

Name: _____ Homeroom : _____

Culturing Bacteria

Materials: 6 petri dishes with agar medium, marker, tape.

- Procedure:**
1. Use a marker to label the dishes 1 through 6 on the bottom side (beneath the agar). Do not open the dishes until you are ready to use them.
 2. Open dish 1 and leave it open on your desk for the rest of the class period.
 3. Open dish 2 and, without pressing hard, rub a finger over the surface of the agar. Reclose the dish.
 4. Wash your hands thoroughly. Open dish 3 and rub a finger over the surface of the agar. Reclose the dish.
 5. Leave dish 4 unopened and untreated.
 6. Use dishes 5 and 6 to test for bacteria in other places in your environment. Avoid contaminating the dishes with bacteria from multiple sources.
 7. Seal each dish with a couple of small pieces of tape to hold the lid in place. Do not tape over the top of the lid. Place the dishes in an incubator at 30° C for two days.

Day 2:

1. DO NOT OPEN THE DISHES. Examine the dishes for bacteria growth. Make a sketch of the bacteria colonies in each dish. Use a stereomicroscope to magnify individual colonies.
2. Count and record the number of colonies and number of types of bacteria in each dish. Different types may be distinguished by color, shape, or texture of their colonies.

- Conclusion:**
1. Which dish showed the greatest number of colonies? Where did these bacteria come from?
 2. Which of the dishes you touched with your finger contained the greater number of colonies? How can you explain this?