

How to make a MicroSoft Word Form to structure students' answering of questions.

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Background.

Certain sorts of exercises are more suitable than others to be marked on line. Those that work best have fairly short and predictable answers that do not require quite nuanced feedback. But even these can be frustrating to mark unless the students' answers are structured. It is my experience that scrolling through a document on the screen is very tiring. However, if answers to each question occur in the same space on each document, then the marker's brain quickly learns, without much conscious thought, to scroll to each answer. This might seem to be a trivial concern, but my experience is that anything that removes drudgery and frustration in the marking task improves the marker's morale and ensures that more time is spent on engaging with the student's work.

If the students' answers are not structured, then some change the order of the questions, or paste in the results of internet searches in the hope that the marker will find sense where the student might not. A structured form, therefore, teaches the student the valuable skill of *précis*, and also reduces frustration for the marker.

Introduction.

This document illustrates how to protect a document so that students are licensed to write in only certain areas. It also shows how to create a pull-down list of possible answers, from which the student should select one.

(i) An input box.

Figure 1'

A' B'

10μ

Which panel of Figure 1 do you think shows *cdc87* mutant? Why?

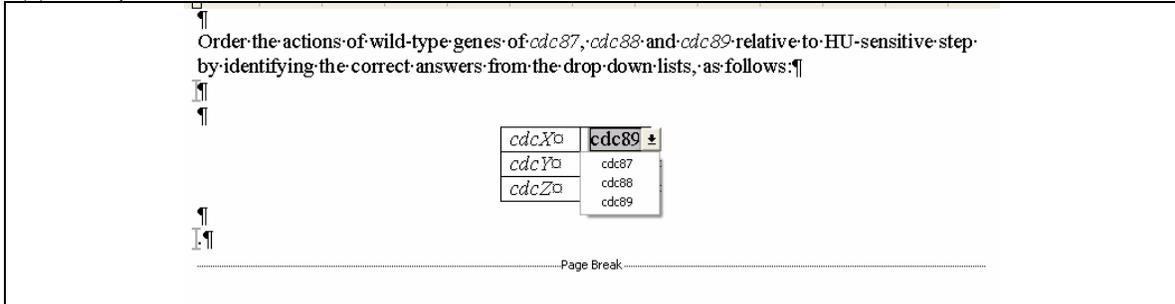
End of Protected Section

Section Break (Continuous)

The student is licensed to answer within the grey box only. The answer may be written, or it may be an inserted image, containing a graph, for example. Notice the lines "End of Protected Section" and "Section Break (Continuous)" that bracket the grey box. These are continuous

section breaks that we use to define that the box is within a particular section. This gives us a handle by which we can later define that the sections before and after the box are protected but the section itself is not, so that the student can write in it.

(ii) A drop down list



In this example, the student can choose one of three options as an answer to the question. In contrast to the input box, the section in which the list occurs in actually protected. Although this seems counter-intuitive, it does make sense because, if the region were not protected, the student would be licensed to delete the drop-down list: when it is protected, the software allows the student to select only the values from the list.

Setting up an input box.

Configuring Word

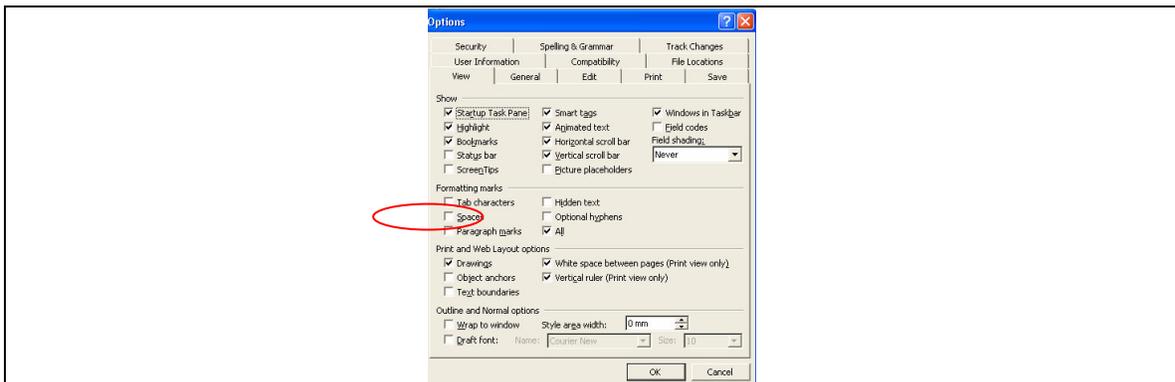
Aims:

- Configure Word
- Show hidden formatting
- Show the status bar
- Show the Forms Tool Bar

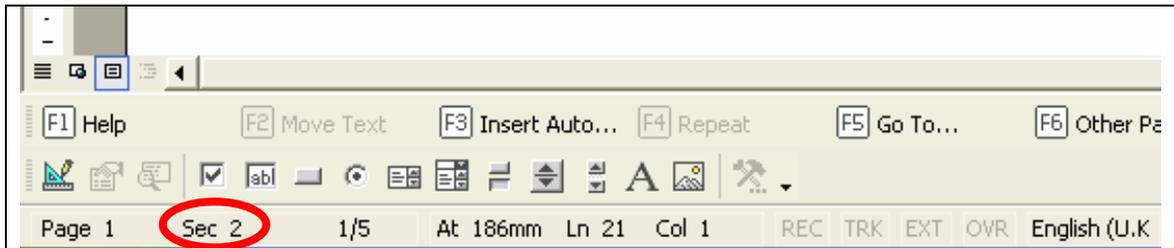
What follows is shown for Microsoft Word 2002. We need to be able to see hidden formatting marks, particularly the “continuous section break”. The status bar shows us the section number of any part of the document. Finally, if we are going to use a dropdown list, we need to access the toolbar that allows us to insert one into the document.

Step 1 – Showing the status bar.

On the Tools Menu Bar, hit “Options”. The click the check box beside “Status Bar”



The result creates a bar at the bottom of the frame containing the document.



The ringed area denotes the section number of the area of the document selected.

Step 2- Show hidden marks.

On the tools menu, hit "Customise" and then click the "Tool Bars" folder. If it is not checked, click the box next to "Standard". On the toolbars, you should see a symbol like this:



If you do not see symbols like this in your document, which signal hidden carriage returns, then click the button above to show them. Any continuous section breaks that you subsequently add will be shown too.

Step 3- Show Forms Tool bar.

One need do the following only if one subsequently will want a drop-down list. Again, on the tools menu, hit "Customise" and then click the "Tool Bars" folder. Check the box next to "Forms".



Note that the icon that inserts a drop down list is found next to the "ab" symbol.

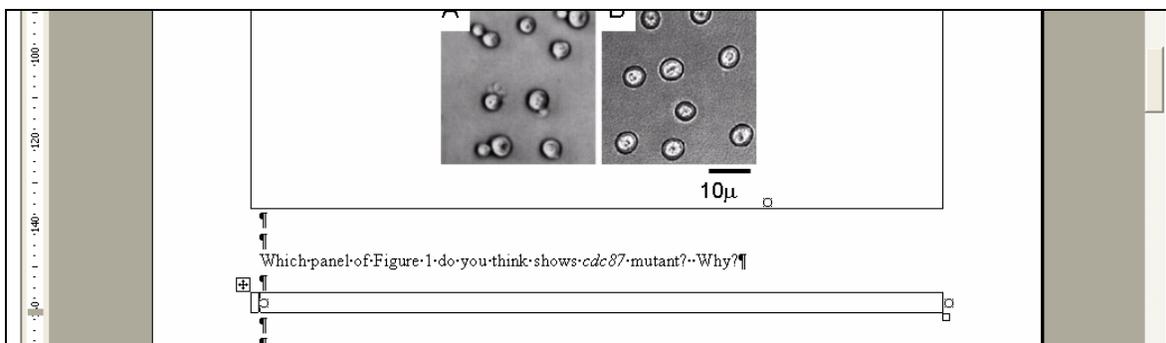
Creating the input box.

Aims:

- Create a table with one cell, at the right size for the expected answer
- Change its background colour to signal to the student that it is a licensed area.

Step (i): Create a one-celled table

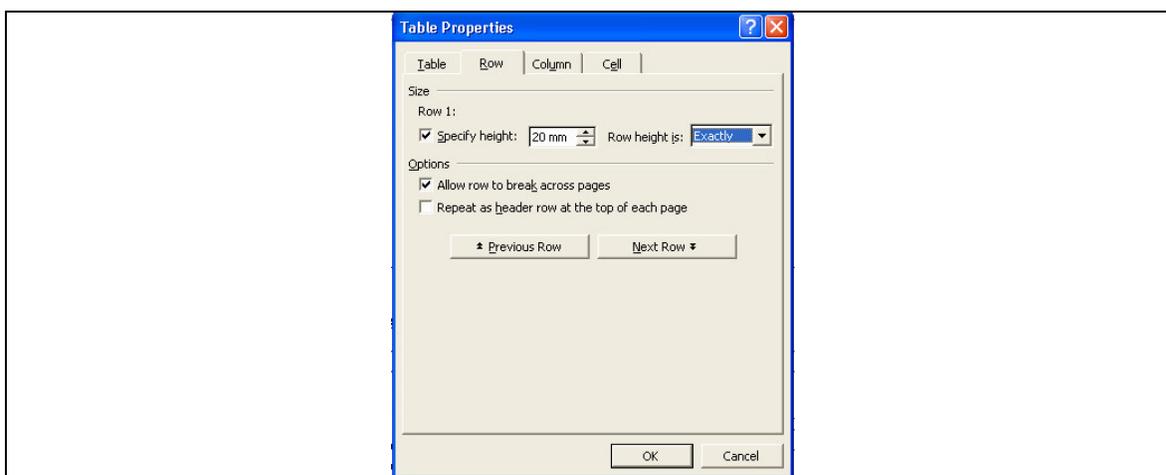
Choose where you want the box to be. Then insert a table, containing one cell only. Go to the "Table" menu; choose "Insert" and then "Table". When the dialogue box comes up, select one row and one column.



The table should now look as above.

Step (ii): Adjust the table size to fit the expected answer length

Position the cursor into the table. Then select from the “Table” menu, “Table Properties” (PC users can right click to access this menu). Then select “Row”. If we considered that a table of height 20 mm was sufficient to contain the answer we would fill in this box as follows.



Note that we change the right-most box’s value from “At least” to “Exactly” by using the pull down menu provided. If you have a model answer, then you could paste it into the box and, by trial and error, determine the correct height of the cell to contain it.

Step (iii) Change the table background colour.

To help the student differentiate the licensed areas, it is useful to highlight the input boxes in some way. One method is to make the background light-grey. Do this by clicking in the table, then select “Table” and “Table Properties”. Select the “Table” folder, and click “Borders and Shading” in this dialogue. (PC users can short-circuit all of this by right-clicking in the table, and then selecting “Borders and Shading” from the menu). In the “Borders and Shading” dialogue box, select the “Shading” folder. Ensure that the rightmost pull down list above “Apply to” has a value set to “Table” or “Cell”. Then click the colour from the leftmost panel.

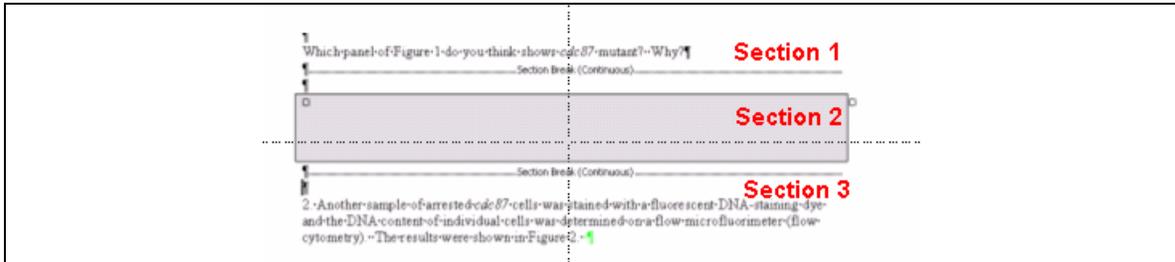
Protecting the document, while licensing the input box

Aims:

- Create a separate section for the input box
- Protect the rest of the document

Step (i) Create a continuous section break around the box.

Place the cursor before the box. Then from the “Insert” menu, select “Break” and then click the radio button next to “Continuous”. Repeat this after the box. Now, when you click inside the box, you will notice that the status bar shows “Section 2”, while those sections before and after are section 1 and section 3.



Step (ii) Protect the rest of the document.

In the example above, we want to protect sections 1 and 3 from being changed, while allowing section 2 to be edited.

It will help, particularly in documents with more than one of these boxes, to position the cursor in the box. Then click “Tools” menu, followed by “Protect Document”. Then click the radio button next to “Forms” and then hit “Sections”.



In the dialogue box for section protection, the section in which the cursor had been positioned is highlighted (the input box in our example). If we uncheck this box, then that section will not be protected, unlike the rest of the document, when protection is enabled.

When we hit “OK”, the final dialogue invites us to give a password.



You may decide that this is useful. Although we protect the document, it does not require too much wit on the students' part to decide that they can unprotect it again. If they do so, it is usually because they want to write a longer answer, which will defeat the aim of the structured document. A password means that such changes cannot be easily made.

Subsequent boxes can be inserted for other question responses. In setting protection, it is useful to know that student areas are even numbered section numbers, while the areas that we do not want then to change are odd numbered.

Creating a drop-down list

Aims:

- Insert the drop down list and populate it with values
- Set protection.

Step 1: Inserting the drop down list

Order the actions of wild-type genes of *cdc87*, *cdc88* and *cdc89* relative to HU-sensitive step by identifying the correct answers from the drop-down lists, as follows:

<i>cdcX</i>	<input type="text"/>	<input type="text"/>
<i>cdcY</i>	<input type="text"/>	<input type="text"/>
<i>cdcZ</i>	<input type="text"/>	<input type="text"/>

As in the example, let us assume that we want to insert a dropdown list containing values *cdc87*, *cdc88* and *cdc89* into the first cell of the table, so that student can match one of these with the identity of *cdcX*. (Of course, you may have more, or fewer, options).

Position the cursor in the blank cell. Then select "Drop Down Form Field" from the toolbar.

The screenshot shows a software toolbar with various icons. The icon for 'Drop-Down Form Field' is circled in red. Below the toolbar, the text 'Drop-Down Form Field' is visible.

This inserts a blank form field into the cell.

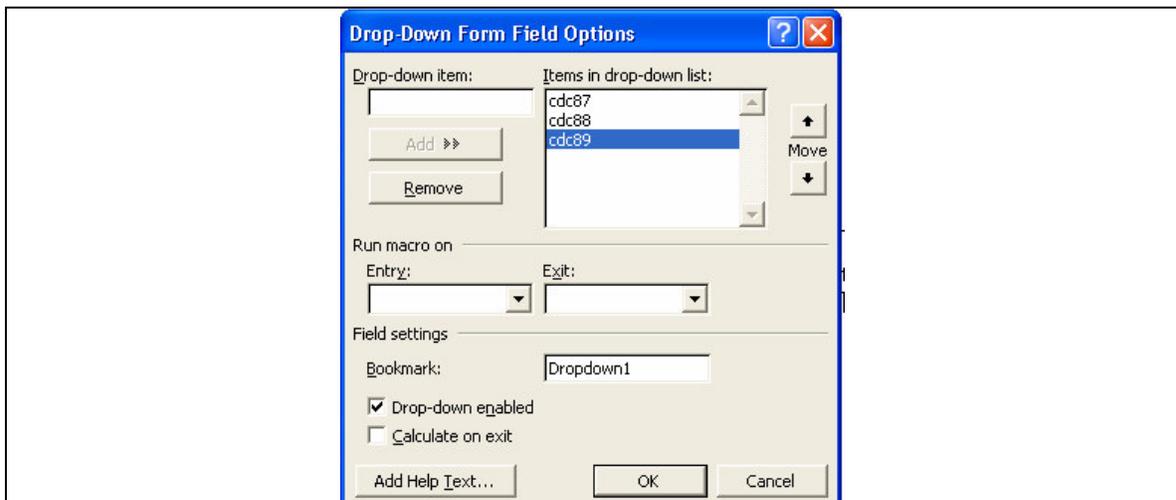
Order the actions of wild-type genes of *cdc87*, *cdc88* and *cdc89* relative to HU-sensitive step by identifying the correct answers from the drop-down lists, as follows:

<i>cdcX</i>	<input type="text"/>	<input type="text"/>
<i>cdcY</i>	<input type="text"/>	<input type="text"/>
<i>cdcZ</i>	<input type="text"/>	<input type="text"/>

We must now populate this list with the values *cdc87*, *cdc88* and *cdc89*. Double click the grey box. A dialogue opens.

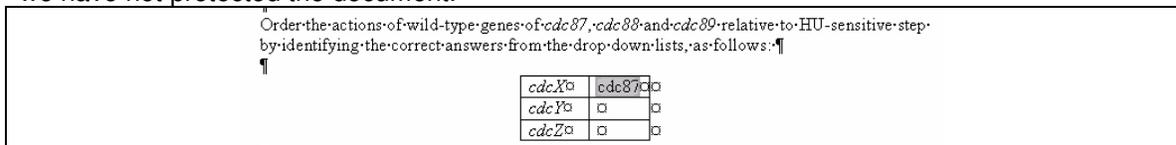


Insert the first value, cdc87, into the box below “Drop Down Item”. Then click “Add” to insert it into the list. Follow with the other two items. The final list will look like this.



Hit “OK”, to populate the list.

At this point the pull down list will have the first value visible, but the others cannot be selected as we have not protected the document.



Step 2: Set protection.

If we were to protect the section that contains the pull down list, it would work. It is neater, though, to bracket the area as a separate section (in the example shown, this would contain three drop-down lists). We then set this section to be protected. The reason for doing this is that we don't break up our convention that answer sections are even-numbered. It is likely that you might have one or more box inputs after this section. When you come to set the protection for the whole document, it will be useful to know that, for example, the answer for question 7 is in section 14.