

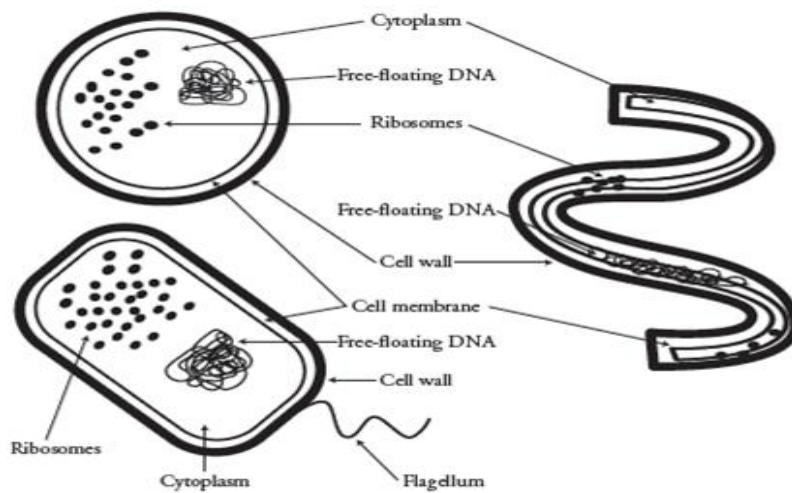
## Prokaryotic and Eukaryotic Cells

Do all cells have the same structure?

### Why?

An efficiency apartment is a one-room apartment. This one room is where you sleep, eat, shower, and entertain your guests. It all happens in one room. It is a simple way of living in a small space. A mansion is a large, complex living space with many separate rooms. There are rooms for cooking, eating, sleeping, bathing, reading, watching TV, entertaining guests, exercising, and storage. The rooms in a mansion are constructed for the specific things you would like to be able to do. You can live in simple efficiency or complexity. In this activity we will be looking at cells that are as simple as a one-room efficiency apartment or as complex as a mansion.

### Model 1 – Three Types of Bacterial Cells



1. The three bacterial shapes in Model 1 are referred to as *coccus* (sphere), *spirillum*, and *bacillus* (rod). Label the diagrams in Model 1 with the correct descriptions.
2. What is represented by the small dots found in each of the bacteria cells?
3. What is the name of the outermost layer that forms a boundary around the outside of each cell?
4. How is the DNA described and what does this mean?