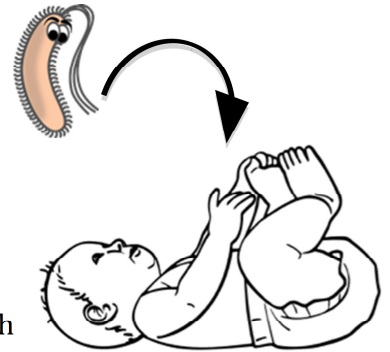




Applying Science Skills: Reproduction Rate of Bacteria

The human body in itself is an ecosystem. Scientists estimate that the number of microbes found in and on the body outnumber the body's own cells 10 to 1! Babies however, are born sterile...so how do we end up hosts to so many guests?



Lactobacillus is a genus of bacteria (that includes several species) that commonly colonizes a baby soon after he or she is born, particularly in the digestive tract and the vagina. Each lactobacillus cell can reproduce through binary fission (divides into two) every hour.

In the space below, calculate the number of lactobacilli that would be present in the baby after 12 hours starting from one bacterium. Create a table and a graph of your data.

Remember, at t (time) = 0, number of bacteria = 1.