

Science 10-Biology

Activity 4

Cell Poster Project



Purpose:

To construct a poster or a 3-D model of a typical plant cell and a typical animal cell.

Procedure:

You will work in groups of 2.

As a group you **must** produce:

1. A poster or 3-D model of a typical **plant cell**.
2. A poster or 3-D model of a typical **animal cell**.
3. A short write-up on the **function** that each organelle of the cell performs. These must be written in your own words and be appropriate to the Science 10 level.

Here is a list of organelles which **must** be included for each type of cell. You can include more organelles if you wish.

Plant Cell Organelles

1. **cell wall**
2. **cell membrane**
3. **cytoplasm**
4. **nucleus**
5. **nucleolus**
6. **nuclear membrane**
7. **chromatin**
8. **mitochondrion**
9. **endoplasmic reticulum**
10. **chloroplast**
11. **vacuole**
12. **ribosome**

Animal Cell Organelles

1. **cell membrane**
2. **cytoplasm**
3. **nucleus**
4. **nucleolus**
5. **nuclear membrane**
6. **chromatin**
7. **mitochondrion**
8. **endoplasmic reticulum**
9. **vacuole**
10. **ribosome**

Resources:

1. **The Biology 12 textbook**. There are detailed diagrams of typical plant and animal cells in an old edition of the Biology 12 text. Ask the teacher for the page numbers of these diagrams. Explanations of the functions of the organelles can also be found.

2. **Internet Sources.** There is a list of some possible internet sites on Mr. Colgur’s Science 10 web page. It is in the Biology section under “Links to Other Sites”. It is called “[Science 10 Cell Poster Helpful sites](#)” On most computers connected to the internet, if you click on the blue URL addresses, it will go directly to the sites. Use the “Back” button to come back to the list.
3. **Science Probe Textbook** pages 330-331.
4. **Encyclopedias.** Most encyclopedias have good coloured cell diagrams and good explanations of the organelle functions.
5. Other resources in the library. Look in the “Biology” section. There are good references available.

Marking Criteria:

Task	Total Possible Mark
Plant Cell Organelles Drawn and Labeled	12
Animal Cell Organelles Drawn and Labeled	10
Function of Each Organelle	24
Overall Neatness and Appeal of Poster	10
Total Mark	56

Due Date: _____

10 Marks will be taken off for each school day late without an approved extension or valid excuse.