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| 5.12 | Writing up a practical as a research paper |
| B**riefing sheet** |

Your task is to write up a practical in the form of a research paper. You have already learned about the structure of such papers in previous activities, and you will be given a template file to help you to write the paper in the correct format.

**Using the template**

The template is formatted in 2 columns. When you get to the bottom of one column, the cursor will automatically go to the top of the next column. Any text in the template that is inserted between these symbols <!> should be replaced by your own text as you write up the experiment. The rest of the text, i.e. the sub-headings in bold, should not be changed.

**Tips for writing up the experiment**

Abstract: 50 to 100 words is OK in this case. Write this last of all, so you can summarise the contents of the whole paper as covered in Activity 5.9.

Introduction: This should be a brief account of why you are doing the experiment and what you are hoping to learn.

Experimental methods: This should be a comprehensive account of how you carried out the experiment(s) and should be written in the past tense. Don’t use ‘I’, ‘we’, ‘he’ or ‘she’.

Results and discussion: You should include any results tables and graphs you have here. These can be copied in from Excel, or you may wish to use a scanner. Alternatively, you could leave spaces in the document for you to draw these in by hand after printing. Tables and figures should have labels underneath with numbering i.e. ‘Table 1’, ‘Fig 3’ etc. Use Insert – Reference – Caption in Microsoft Word to automatically number table and figure captions.

Use sub-headings if appropriate; i.e. if you have results from different experiments, or if the practical was in different parts. Make sure you also include a written discussion of your results, rather than just including results tables.

Conclusions: This should be a summary of what you have found in your experiments and what you have learned. You should also include suggestions for further work that you could do.

Bibliography: This should include references to any textbooks or websites you have used, following the standard format covered in activity 5.10. Don’t forget to include citations to images you use from other sources.

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| **<!>Experiment title<!>** | |
| <!>Your name(s)<!>  <!>Your school’s name and address<!>  **Abstract**  <!>Insert your text here – 50-100 words is OK in this case. Write this last of all so you can summarise the contents of the whole paper as covered in Activity 5.9.<!> | |
| **Introduction**  <!> The rest of the document will be formatted in 2 columns. When you get to the bottom of one column, the cursor will automatically go to the top of the next column.<!>  <!>The introduction should be a brief account of why you are doing the experiment and what you are hoping to learn.<!>  **Experimental methods**  <!>This should be a comprehensive account of how you carried out the experiment(s) and should be written in the past tense. Don’t use ‘I’, ‘we’, ‘he’ or ‘she’. See the example on the guidance sheet to help you with this.<!>  **Results and discussion**  <!>Include any results tables and graphs you have here. You can copy these in from Excel, or you may wish to use a scanner.<!>  <!>Use sub-headings if it is appropriate i.e. if you have results from different experiments, or the practical was in different parts.<!>  <!>Make sure you include a written discussion of your results.<!> | **Conclusions**  <!>This should be a summary of what you have found in your experiments and what you have learned. You should also include suggestions for further work that you could do.<!>  **Bibliography**  <!>This should include references to any textbooks or websites you have used, following the standard format covered in activity 5.10. Don’t forget to include citations to images that you use from other sources.<!> |