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## Bacterial Colonies Study Analysis

Purpose:
You will participate in a science procedure to grow bacterial colonies in order to gain an understanding in infection control.

Directions:

1) Get in groups of 4 and ONLY groups of 4 (there can only be 6 groups total!) Account for students that are absent today.
2) You will get 6 Petri dishes with caps
3) Lab Petri Dishes 1A 1B 2A 2B 3A 3B (on the bottom or side of the dish, we want to still be able to see through the top) using tape and a marker and with your group name(you can create it) and hour
4) Go around the school and collect samples from various spots in the building that people use every day (i.e. Door Knobs)
a. To take a sample use a cotton swab and rub the swab on the area you and testing MAKE SURE YOU KEEP TRACK OF WHAT IS WHAT!!!! (Make sure you get a good sample COMPLETELY COAT THE SWAB TIP WITH THE SAMPLE)
b. After you have sampled the spots, you are going to CLEAN the area with a disinfectant wipe (get from me ) and take another sample of the area to compare
c. You may want to transfer each sample to the Petri dish before starting on your next area to help with confusion
i. When Transferring the sample to the Petri dish rub the cotton swab on the surface of the agar gel, get the cotton swab sample all over the agar, but DO NOT break the agar gel
5) After the bacteria is transferred to the Petri dish, cap the dish and use a piece of masking tape to seal it shut (use the table all the way around the side edge) (the dishes will be kept at room temperature)
6) Label your paper according to how you transferred your samples
a. i.e $1 \mathrm{~A}=\mathrm{Mrs}$. Lichon Door knob Dirty, 1B= Mrs. Lichon Door Knob Clean
i. All A dishes should be DIRTY samples, and All B dishes should be CLEAN samples

## Group Samples:



Draw a accurate and colorful picture of what your bacteria growth looks like after the day incraments Day 3 Pictures of Bacterial Growth (Date $\qquad$


Day 5 Pictures of Bacterial Growth (Date $\qquad$ )


Day 10 Pictures of Bacterial Growth (Date $\qquad$


Describe what you saw on each plate after day 3, 5, 10
Day 3
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$\qquad$

Day 5
$\qquad$
$\qquad$

Day 10
$\qquad$
$\qquad$

Where there any sections free of bacterial colonies on any of the days? If so why do you think this happened?
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$\qquad$

Which of the plates had the largest colonies? Why do you think this occurred?
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This experiment helped you draw the following conclusions about bacteria (YOU MUST NAME 4)
1)
2)
3)
4)

What do you think people can do every day in order to reduce chance of illness?

