



High School Science Virtual Learning

Applied Biological Science

Aseptic Transfer Technique

April 06, 2020



High School Applied Biological Science

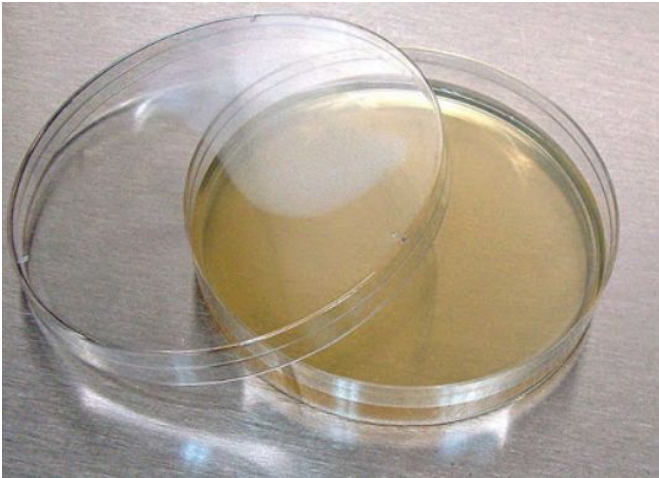
Lesson: April 6th, 2020

Objective/Learning Target:

I can safely transfer bacteria from one sterile location to another using aseptic techniques.

Let's Get Started:

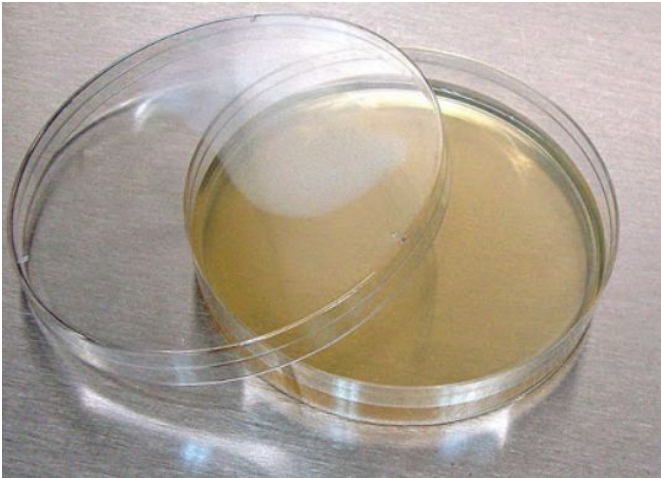
1. The image to the right shows an inoculation loop. What is the purpose of this tool?



2. The image to the left shows a petri dish with nutrient agar, what is the purpose those it?

Let's Get Started: Answer Key

1. The image to the right shows an inoculation loop. What is the purpose of this tool?
 - a. To inoculate or transfer microorganisms from a culture to a sterile growth medium.



2. The image to the left shows a petri dish with nutrient agar, what is the purpose those it?
 - a. To grow microorganisms on, specifically bacteria, in a safe sterile way.



Lesson Activity

Directions:

1. Watch the video over aseptic technique.
2. Write down notes as you watch the video about important key points made.
3. Read over the Aseptic Technique Notes

Link(s): [Aseptic Technique Video](#)
[Aseptic Technique Notes](#)



Practice

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

Model 1

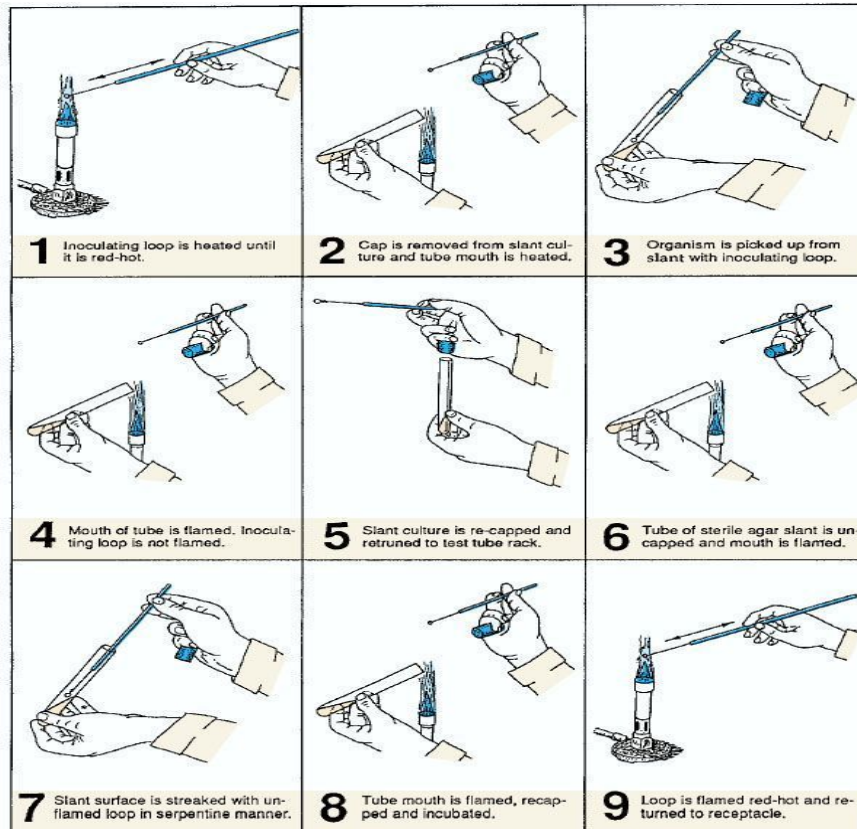


Figure 4 Procedure for inoculating a nutrient agar slant from a slant culture

Questions:

1. What does the term “aseptic mean?
2. Why is it important to use the aseptic technique when transferring microorganisms?
3. Our aim is to grow some bacteria the way microbiologists do. We got our bacteria from a “culture” - which contained the bacteria and nutrients for them to eat. Before we can collect the bacteria from the culture, what must we do first?
4. Do you take any precautions to try to avoid other microbes getting onto the agar?



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

1. Act of transferring bacteria from one sterile location to another with contamination from other microorganisms.
2. Microbiologists must carry out their lab work using the aseptic technique to prevent microbial contamination of themselves, contamination of the environment they are working in, including work surfaces or equipment, and contamination of the sample they are working on.
3. Sterilize the work area then sterilize the inoculating loop by putting it into the flame until it is red.
4. Keep petri dish lid on until bacteria is ready to be placed in it. Sterilize work area before and after. Sterilize inoculating loop between each inoculation. Wear gloves.



More Practice:

Complete the following over Aseptic Technique

1. [Practice Quiz](#)
2. [Practice Quizziz](#)