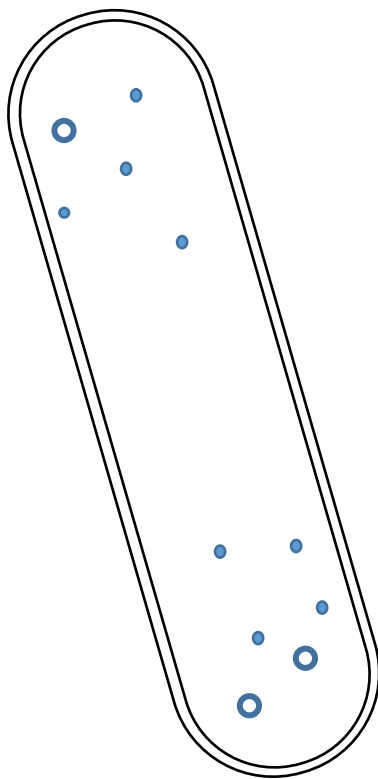


## Prokaryotic Cells

- Prokaryotic cells do not have \_\_\_\_\_ so therefore do not have organelles, such as rough endoplasmic reticulum, and their DNA is not enclosed in a \_\_\_\_\_. Also, the DNA in a prokaryote is not associated with \_\_\_\_\_ proteins, so is called \_\_\_\_\_ DNA. Prokaryotic cells divide by \_\_\_\_\_.
- Below is a rough representation of a \_\_\_\_\_-shaped bacteria. A common example of this type of bacteria is called \_\_\_\_\_. Draw the \_\_\_\_\_ chromosome of DNA and add straight lines to the correct structures. Then complete the labels and annotations.



Cell wall: prevents _____
_____ membrane: controls the _____ and _____ of many substances.
_____ : the region containing the _____ DNA
_____ ribosomes: site of _____ synthesis
_____ : site of many _____ reactions.
_____ : small rings of _____. They are important for genetic _____.

- The diagram is missing \_\_\_\_\_, which are used for locomotion and \_\_\_\_\_ which are used for cell-to-cell adhesion for purposes such as exchanging \_\_\_\_\_. Add these two structures to the diagram. Not all prokaryotes have these structures.
- Extension: The actual size of this type of bacteria is 2  $\mu\text{m}$ . Work out the magnification of this diagram in space below.