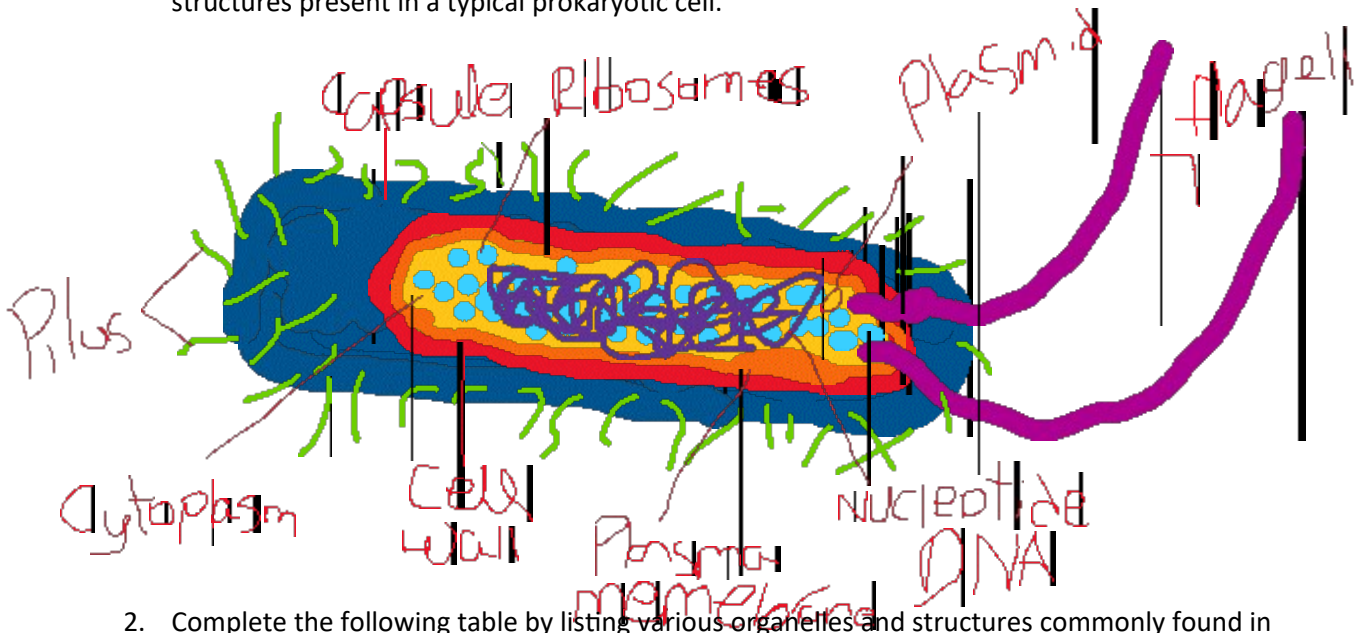


Active Learning Template: Cells

1. Draw an image of a Prokaryotic cell in the space below. Label all the organelles and structures present in a typical prokaryotic cell.



2. Complete the following table by listing various organelles and structures commonly found in a Prokaryotic cell and describe their functions in 1-2 sentences.

Organelles and Structures of Prokaryotic Cell	Function
Cell wall	The cell wall provides protection for the cell by maintain the cell's shape, protects the cell interior, and prevents the cell from bursting when it fills with water.
Flagella	The Flagella is responsible for moving the cell forward and providing motility. The prokaryotic flagellum spins, creating forward movement.
Pili	The Pili is responsible for transferring of genetic material between the cells. They adhere to surfaces which facilitates infection.
Capsule	Capsule is responsible for protecting the cell from ingestion and destruction by white blood cells. The capsule helps cling to each other and to various surfaces.
Fimbriae	Fimbriae are hairlike structures with bristles that help with adhering to other cell surfaces.
Nucleoid	Nucleoid contains the genetic material. It is essential for controlling the activity of the cell and reproduction.
Ribosome	Ribosomes are responsible for protein synthesis. The main purpose is to translate messenger RNA to proteins with the aid of tRNA.
Cell membrane	The cell membrane is responsible for regulating what comes into the cell. The cell membrane encloses the cell and protects it, only allowing certain molecules to come