

## Bacteria Lab

1. PREPARING THE SAMPLES: To avoid contamination, only open the petris dish when you are ready to take the sample and seal with parafilm after collecting the sample.
  - A. Fingerprint Sample (2 petris dishes): Using a marker, label the outside of one dish (non-agar side) “unwashed hands” and the second dish “washed hands”. On the agar side of the dishes, divide the dish in sections (as if you were cutting a pie) so each member of your group has an area and label it with their name
    - 1) "Unwashed hands" dish = Open the dish and roll your fingerprint over your area  
After each person does this put the lid on the dish and seal it with parafilm
    - 2) "Washed hands" dish = After washing your hands, repeat the above procedure.
  - B. Additional Sample: Label a petris dish with the title of your assigned sample to collect. To sample a dry surface, moisten a sterile cotton swab in distilled water first and then collect your sample. Rub the swab against the agar in a "scribbling" motion staying in contact with the agar until you reach the other side of the dish. Put the lid on the dish and seal it with parafilm.
- II. GROWING THE SAMPLES: The sealed petris dishes will be placed in Mr. Miller's incubator set at 37°C for 48 hours.
- III. ANALYZING THE SAMPLES
  - A. Observe all of the samples from step I.B.
    - 1)a) Which 2 produced the most bacterial growth? (Mark which is the most of the two)
  
    - b) What do these dishes have in common?
  
    - 2)a) Which 2 produced the least bacterial growth? (Mark which is the least of the two)
  
    - b) What do these dishes have in common?
  - B. Observe your "unwashed" and "washed" fingerprint.
    - 1) Draw and describe both of your fingerprints (label “unwashed” and “washed”).
  
    - 2) The “washed” fingerprint should not be completely free of bacteria Why is bacteria still present after you wash your hands?