha's surprise party," Monica said. "I've got to work out if I need to collect more money from my friends."

"How many people are you inviting?" Dave asked.

"About a hundred people; everyone in Year 5 and 6 has given me £3 so far to pay for the disco and buy the food and drink. I was trying to work out if I'd have any left over to decorate the hall."

Discuss the idea of working to a budget. Discuss how totals will need to be recalculated if prices or quantities change, such as the number of people invited or amount of food or drink bought. Explain an easy way to calculate these totals is to put them into a spreadsheet like Dave did for Monica.

Main Activity

Reproduce the 'Entering Data' activity sheet in Excel. Demonstrate how to move around the spreadsheet and how to enter text labels and numbers into the cells. Ask the class to identify particular cells and fill in the contents. Explain how to use a simple formulae, such as =E2+E3, to find the total amounts spent on Trisha's surprise party and =J5-J7 to find out how much money is left.

Discuss how =E2+E3+E4+E5+E6 produces a total. Explain each cell specified is added together.

Is there a shorter way they could write this? Tell the children they could use the formulae =SUM (E1:E6) instead. Ask the children to use the =SUM formulae to calculate the total cost of the surprise party.

Ask the children to explore what happens when the data for the cost of the disco is removed and changed for the cost of the band. How much money did Monica save? Make suggestions on what this money could be used for instead.

Plenary

Ask each group to change one of their cells so the total is over budget. Then, ask each group to present their spreadsheet to the class and see if anyone can spot how to change the total back to within the budget.

Explain Excel is not only a good calculator but, is also a good presentation tool. They can highlight headings by adding colour backgrounds and make specific text bold so it stands out.

Extension

Allow time for the children to experiment changing the colour of the cells and text to improve the appearance of their spreadsheets. Suggest they can also use the bold, italic and underline options for the totals.

Activity Two – Formulae



"Use a range of formulae."

"We need to use formulae appropriately in spreadsheets to calculate the correct answers."



Resources

- 'Surprise Party' story
- 'Formulae' activity sheet
- Computers
- Printer
- Digital projector
- Whiteboard
- Laptop.

Introduction

Read the 'Surprise Party' story to the class. Discuss how Jason could use a spreadsheet in Excel to help him with his maths homework.

Monica smiled and together they changed the figures on the spreadsheet to work out how much more money they could spend.

"That's cool," Jason said. "Could I use Excel to work out my maths homework?"

"Yes," Dave said and opened up a new sheet. He entered a few numbers into the columns and added the formulae. "There. It's worked out all the answers for you."

Remind the children how to create a simple spreadsheet and enter simple formulae. Show the class how to copy the formulae from one cell to another. Explain they are going to explore the different formulae for: subtraction =SUM(D14-D12), multiplication =SUM(B12*C12), division =SUM (C2/C3) and addition =SUM(D2:D8).

Main Activity

Split the class into pairs and give each pair a copy of the 'Formulae' activity sheet. Use these numbers, to work out the formulae and write it onto the activity sheet. Remind the children that the / sign means divide and the * means multiply.

Ask each pair to recreate the Excel sheet on the computer and use it to calculate the correct answers using the formulae they have worked out.

Plenary

Ask for volunteers to add the formulae onto a copy of the re-created Excel sheet projected on the whiteboard. Discuss how they identified the appropriate cells to include and what answers they found.

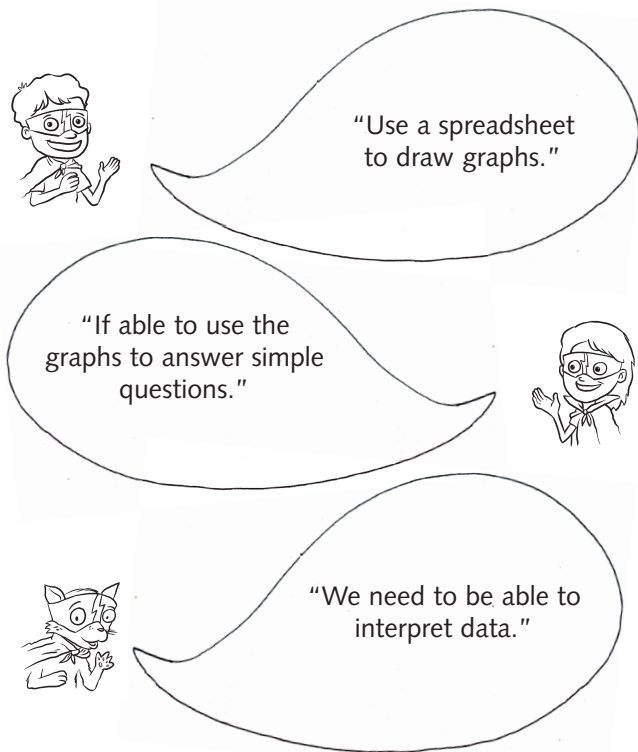
Extension

Ask the children to create a set of multiplication tables from 1x to 12x, such as:

	A	B	C
1	1	9	9
2	2	9	18
3	3	9	27

What happens when they change the number in column B? Would this work for all their times tables?

Activity Three – Party Planner



of the story where Dave suggests they do a survey so they buy enough food.

"You know what'll make that easier, don't you?" Dave said.

"What?"

"Putting it all on a spreadsheet on my laptop, if you put in the formulae it will work out the total amounts for you."

"Really, you could do that?"

Dave grinned. "Of course I can. Do you know how much of each item you want?"

Monica shrugged. "Not really. Enough for one hundred people I suppose."

"We could do a survey of people's favourite food to make sure you buy the right amount," Dave said.

Explain this would help to prevent any food being wasted by buying too much too. Explain it would also help to identify food everyone in the group likes to eat and drink. Remind the class that some people have allergies and this should be taken into consideration when choosing the types of food and drink they would like.

Tell the class they are going to conduct their own surveys to help them decide what food and drink to bring to the party. Database programs such as, Black Cat Information Workshop 2000, can be used by the children to produce their own simple databases. The choices of graphical representations include horizontal and vertical bar charts, pie charts, line and scatter graphs, which can be manipulated and shown in 2 or 3 dimensions.

Resources

- 'Surprise Party' story
- 'Party Planner' activity sheet
- Computers
- Printer
- Digital projector
- Whiteboard
- Laptop
- Database program, such as Black Cat Information Workshop 2000.

Introduction

Read the 'Surprise Party' story to the class. Ask the children if it was a good idea for Monica to organise a surprise party for her best friend, Trisha. Do they like surprise parties? Why, or why not? Did Monica have enough money to spend on making the party a success? What happened that helped Monica keep to budget? Would she have been able to organise the party with less money?

Tell the children they are going to plan a class party. Set a date for the party to take place. Is the party going to have a theme? What will they need? Re-read the part

Main Activity

Split the class into small groups of six to eight children. Tell them they are going to find out what party food their group prefers. Remind them how to make a tally to calculate quantities. Explain they will need to set up the database to draw graphs to show the results. Then they can analyse the graphs to decide the most popular food and drink.

Explain they are going to produce their graphs using the computer. Talk about the software they are going to use. Allow time for them to set up the database, produce their graphs, print and analyse them.

Plenary

Ask the children:

- Which food is the most popular?
- Which drink is the most popular?
- What other things will they need to provide?

Explain they will need cups, plates, napkins, etc. Each child should choose one item to bring to their class party.

Extension

Ask the children to find out for homework how much each of the items their group is going to bring costs. They can easily find prices by searching supermarket websites.

Tell them to put these prices into a spreadsheet and calculate the total cost. Is this within a given budget?

Activity Four – Invitation



“Organise and re-organise text and graphics on screen.”

“If able to use appropriate techniques to ensure writing is clear, well presented and free of errors.”



Resources

- ‘Surprise Party’ story
- ‘Invitation’ activity sheet
- Computers
- Printer
- Digital projector
- Whiteboard
- Laptop
- Word.

Introduction

Read the ‘Surprise Party’ story to the class.

Re-read:

Monica carried on emailing the party invitations she’d made in Word to everyone. She asked them to RSVP by email so Trisha would not find out about the party.

Explain Monica made invitations in Word to invite people to the party. She emailed them so Trisha would not see her giving them out. This helped to keep the party a surprise.

Main Activity

Explain to the class, they are going to design and make their own party invitation. This could be for Monica’s surprise party in the story, or for their own class party.

Ask, what information needs to go on an invitation? Tell them they need the date, time and venue. If it is for the class party there could also be a space to remind them what they need to bring.

Use the ‘Invitation’ activity sheet to design their invitation and then they can reproduce them in word and add Word Art, ClipArt, gifs and all photos from the Internet that could be used as backgrounds.

Plenary

Print out the invitations. Discuss what worked well and what did not work so well.

Extension

The children could email their invitations using the school email facilities.

Entering Data

Name: _____

- Complete the spreadsheet using the information found in the 'Surprise Party' story.

	A	B	C	D	E	F	G
1		Item	Amount	Quantity	Cost		
2	Food	Biscuit Bars					
3		Cakes					
4		Crisps					
5		Cocktail Sausages					
6		Pizza					
7		Sandwiches					
8							
9	Drinks	Apple Juice				Budget	£300
10		Blackcurrant Cordial					
11		Cola				Total	
12		Lemonade					
13		Orange Juice				Remaining	
14							
15	Other	Balloons					
16		Birthday Banners					
17		Bowls					
18		Cups					
19		Disco	1	1	£200		
20		Napkins					
21		Party Poppers					
22		Plates					
23							

- What was the total amount spent on Trisha's surprise party?

- Was this within the budget?

Formulae

Name: _____

- Create this spreadsheet in Excel.

	A	B	C	D	E
1	1	2	3	4	5
2	6	7	8	9	10
3	11	12	13	14	15
4	16	17	18	19	20
5	21	22	23	24	25
6					
7					
8					
9					
10					

- Work out the formulae needed to find out the answers to the following sums.

Sum	Formulae	Answer
$A7 = 1 + 6 + 11 + 16 + 21$		
$B8 = 22 + 17 + 12 + 7$		
$C7 = 18 - 3$		
$D8 = 25 - 21$		
$E7 = 4 \times 9$		
$A9 = 17 \times 19$		
$C9 = 16 \div 8$		
$E9 = 20 \div 5$		

- Check your answers in Excel.
- Using the same spreadsheet, write some sums of your own to work out the formulae.

Invitation



Name: _____

- Design and make an Invitation for your own party.
- Remember to include the date, time and venue.

- Mark on your design where you will use Word Art, ClipArt and photos.