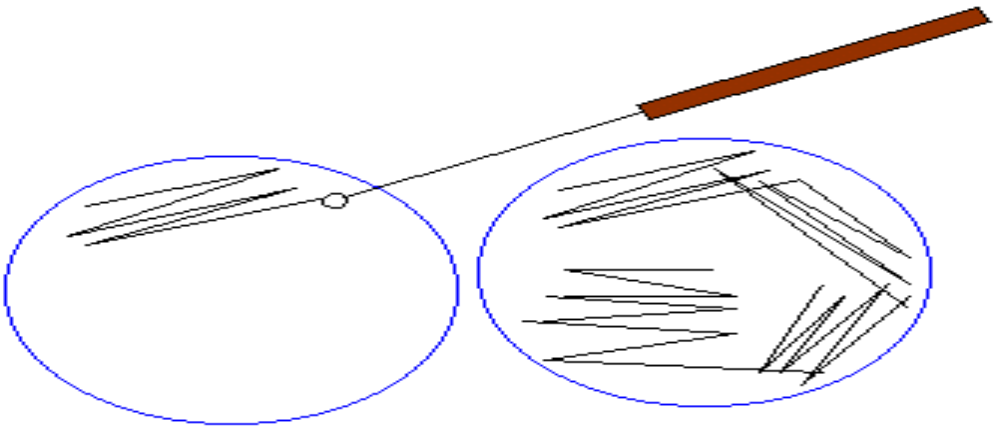
Streak Plate Technique for Isolating Bacteria: Step-by-Step

For entire article: http://www.scienceprofonline.com/microbiology/streak-plate-technique-for-isolating-bacteria.html

The purpose of streak plating is to spread out a clinical sample on solid growth media, so that individual, isolated bacterial colonies will grow.

1. Streak swab of clinical sample over one quarter of the sterile Petri dish in a back-and-forth "tornado" pattern. This is quadrant #1.
2. Discard swab in biohazard bag.
3. Sterilize loop in flame of Bunsen burner or hub of microincinerator.
4. Allow loop to cool without waving it about.
5. Place loop on next quadrant of Petri dish, next to quadrant #1. Gently drag the loop into quadrant #1 a few times, to obtain just a bit of bacteria from that first sample, then spread that material over quadrant #2, in another tornado pattern.
6. Again sterilize loop in flame of Bunsen burner or hub of microincinerator, and allow loop to cool.
7. Place loop in next quadrant of Petri dish, adjacent to quadrant #2. Gently drag the loop into quadrant #2 a few times, to obtain just a bit of bacteria from that sample, then spread that material over quadrant #3 in a tornado pattern.
8. Again sterilize loop in flame of Bunsen burner or hub of microincinerator, and allow loop to cool.
9. Place loop in next quadrant of Petri dish, adjacent to quadrant #3. Gently drag the loop into quadrant #3 a few times, to obtain just a bit of bacteria from that sample, then spread that material over quadrant #4, in a back-and-forth "tornado" pattern.
10. Make sure that the quadrant #4 streak does not touch the quadrant #1 streak.
11. Incubate plate at 37 degrees C for at least 24 hours.



For a video demonstration of streak plating, see the YouTube video:

Microbiology: Streaking for Isolation

https://www.youtube.com/watch?v=AaG3Pt3nwLQ