

Headers and footers

Name, Candidate number and centre number

↓
+ activity number

Building a model

You may well not need to build a model from scratch but you will need to modify an existing model.

We are going to start by building a model from scratch in order to acquire the necessary ICT spreadsheet skills.

This lesson you should learn how to:

- Import a data set using the wizard and place data in a particular location.
- Copy and paste a logo into a spreadsheet
- Set validation rules, input messages and error alerts
- Make formulae that link cells in one worksheet to those in another (within the same workbook!)

You will also practice skills you are now becoming familiar with, eg:

- Importing data from a text file
- inserting and renaming worksheets
- making and replicating formulae

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Open a new spreadsheet and import the QwickFeet 2003 figures from the ebook.

1. Define the Problem

- a) minimise emergency orders
- b) Predict the years orders

Parameters: max^m 4000 pairs
batches of 100

Data source: Internal data base of
2003+2004 figures

ext source: more years
national sales data

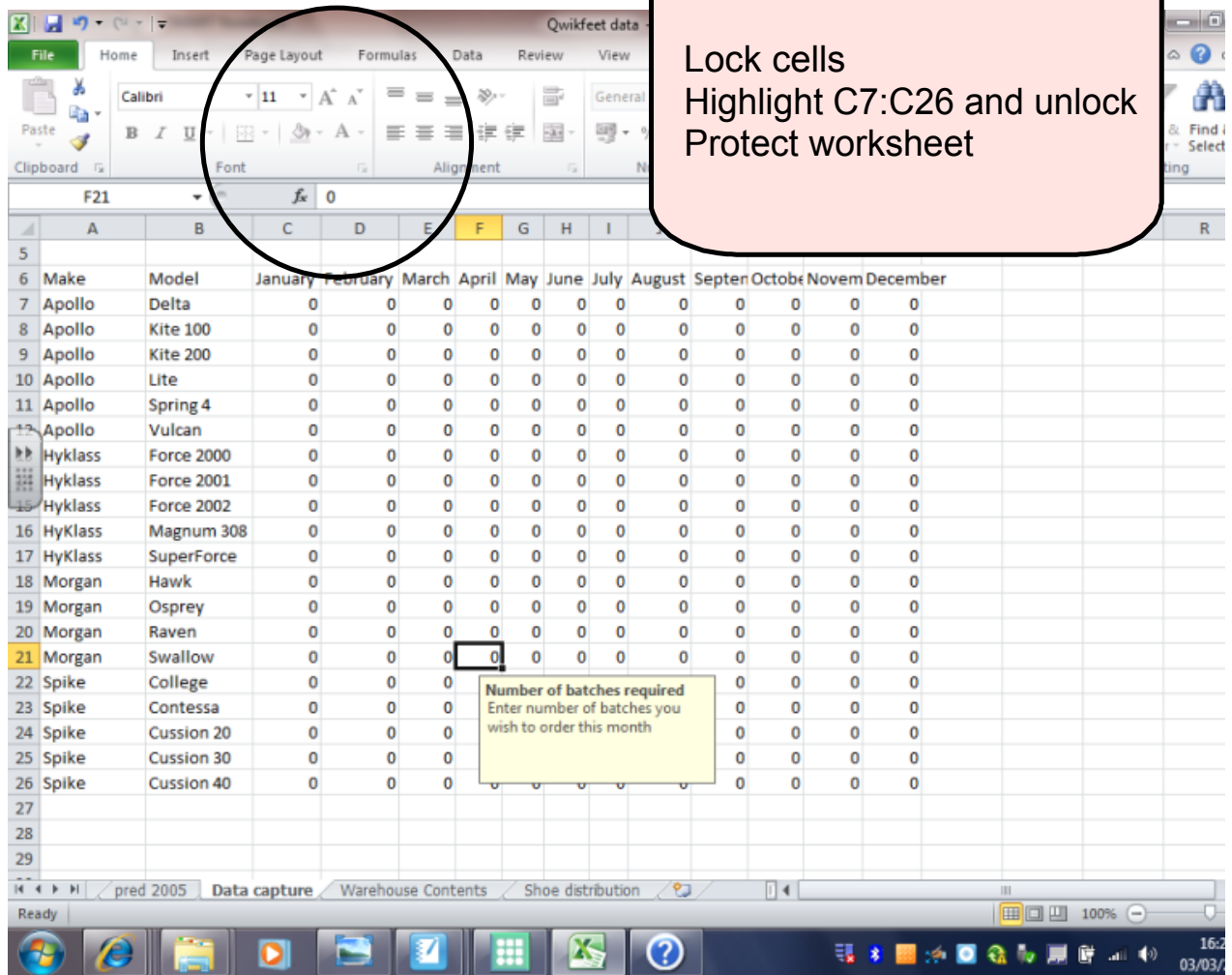
We are going to develop the Qwik feet model

This lesson you should learn how to:

- Set conditional formatting
- Calculate totals (sum)
- Round data (to nearest whole no, 2dp etc)
- Absolute cell referencing
- protect a worksheet (password qwikfeet)
- lock and unlock cells

You will also practice skills you are now becoming familiar with, eg:

- merge cells
- Making formulae and replicating
- sum
- finding a percentage



Interrogating the model

ch 3.5

- comment boxes
- filters
- lookup
- graphs
- show formulas (under formulas tab)

Refining a model

White book ch 3.6

The exam

Drawing together what we have
learned

The exam

- There are 5 main areas in the exam that draw together what we have learned:
 1. Identifying the problem
 2. Analysing the Sources of data
 3. Creating and using the model to make a decision
 4. Reporting the findings
 5. Evaluation of the model

Identifying the problem

- Summarise the Current Situation
- Outline the decision you have to make.
- State any assumptions you have to make
- May also ask for lists of sources
- **Marks given for key points of the current situation and what you perceive the problem to be.**

Analysing the Sources of data

- Identify and evaluate the sources of information available, commenting on their likely accuracy and usefulness.
- Identify any additional information you think may be useful:
 - Explain why you think it would be useful.
- Suggest a possible source for this information.
- **Could approach this from a variety of points. Could do exactly as exemplar suggests or could ask for analysis of the sources and evaluative comments. May also ask you to suggest a strategy**

Creating and using the model to make a decision

- You will be given a range of tasks to complete for this.
- **Marks given for each request they give you- the complexity of the request depends on the number awarded. Use of ICT functions to do jobs such as annotation is viewed positively.**

Reporting the findings

- The alternatives considered
- The decision you came to
- An explanation of why you made this decision
- Any other factors needing taking to account.
- Use graphical info as well as textual,
- This is a professional report:
- **Consider**
 - Layout- grammar, spelling etc
 - Use of graphs
 - Recommendation/ justification and comparison.
 - Other things to take into account.

Evaluation of the model

- How well the model performed
- What else you would like to do and why this would help
- What other data may be needed and how would you collect it
- If the problem hasn't been solved what would you do next.
- **Consider:**
 - **analysis of model**
 - **ways to enhance the model**
 - **other data collection**
 - **What next steps.**
 - **Be careful to make comments relevant.**

Preparation!

- Practice Exam Papers.
- Understanding the mark scheme.
- Preparing the pre-release- you will have just under 2 weeks to work on the model!!
- Learning key points from the pre-release prep.

Identifying the problem

- Go through the pre-release and bullet how you see the situation.
- Get this clear in your mind for the exam.
- Learn the key points.
- Don't be too rigid!

Analysing the Sources of data

- Identify the sources and prepare comments on all of the following:
 - Accuracy
 - Usefulness
 - Also prepare to be asked about other sources. (you may get some of them in the exam!)
 - Consider a strategy you may use.

Creating and using the model to make a decision

- Using your spreadsheet knowledge prepare the spreadsheet as well as you can.
- Check formulas and finish off obvious parts.
- Consider strategies.
- Jot down and learn any complex formulas you may want to use.
- Test the model!

Reporting the findings

- Practice report writing
- Consider options that you have and make a note of them. Test them using your model and have an idea what you think is the likely way forward.
- Consider graphs you may be able to use.
- With what you have now what else might you want to take into account?

Evaluation of the model

- From what you have done to the model so far, bullet points its:
 - Usefulness
 - What else it could do
 - Other data you would want
 - What you would do next

The exam

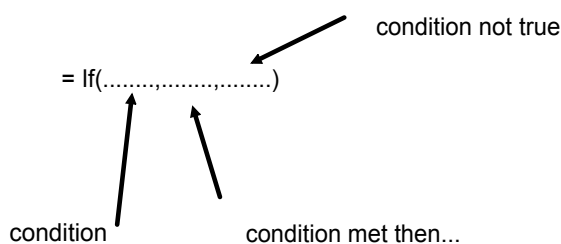
- 2 1/2 hours long
- This includes ALL printing time.
- Total marks: 90
- Headers must be used to detail: *Name, Candidate number, activity number and centre number*

Activity	Understanding the Situation	Sources of Information	Computer modelling	Recommendation report	Evaluation
Suggested time	15	20	45	40	30

Monday 14th March

1. Sort "if" statements.
2. Practice on the worksheet you are using
3. Open convert 1 from your home area or convert 2 from the shared area.
4. Head column A Months and number 1 - 36
5. In column C start to work out the cost of a loan
6. Work on the cost of using savings
7. Find out about the cost of using a credit card
8. Write a report of your findings.

"If" statements



`=IF(G2-E2>10,(G2-E2),0)`

The Report

1. Summarise the situation
2. Define the problem
3. State the sources used and identify other possibilities you could have used
4. The method you used to tackle the problem
5. The solution you propose
6. Your justification
7. An evaluation of the analysis.
8. Conclusion