



High School Science Virtual Learning

**Applied Biological Science**

**Bacteria Morphology**

April 9th, 2020



High School Applied Biological Science  
Lesson: April 9th, 2020

**Objective/Learning Target:**

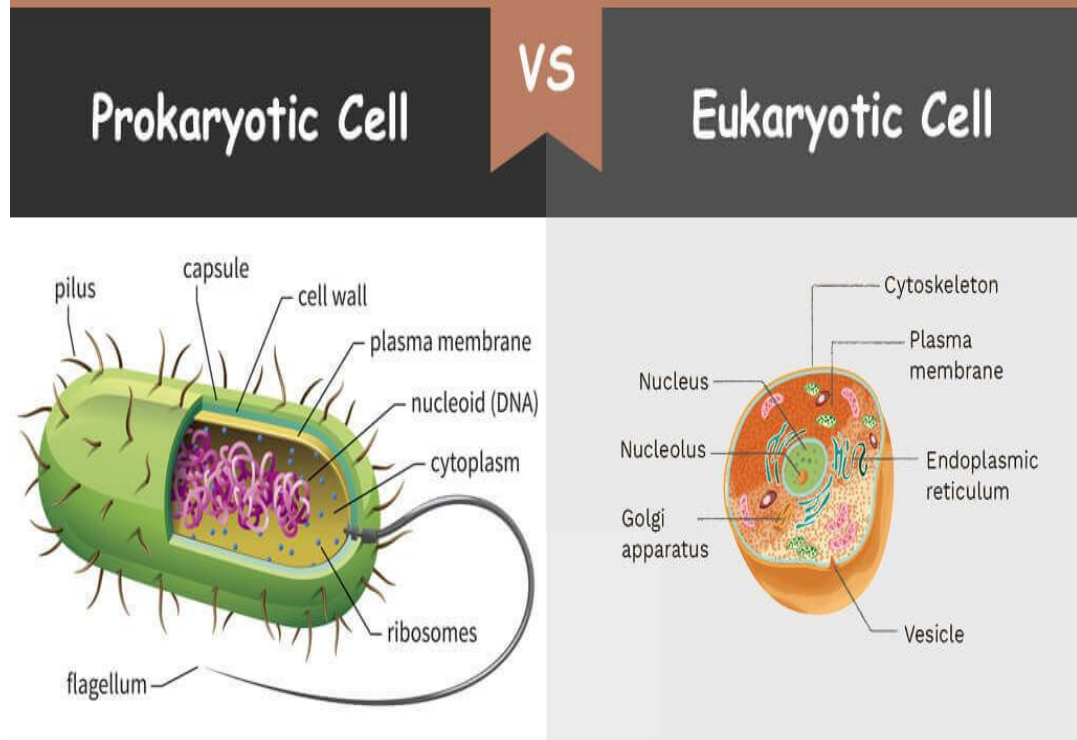
I can identify bacteria by their shapes and grouping.

# Let's Get Started

Using prior knowledge about bacteria and the image to the right make a claim answering the question below then provide evidence and reasoning to support your claim.

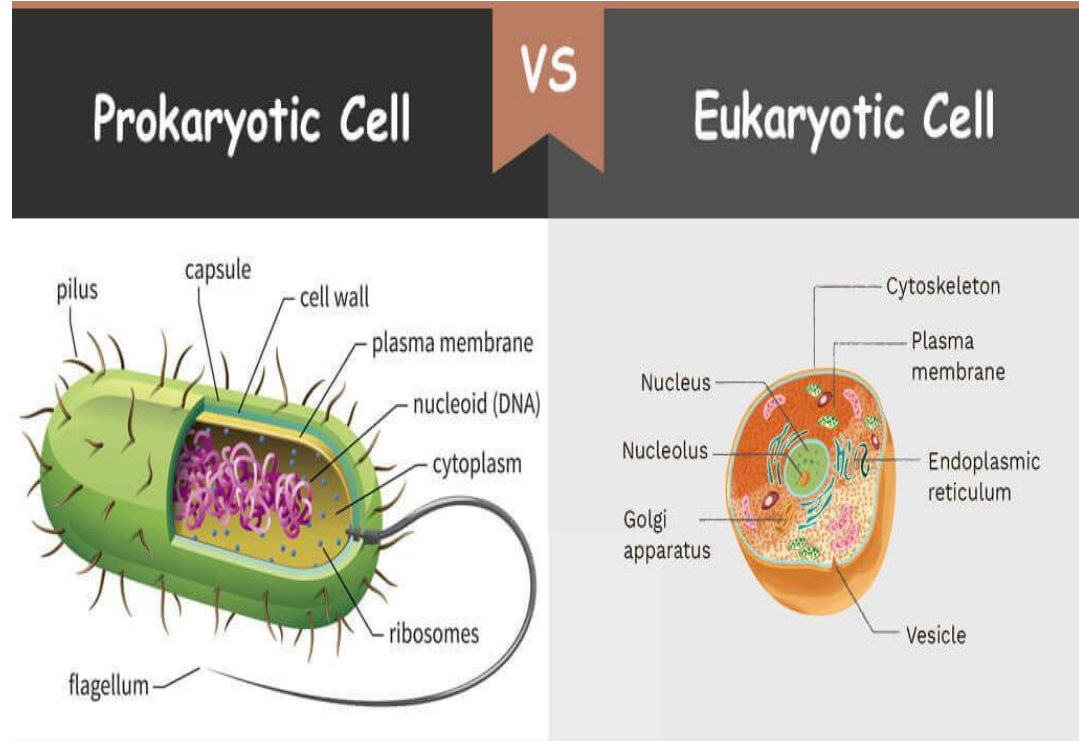
Is a bacteria a prokaryotic or eukaryotic organism?

1. Claim:
2. Evidence:
3. Reasoning:



## Let's Get Started: **Answer Key**

1. **Claim:** Bacteria are prokaryotic organisms.
2. **Evidence:** Prokaryotes do not have membrane bound organelles. They are single celled organisms. Their DNA is circular.
3. **Reasoning:** Bacteria are classified as prokaryotic cells because they do not contain a nucleus or other membrane bound organelles.





# Lesson Activity

## Directions:

1. Watch the video and read over the article about bacterial shapes and arrangements.
2. Create a notes page that includes all of the shapes and arrangements of bacteria. Use this to help you answer the practice questions.

**Link(s):** [Bacterial Shapes and Arrangements Video](#)  
[Bacterial Shapes and Arrangements Article](#)



# Practice

*Complete the following questions based off of what you learned from the video and the image on the next slide.*

# Model 1

## BACTERIA SHAPES

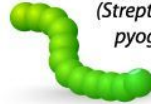
### SPHERES (COCCI)



**Diplococci**  
 (Streptococcus pneumoniae)



**Staphylococci**  
 (Staphylococcus aureus)



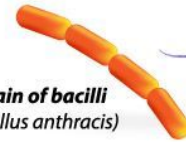
**Streptococci**  
 (Streptococcus pyogenes)

#### Tetrad



**Sarcina**  
 (Sarcina ventriculi)

### RODS (BACILLI)



**Chain of bacilli**  
 (Bacillus anthracis)



**Flagellate rods**  
 (Salmonella typhi)



**Spore-former**  
 (Clostridium botulinum)

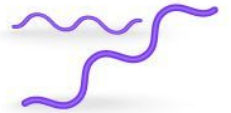
### SPIRALS



**Vibrios**  
 (Vibrio cholerae)



**Spirilla**  
 (Helicobacter pylori)



**Spirochaetes**  
 (Treponema pallidum)

## Questions:

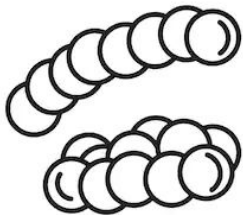
1. Bacillus is a genus of bacteria that also refers to what cell shape?
2. Under a microscope, what type of organism would appear as a group-like cluster of round cells?
3. Under a microscope, what type of organism would appear as a chain of rod-shaped cells?
4. In microbiology, what does the prefix staphylo refer to?
5. Draw an image of what a streptococcus would look like under a microscope.



Once you have completed the practice questions check with the **answer** key.

1. **Bacillus** is a genus of bacteria that refers to the cell shape Rod.
2. **Staphylococcus**
3. **Streptobacillus**
4. **Staphylo** in microbiology refers to bacteria being in group like cluster arrangements when viewing them under a microscope.

5.





## More Practice:

Follow the links below to do more practice.

1. [Morphology and Taxonomy Practice](#)
2. [Practice Quizziz](#)