



## SW1 - Hand Shaking Experiment Worksheet - Section A

Dirty section

Colony 1 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Colony 2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Colony 3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Colony 4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Colony 5 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Clean section

Colony 1 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Colony 2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Colony 3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Colony 4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

### Hand Shaking Experiment:

#### Section A Results Worksheet

Observations

1. Which side of the Petri dish contained the highest number of microbes?  
   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Which side of the Petri dish contained more different colonies of microbes?  
   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. How many different colony types were there on the:  
   Clean \_\_\_\_\_\_\_\_\_\_\_  
   Dirty \_\_\_\_\_\_\_\_\_\_\_

Conclusions

1. Some people may see more microbes on the clean side of the Petri dish than the dirty side. Why?  
   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Which colonies would you consider the friendly microbes and why?  
   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



## SW2 - Hand Shaking Experiment Worksheet - Section B

### Hand Shaking Experiment: Section B Results Worksheet

#### Procedure

1. Carry out the experiment according to the teacher’s instructions.
2. In the table below, fill in how many different types of colonies you counted on your Petri dish and draw a graph of your results.

**After washing (or not washing) and shaking hands**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Results | Student 1 | Student 2 | Student 3 | Student 4 | Student 5 | Student 6 |
| No wash (control) |  |  |  |  |  |  |
| Quick wash |  |  |  |  |  |  |
| Thorough wash |  |  |  |  |  |  |
| Thorough wash with soap |  |  |  |  |  |  |

1. Which method of hand hygiene eliminated the most microbes?   
   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Why would soap help eliminate more microbes than washing with water alone?   
   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. What are the advantages and disadvantages to using antibacterial soap when washing your hands?   
   Advantages:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
      
   Disadvantages:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. What evidence do you have that microbes can be transmitted by hands?   
   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Which areas of the hand would do you think would contain the most microbes and why?   
   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. List 5 times when it is important to wash your hands:  
   a\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ c \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   
   d \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ e \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_