

Modelling: Concocting Spells

1. Download and open 'spell_costs.xls'
 2. Save the spreadsheet to your area and call it 'spells'
 3. Have a close look at the spreadsheet.
You should see two tabs – one for 'spell costs' and one for 'cost of ingredients'.
 4. In the 'spell costs' sheet, highlight cells B4:B8. Format these cells as currency to 2 decimal places. Do the same for the cells D4:D9.
http://www.teach-ict.net/software/excel/with_sound/formatting/currency.html
 5. In cell D4, write a formula to work out the cost of the ingredients for the 'Shape Shifter Potion'.
 6. Drag (autofil) this formula down for cells D5:D8
 7. In cell D9, use the autosum button to add up the total cost of the ingredients for the Shape Shifter Potion.
 8. Look at the table for the 'Love Potion'.
Format all cells containing money as currency to two decimal places.
 9. Write a formula to calculate the costs for creating a 'Love Potion'.
 10. Now you are going to complete the table for making an 'Intelligence Potion'
- At the moment, the cost of each ingredient has not been filled in. Click into cell B4 in the 'Shape Shifter Potion'. Look at the formula bar.

The formula bar says = 'cost of ingredients'!B18

= **is the start of a formula**



'cost of ingredients!' - this means that something has been 'picked up' from the other sheet called 'cost of ingredients'

B18 - means that whatever value is in cell B18 on the 'cost of ingredients' sheet, will now be 'picked up' and displayed in B4

Let's have a go, it will become clear then. Follow the instructions in step 11.

11. Click into cell G4 on the 'spell costs' sheet

- Start your formula with an =
- Click on the 'cost of ingredients' tab
- Find the cost of the 'fly wing' in cell B7
- Click into cell B7
- Press your 'enter' key

You should see that the cost of a fly wing is now displayed in cell G4 on the 'Spell costs' sheet.

12. Click into cell G5 on the 'Spell Costs' sheet.

- Start your formula with an =
- Go to the 'cost of ingredients' tab
- Find the cost of the 'Newt's Tail' in cell B12
- Click into cell B12
- Press your 'enter' key

13. Carry on getting the costs for cells G6 and G7 on the 'Intelligence Potion' table

14. Format cells G4:G7 as currency

15. Format cells I4:I8 as currency

16. In cell I4, write a formula to calculate the cost of the fly wings needed.

17. Drag the formula (autofil) down cells I5 to I7

18. In cell I8 write a formula to add up the costs in cells I4:I7

19. Complete the 'Grow Hairy Wart Cream' table using the method you learned above.



20. Click on the 'cost of ingredients' tab

21. Add at least 5 more ingredients and their costs to the table

22. Go back to the 'spell costs' sheet.

23. Select the cells F13:I18. You are going to sort the table. Sort the table in 'ascending' order of ingredient. All of the ingredients should now be in alphabetical order.

http://www.teach-ict.net/software/excel/with_sound/sorting_searching/sortingdata.html

24. You have been asked to invent two brand new potions. In cell A22, write the name of your first new potion.

25. Set up the table for this new spell in the same way as the tables which already exist.

26. Pick up the cost of the ingredients from the 'cost of ingredients' table. Use some of the new ingredients that you entered earlier. Write formulas to calculate the cost of the spell.

27. In cell F22, write the name of your second new spell.

28. Set up the table for this new spell in the same way as the tables which already exist.

29. Pick up the cost of the ingredients from the 'cost of ingredients' table. Write formulas to calculate the cost of the spell.

30. Make sure you are on your 'spell costs' sheet.

31. Add your name as a footer

http://www.teach-ict.net/software/excel/with_sound/insert_delete/insertfooter.html

32. Set the print area

http://www.teach-ict.net/software/excel/with_sound/printing/print_area.html

33. Set the page to print landscape and on one page

http://www.teach-ict.net/software/excel/with_sound/printing/print_onepage.html

34. Set the gridlines and sheet and row headers to show

http://www.teach-ict.net/software/excel/with_sound/printing/print_gridlines.html

[http://www.teach-](http://www.teach-ict.net/software/excel/with_sound/printing/print_row_columnheaders.html)

[ict.net/software/excel/with_sound/printing/print_row_columnheaders.html](http://www.teach-ict.net/software/excel/with_sound/printing/print_row_columnheaders.html)

35. Print the page

36. Show the formulas

http://www.teach-ict.net/software/excel/with_sound/formula/formula_show.html

37. Resize the columns if needed

38. Set the print area

39. Print the page on one sheet.

40. Hide the formulas

http://www.teach-ict.net/software/excel/with_sound/formula/formula_hide.html

41. Answer the questions on the 'Spell Cost Modelling' sheet

You may:

- Guide teachers or students to access this resource from the teach-ict.com site
- Print out enough copies to use during the lesson

You may not:

- Adapt or build on this work
- Save this resource to a school network or VLE
- Republish this resource on the internet

A subscription will enable you to access an editable version, without the watermark and save it on your protected network or VLE

DO NOT COPY