Unit 7.4 Introduction to modelling and presenting numeric data			
Date: xx	**Duration:** xx mins		**Lesson:** 1 of 6
Class: xx	**Pupils:** xx	**Boys:** xx	**Girls:** xx

Aims of the unit
Pupils will use spreadsheets to model simple situations. They will use spreadsheet functions to construct, explore and amend simple models using charts to present their findings.

Objectives of this lesson
Pupils should:-
- be able to identify key elements and vocabulary of a spreadsheet
- be able to set up a simple spreadsheet
- be able to use simple formula (+, -, *, /)

Resources
Computer room with Microsoft Excel, IWB.
Pupil workbook
Backup resources

Prior Knowledge
Requires basic use of computing as found in unit 7.1. Experience of spreadsheets desirable but not essential.

Possible difficulties
Pupil access to network or computer failure (Share with peer)
Network failure (Use paper based backup resources)

Timing	Teacher Activity	Pupil Activity	Resource
10:05	Welcome pupils and ask them to sit in the middle away from computers. *Explain* that this lesson we are going to:- • View a presentation and discuss our new topic of modelling with a class quiz • Plan a spreadsheet on paper • Create a spreadsheet • Each receive a workbook and put name on it. Take register whilst workbooks are being passed around	Pupils need to be paying attention 2 pupils hand out booklets, pupils placing name on booklet	IWB Workbooks
10:08	**1)** *Present* "Introducing Spreadsheets" *Ask questions* to test prior knowledge and understanding. "Which program would you use?" "Why would you use a spreadsheet?" "Who would use a spreadsheet?" "Why use a spreadsheet?" *Ask for a volunteer* to control the IWB in the "Get to know Excel" quiz	Answer questions One pupil control the board. Rest of class assist with the right answer	IWB Introssheet.swf (Use screenshot handout for backup)
10:18	*Introduce* planning High School Musical theme and need for budgets. *Ask* what costs would we need to consider when planning a production. Ask pupils to write down in workbook Once minimum of 6 costs identified ask pupils to use template in workbook and plan their spreadsheet. When completed ask them to move to computer, logon, open excel and start creating their spreadsheet. *Circle room quickly to check on progress. For those that are struggling, demonstrate on whiteboard.*	 Answer questions and write down in workbook Practical work: Plan spreadsheet *Practical work:* Logon to network, open excel and create spreadsheet Pupils move to the front	 Workbooks Computers with excel Whiteboard

	(differentiation) Open up excel on IWB computer and start own spreadsheet	if having difficulty for teacher led example	IWB, excel
10:30	*Gather class* to move into the middle to discuss formulae. *Demonstrate* how to create a total. Show how by changing one cost the total update automatically. Show other simple formula (+, -, /, x). *Instruct* pupils to create a total and provide a minimum cost per ticket if 50 tickets were sold *(Differentiation by outcome. Creating a total is key, min ticket value is extension task)* Circulate quickly to check on progress and assist those having difficulty	Pupils move to middle, pay attention and answer questions *Practical work:* Pupils return to computer and complete task	IWB, excel
10:40	*Instruct* pupils to save work as 74_1_Musical.xls in their user area, log off and return to the middle.	Practical work	
10:45	*Plenary: Ask* for advantages and disadvantages of using spreadsheets, recap on vocabulary. Ask to write homework in diary "Complete advantages and disadvantages of using a spreadsheet for real life situations as found in workbook"	Answer questions Write down instructions	 Homework diary
10:50	*Dismiss class:* Test a pupil from each side (3) on spreadsheet vocabulary. If answer correctly that side is dismissed first, move onto the text side. (1 min most)		