Name: _____ **Date:** _____

Sudsy Cells Worksheet

Type of Soap:_____

Pre-Lab Questions

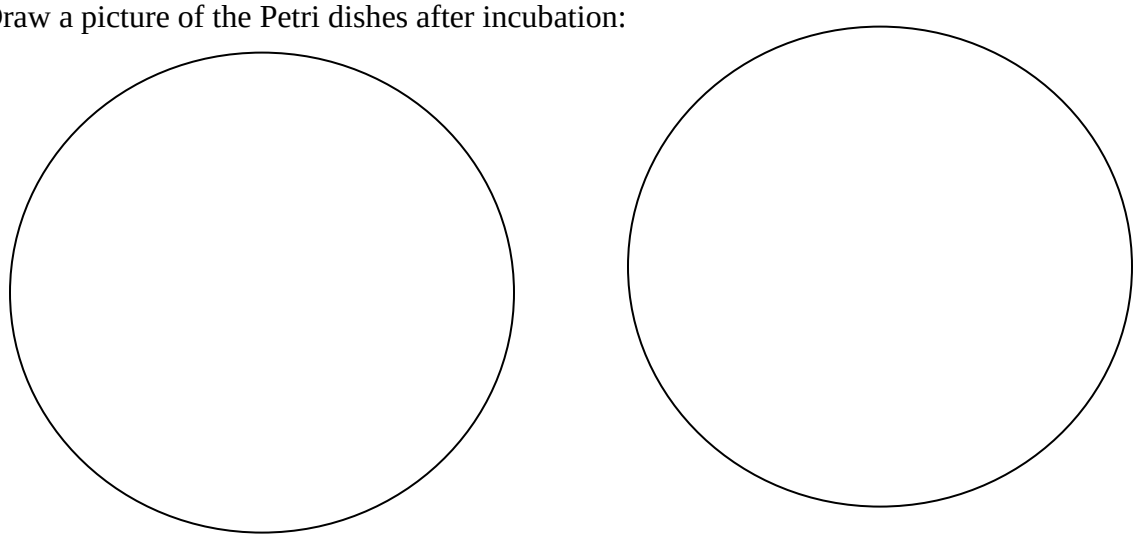
1. What is the control for your experiment?
2. Hypothesis:

_____

_____

Results

Draw a picture of the Petri dishes after incubation:



CONTROL With SOAP

Number of colonies on your Petri dishes:

CONTROL: _____ With SOAP: _____

1. What **number** of colonies was removed by the soap? _____
2. What **percentage** of colonies was removed by the soap? _____

Name: _____ **Date:** _____

Class Results Record the class results in the table below.

Groups	# Colonies Removed by Soap				
	Bar Soap	**Liquid Hand Soap**	**Anti-bacterial Soap**	**Hand Sanitizer**	**Liquid Dish Soap**
Groups 1-5					
Groups 6-10					
Groups 11-15					
Class average					
% Removal					

1. Which soap worked the best for removal of bacteria?

   _____

2. What are some sources of error that might have affected this experiment?

   _____

   _____

3. Engineers design different surfactants (soaps) for different situations. Using the soaps we tested today; write a design for a new soap for each of the following situations. You may mix soaps together in your new design.

   - For young children to use after playing on the playground.

     _____

     _____

   - To help clean up an oil spill of the coast of California.

     _____

     _____

   - For a doctor to use before a medical procedure.

     _____

     _____

4. Engineers also need to consider the effects that their products have on others. Think about the surfactants that you used today. What are some impacts those surfactants may have on the environment, animals or humans?

Name: _____ **Date:** _____

_____

_____