

# 1 Worksheet 7: Making a Poster

The cosmic e-lab website also allows you to create a poster to present your results. This is a great opportunity for pupils to present their findings from their own research topic to their fellow classmates. They can create a poster and then present it to the class with a short talk followed by time for questions. This is a nice way to round off the project and ensures that everybody learns about each part of the project. After the presentations they can then all take the post-test to see how much their knowledge has improved by taking the project.

## 1.1 Introduction

With any experiment, when you have finished analysing your results and have come up with a conclusion you will want to share your findings with the world. Science does not progress unless we tell people what we have done and what we found out. There are different ways we can do this. We can write a paper which is published in a journal. This is usually reserved for significant results. As well as this, we may also be lucky enough to be asked to give a presentation about our work at a major conference. This is a great way to tell people about our results as it also gives them an opportunity to ask us questions about our experiment. A much quicker and easier way of presenting our results is to make a poster. This very briefly outlines the experiment, and when small groups come round to look at it, we can discuss with them the procedure and results. You will now be making a poster to present to your fellow classmates. You should then prepare a 5 minute talk about your poster, explaining the experiment and your results. They will then have a question and answer session, where your classmates can ask you about the method and discuss with you your results.

## 1.2 Making your Poster

**Cosmic Ray e-Lab** CRuob1 Log out

Project Map Library Upload Data **Posters** Site Map Assessment

New Poster Edit Posters View Posters Delete Poster View Plots Upload

**New Poster: Make or edit your poster** Click on "New Poster"

- Fill in all the fields including Poster File Name if it is missing. This is the name the poster, do not use a name you have already used. **Click to view example poster**
- Look at the [paragraphs of a good poster](#) or an [excellent example](#)
- Be sure to write a good abstract
- To view the plots that you might want to include for the figures in your poster, click **View Plots** in the navigation bar. You can fill in fields for up to five figures. You don't have to fill them all in.
- Click **Make Poster** to save the data for the poster and display your poster. If you have "pop-ups" blocked, you will need to click on Display Poster below.

**Fill in the fields for your poster**

Poster File Name:

(e.g. poster\_lifetime)

Title:

Subtitle:

Authors:

Date:

**Abstract:** (Brief Overview of purpose, procedures, results & conclusions)

**Introduction:** (Background and researchable question)

**Procedure:** (Research or study plan)

Figure7 Select graphic for figure. ▾

Caption7

Figure8 Select graphic for figure. ▾

Caption8

Figure9 Select graphic for figure. ▾

Caption9

Figure10 Select graphic for figure. ▾

Caption10

Conclusion: (Interpret results, suggest further study)

Bibliography

**Click on "Make Poster" If it doesn't show up you probably have pop-ups blocked so click on "Display Poster"**

Make Poster To see poster, don't block popups! Otherwise click Display Poster below.

Making a poster is easy with the Cosmic e-lab. Log in and click on “New Poster” from the “Posters” tab. Now simply fill out all the fields, including a file name, the title and the authors names’. This section will give you advice about exactly what to write in each field. Once you have written everything you need to and uploaded your figures, click on “Make Poster” at the bottom of the screen. It will only appear if you do not have pop-ups blocked. If it does not appear automatically then click on “Display Poster”.

### 1.2.1 Abstract

In some ways the Abstract is the most important part of the poster. It is the first thing people read (after the title), and it is what they use to decide whether they are going to read the whole thing or not. It should not be too long, but should very briefly describe the experiment you carried out, and what your most important results and conclusions were. It is often useful to write this after you have written the rest of the poster, so that you can simply summarise the poster in a couple of lines.

### 1.2.2 Introduction

In the introduction you should write about the main physics behind the experiment. You should also discuss what your research question is, and what the ultimate goal of the experiment is.

### 1.2.3 Procedures

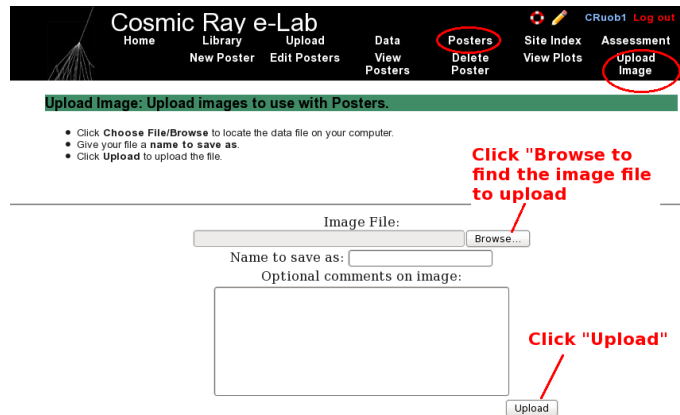
This is where you outline the method you used to carry out your research. It should not be step-by-step instructions, but should be detailed enough that somebody reading the poster will be able to understand how you attempted to answer your research question.

### 1.2.4 Results

This is where you discuss your results. You should state clearly what the data show and how you have interpreted it. You will also have to upload figures and plots after this section. Make sure these plots are relevant and that you refer to them in this section. You should explain your graphs and what the data shows.

### 1.2.5 Figures

You can include up to 10 figures for your poster, but 1 or 2 should be enough. Make sure your graphs are clear and are relevant to the poster. Include a caption to explain what the graph shows. You can include any of the graphs which you saved, so select the appropriate graph from the drop down list.



If you want to include a graph which is not saved in the Cosmic e-lab, for example if you used MS Excel to create a graph, then you will need to upload it before you can include it in a poster. You can do this by clicking on “Upload” under the “Posters” tab, as shown in the figure above. Click on “browse” to find the image you want to upload. It has to be saved as an image file, for example with a filename ending “.png” or “.jpg”. Once you have uploaded it, it will appear in the drop-down list of figures and you can include it in your poster.

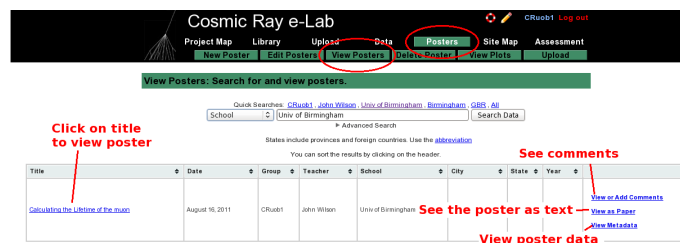
### 1.2.6 Discussions and Conclusions

This is where you interpret your results and give the answer to your research questions. Explain how the data presented in the results section supports these conclusions and why you have interpreted them in that way. What new physics do these conclusions imply? Afterwards you should suggest improvements to the procedure or extensions to the experiment. What can you now investigate knowing what you have learnt from this experiment?

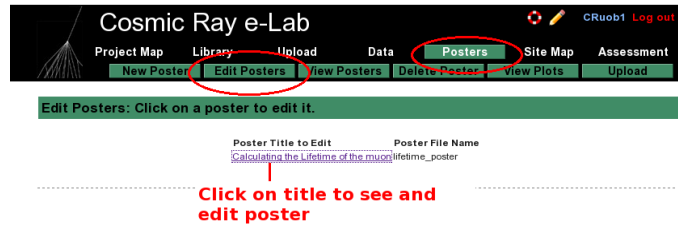
### 1.2.7 Bibliography

Include a list of any books or web pages that you used when researching material for this project.

## 1.3 Editing your poster



Once you have made your poster, you can view it by clicking on “View Posters” in the “Posters” tab. By searching for a school you can also view any other poster uploaded to the website. Just click on the title to view the poster. You can add comments to it by clicking on “View or add comments”. If you want to view the poster as a paper, so as plain text and figures, click on “View as paper”. If you want to view the data for the poster click on “View as Metadata”.

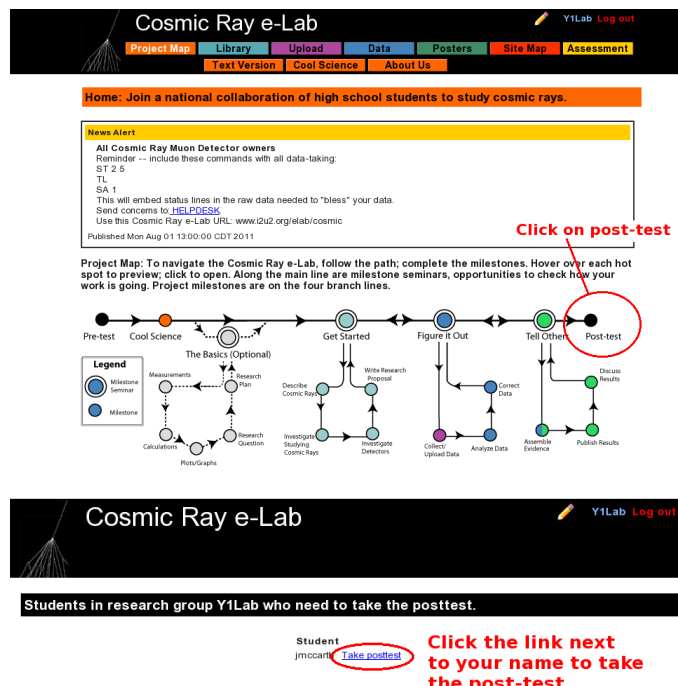


If you want to edit your poster, select “Edit Posters” from the “Posters” tab. Click on the title of the poster you wish to edit and it will bring up the fields for the poster, which you can edit. When you are done click on “Save Changes”.

## 1.4 Presenting your poster

When your poster is finished you can present it to the class. Prepare a 5 minute talk about your poster. Summarise each section but don’t just read the poster, try and explain it more clearly. When you are finished invite your classmates to ask you questions about the poster, either about the physics behind it, the procedure or the conclusions. They may have some insight which leads you to interpret the results slightly differently. You can then edit your poster based on their feedback.

## 1.5 Post-test



Finally, to round off the project, you will need to take to post-test. This is designed to test how much your knowledge has improved through the project, compared with the pre-test which you took. From the Project Map page, click on the post-test icon at the end. Then click the link next to your name to start the post-test.