

Scientific Posters

GCSE Science

INSTRUCTIONS

Scientific Posters

Scientists communicate research findings in three main ways. Primarily, they write journal articles much like an experiment write up. These are very concise, appraise the current literature on the problem and present findings. Scientists then share findings at conferences through talks and scientific posters. During a science degree, you would practise all three of these skills.

Scientific posters are a fine balance between being graphically interesting and attracting attention and sharing just the right amount of text to convey a detailed scientific message. They are more detailed than a talk and less detailed than a research paper.

Use this information to help structure your poster – www.tiny.cc/posterskills (that's Poster Skills not Posters Kill!) More detailed guidance is available at: www.tiny.cc/posterskills2

Creating your poster

It is easiest to create a poster in PowerPoint; however, you need to add custom text boxes rather than using the standard templates. Posters need to be eye catching, but readable from a distance. If you use PowerPoint, start with a 4:3 slide (for easier printing, it can then be printed on A3) and use a 14-16 pt font. The first box could be larger to draw people in. You can use a background image, but pick a simple one that is of high quality. Select 'text box fill' and select 'change the transparency' to maintain the contrast and partially show the picture.

You can experiment with different layouts and you should include images. Avoid a chaotic layout.

Remember to include any authors and references.

Finally, look at the examples given on the University of Texas website which also offers an evaluation of each. www.tinyurl.com/postereg

Example - Cell Types.

Background

All living things are made up of cells. The structures of different types of cells are related to their functions. Eukaryotic cells have features in common, such as a nucleus, cytoplasm, cell membrane, mitochondria and ribosomes. Plant and algal cells also have a cell wall, and often have chloroplasts and a permanent vacuole. Prokaryotic cells have different structures to animal and plant cells.

Source articles:

http://www.bbc.co.uk/schools/gcsebitesize/science/add_edexcel/cells/cells2.shtml

<https://www.ck12.org/biology/prokaryotic-and-eukaryotic-cells/lesson/Prokaryotic-and-Eukaryotic-Cells-BIO/>

<https://www.cliffsnotes.com/study-guides/biology/biology/the-biology-of-cells/prokaryote-and-eukaryote-cell-structure>

<https://www.ck12.org/book/CK-12-Biology-Advanced-Concepts/section/11.13/>

Use other sources as necessary.

<https://www.youtube.com/watch?v=fLThq5t4Ku0>

Task:

Produce a scientific poster on the differences between prokaryotes and eukaryotes.

Recall	State what eukaryote and prokaryote mean.
Describe	Describe the functions of the organelles within a prokaryote and a eukaryote.
Compare	Compare the different types of prokaryotes and eukaryotes and how they are specialised for their function.
Evaluate	Explain how prokaryotes can be used in industry.