Day 1	Streak for isolation on different media at different aerobic conditions	1 Blood Agar – CO_2 1 TSA – O_2	Causative organism must be separated from contaminate for identification. CO_2 enhances growth of *Streptococcus*. Type of hemolysis can help with isolation.	Record CS number & clues
	Gram Stain	Use fresh Gram controls	Gives tentative idea of the type of organisms present. Helps eliminate possible organisms.	Record Gram Stain results
	Research organisms causing similar symptoms & normal flora of collection site	Use text, lab website, library, etc… cite sources	Narrow down possibilities to eliminate unnecessary tests. Start filling out Diagnosis Information Sheet.	Record research findings
Day 2	Visually examine plates for 2 isolated organisms, check with instructor/IA	Distinguish different organisms using colony morphology & hemolysis.	Colony morphology & hemolysis will help narrow down possibilities.	Record observations
	If isolation is unsuccessful, show plate to instructor/IA. May need to re-streak.	If isolation is unsuccessful, patiently return to Day 1 & re-streak for isolation.	The instructor/IA have more experience observing these organisms; they may see differences that are not obvious.	Record observations & results
	If isolation is successful, streak isolates onto separate plates to obtain pure cultures.	Prick the center of a well isolated colony & re-streak on maintenance plates. TSA for staphs & enterics, BHI for streps.	Verification of pure isolation is necessary. Pure culture plates are needed to work from.	Very carefully keep track of each organism.
	If isolation is successful, Gram stain the 2 distinct isolates.	There should be one Gram (-) & one Gram (+) organism.	Gram staining isolates helps ensure the isolation & cultivation of pure cultures.	Record observations & results
Day 3	If both organisms are separated with pure cultures growing on stock plates, proceed to selective tests.	Use information from the unknown lab, research, & Gram stains to determine appropriate selective tests to conduct.	Conducting inappropriate tests represents unclear thinking & unnecessary expenditure of money & personnel time. Tests done incorrectly will give misleading results causing confusion & misidentification.	Construct a blank table of tests to record observations
	If both organisms are not separated with pure cultures growing on stock plates, re-streak until they are.	Streak original broth culture for isolation. Isolate both organisms & re-streak on maintenance plates for pure culture.	Contaminated cultures not purely isolated will give you at best, ambiguous results & at worst, wrong results.	Don't get your organisms mixed up!
Day 4/5	Read test results, repeat tests with ambiguous or conflicting results.	Make sure to follow test procedures exactly.	Use micro website to look up test procedures & to determine what positive & negative tests look like.	Record results in test table
Day 6/7	Complete antibiotic sensitivity testing on causative organism.	Use MHA plates for staphs & enterics, BHI for streps.	Identify antibiotics the causative organism is sensitive & resistant to.	Record & interpret results