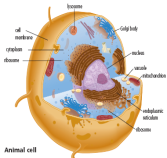
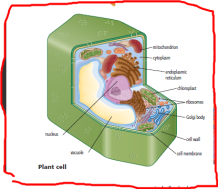
**3-D Cell Analogy Project** 

An **analogy** is a comparison between two things to help us understand a concept. To help us understand the inner parts of the cell and how they function, you will create an analogy of the cell, comparing it to a real-life place. You will discuss how each part of the cell is similar to the parts/functions of your analogy.

* You may work alone or in pairs
* You may represent your analogy as a poster or a 3D model.
* The cell must be compared to a real-life place
* You can choose to represent either a plant or animal cell
* You will plan and complete your poster/model IN CLASS.
* **Ideas:** Restaurant, Airport, School, city, Factory, Circus, Jail

**What to do**

1. Create a title for your analogy that would fit with the functions of a cell.

*Eg. Title: The Cell is like a School.*

1. Compare functions of cell organelles with features of your analogy and explain how they are similar.

*Eg. In our cell analogy, the* ***Principal*** *represents the* ***nucleus****. In the cell, the* ***nucleus*** *is the control centre of the cell, controlling all cellular activities and processes. This is similar to the* ***Principal*** *because they both need to provide instructions and direct activities.*

1. Represent your analogy with a **poster** (or a 3D model). Cell structures and comparisons must be clearly labelled on the poster.
2. Start with the planning sheet on the next page to flesh out ideas. Your poster will be the polished presentation with pictures and more detail

**PLANNING** SHEET – you must choose at least 8 of the following

|  |  |  |
| --- | --- | --- |
| Cell Structure | Is like a ... | Explanation/Reasoning |
| Nucleus |  |  |
| Cell Membrane |  |  |
| Ribosome |  |  |
| Mitochondria |  |  |
| Cytoplasm |  |  |
| Vacuole |  |  |
| Vesicle |  |  |
| Golgi Body |  |  |
| Endoplasmic Reticulum |  |  |
| Lysosome |  |  |
| Chloroplast (plant cell) |  |  |
| Cell wall (plant cell) |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Skill | Emerging | Developing | Proficient | Extending |
| **Communicating**  I can communicate ideas with an analogy, using scientific terms  My structures are clearly labelled  Each comparison is clearly stated |  |  |  |  |
| **Apply and Innovate**  I can co-operatively design projects  I can transfer and apply learning to new situations |  |  |  |  |

