





### III. Describing bacterial morphology:

The term "microorganism" includes viruses, bacteria, protozoa, and some fungi. Most of these organisms are indeed microscopic. Bacteria are unicellular (=single-celled) prokaryotic organisms. They are very small, rarely more than 5  $\mu\text{m}$  in length: they can be seen only with the highest powers of the microscope, either alive or fixed on the slide and properly stained.

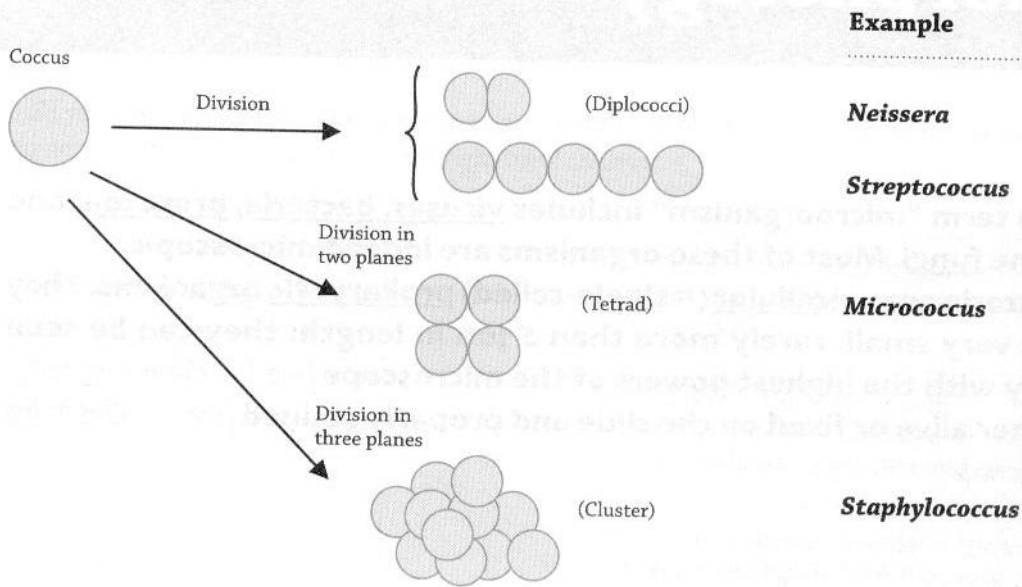
#### A. Bacterial morphologies

Bacteria can have different shapes, mostly spherical (**cocci**) or rod-shaped (**bacilli**).

		<b>Example</b>
	Straight rod	<b><i>Escherichia</i></b>
	Comma forms	<b><i>Vibrio</i></b>
	Spore forming rod	<b><i>Bacillus</i></b>
	Coccus	<b><i>Staphylococcus</i></b>

## B. Bacterial arrangements

Bacteria exhibit different arrangements, which can be observed on a wet mount [see 6 - Observing bacteria].



## C. Bacterial flagella type

Some bacteria have filaments, called **flagella**, sticking out of them. The flagella can flick, and so make the bacterium move. They can be inserted on different locations on the bacterial cell: this is called the **flagella type**. The **wet mount technique** is a method to determine the flagella type by observing the motility of the bacterium [see 6 - Observing bacteria].

<b>Structure</b>	<b>Flagella type</b>	<b>Example</b>
	Polar	<b><i>Vibrio cholerae</i></b>
		<b><i>Bartonella bacilliformis</i></b>
	Peritrichous	<b><i>Escherichia coli</i></b>

**Activity n°8:** Let's have a closer look at other bacterial