

Chapter 33 Project

Scientific Poster: The Animal Body

Project Goal + Timeline

In this project, we will be reviewing your knowledge of the animal body through a poster presentation. You'll create a poster showcasing the body plan, tissue types, and maintenance of homeostasis in a specific animal. After creating your poster, you'll prepare a short presentation and present to the rest of the class. This project should be completed within a group of two to four students in three to four hours.

Directions

Part 1: Plan Your Poster

First, select the animal that will be the focus of your poster. Select an animal that is sufficiently complex so you can clearly discuss its body plan, tissue types, and processes through which homeostasis is maintained.

Once you've selected your animal, you will need to research it. Your goal is to obtain enough information so that you can structure your poster with the following components.

- **Poster title:** Provide a descriptive title that accurately summarizes the information on your poster.
- **Introduction:** Introduce the animal that is the focus of your poster, including its general features and habitat.
- **Main Poster Content**
 - **Body plan:** Draw your animal (or provide an image of your animal) and describe its overall body plan. Describe any specialized features and discuss how the body plan relates the animal's functions and ability to survive.
 - **Body cavities:** Draw (or provide an image of) a cross section of your animal. Label and describe the body cavities, including the functions and contents of each.
 - **Body tissues:** Draw (or provide an image of) at least three of the major tissue types that make up your animal. Describe the structures and functions of each.
 - **Thermoregulation and homeostasis:** Describe how your animal maintains its body temperature and homeostasis. Outside of temperature regulation, describe at least one other homeostatic feedback loop in your animal. Provide a diagram of the feedback loop and label and/or explain all steps.
- **Conclusion:** Summarize the major points made by your poster.
- **References** (if applicable)

Use the internet to research the required information for the animal you've selected. Make sure to use reputable sources to obtain information. Keep track of the references and any images you use for your poster.

After researching your topic, decide your method to build your poster. You may choose to print out the text and images and paste them onto poster board. Alternatively, you may develop your poster in presentation software and have the poster printed out.

Part 2: Create Your Poster

Now, it's time to create! Keep in mind the final product should be approximately 48" wide by 36" high.

First, prepare the text. Write the text of your poster in word processing software before printing or copying to poster design software. Make sure to write a title that succinctly describes the content of your poster. Then, develop an introduction that provides background information about your animal.

Next, write the poster sections. For each, include the title of the section, the text, a figure, and a brief figure legend. Reduce text as much as possible to make your poster approachable and clear.

Prepare the figures you'll include in your poster. Make sure your figures have a clear connection to the content and are being used to either illustrate or further explain the ideas conveyed on your poster. You may choose to prepare any specialized figures in illustration software or by hand. If you use any figures from the internet, make sure to include a citation for the image. Design all figures that can be read from a distance (at least 2 feet away).

If you've consulted any outside resources, prepare a works cited list to add to your poster.

Now, you're ready to prepare the layout. As you work, keep the following in mind.

- Ensure that your poster is the correct size (48" wide x 36" tall).
- Choose a foreground color, background color, font, and font sizes that enhance clarity and visibility. Generally, 16-point font is the minimum font size to use for the smallest text on a poster.
- Copy and paste your text and figures onto the poster or into poster presentation software, optimizing the layout of each.
- Make sure that the title is written in a large font size so that it is clearly visible to anyone passing by. Add authors directly beneath the title in a smaller font size.
- Ensure that your text, figures, and individual sections are surrounded by empty space so your poster doesn't seem too crowded.
- Make sure all figures have a brief explanatory caption and a citation, if needed.
- Ensure that all visual elements are properly aligned so that your poster appears symmetrical and harmonious.
- Ensure that your poster is completely free of errors, typos, and grammatical mistakes.

Part 3: Present Your Poster

Prepare and rehearse a short, ten-to-fifteen-minute oral presentation for the rest of the class. Your presentation should start with a hook, some gripping information that will pique a listener's interest. Then, you should take the listener through your poster, explaining each section. Do not get bogged down in the details but rather focus on the big picture and major takeaways. Listeners who want to know more can always read the text and ask questions!

Bring your poster to your class poster presentation. Be available to take interested listeners through your poster, but also make sure you find the time to walk around, view other students' posters, and listen to their presentations.

Project Materials

- Poster board or poster creation software
- Computer with internet access
- Printer
- Paper

Student Checklist

- ☐ Plan your poster
- ☐ Design your poster
- ☐ Create your poster
- ☐ Present your poster