

The Cell Brochure Project



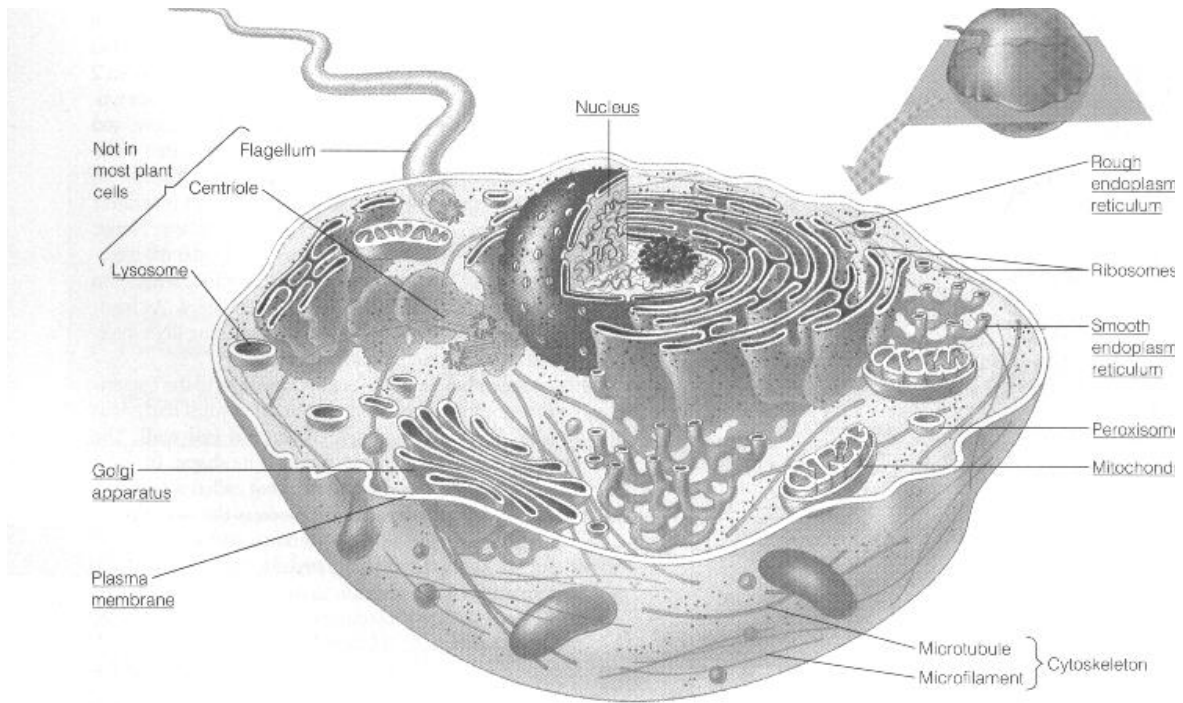
In the next unit you will be studying the parts of a cell and their functions. The purpose of this project is to reinforce your understanding of these functions by comparing the different parts of the cell to the parts of a factory. In some ways a cell resembles a factory, because, like a factory, a cell uses raw materials to manufacture a product. An example of a comparison are the cell walls compared to factory walls because both provide support and protection.

For this project you will be creating a brochure for a factory that will be used as a tour guide for their visitors and new employees. Following, is a list of the things that must be included in your brochure.

1. A company Name (front panel)
2. An opening statement (e.g., Welcome to . . .)
3. A map of the floor plan (your cell).
4. Areas of interest on the tour (cell parts).
5. A description of each stop along the tour, indicating the similarities between the functions of factory and cell.
6. Number each description and correlating-stop with matching numbers.
7. A company Address and phone number on the bottom of the back panel.
8. Be creative. You may want to add an advertising slogan or company logo etc. . .
9. Include the following cell structures in your brochure.

Structure	Function	Analogy (Like A)
Cell wall	Support and protection	Factory walls
Cell membrane	Boundary, gatekeeper	Security guards
Cytoplasm	Site of metabolism	The work area
Chloroplasts	Photosynthesis	Snack bar
Endoplasmic reticulum	Intracellular transport	Conveyor belts
Golgi bodies	Storage, secretion	Packaging, storing, and shipping
Lysosomes	Intracellular digestion	Clean-up crew
Mitochondria	Cellular respiration	Energy generation plant
Nucleus	Controls heredity	Boss's office and copy machine
Ribosomes	Protein synthesis	Assembly line
vacuoles	storage	Warehouses

Animal Cell



A. An animal cell (8,000x)

Plant Cell

