

Correct answers for Lab Quiz #1

1. The type of metabolism indicated in the image is **fermentative**.
If you answered facultative anaerobe or facultatively anaerobic, those are gas requirements and not type of metabolism so your answer was incorrect. Respiratory is a type of metabolism, but was also incorrect in this case.
2. The pH indicator in O/F medium is **bromothymol blue**.
3. The two fermentation products indicated are acid and gas.
4. The fermentation product tested for in the VP test is **acetoin** or **acetylmethylcarbinol**.
5. The pH indicator used in the MR test is **methyl red**.
6. The enzyme being tested for in the citrate utilization test is **citrate permease**.
7. Tube "B" contained a culture capable of esculin hydrolysis as indicated by the black color in the medium.
8. **Yes**, the data shown indicated lysine was decarboxylated and cadaverine was formed. We know this because the medium in the control tube was yellow and the medium in the lysine tube was purple.
9. One function of the vaspar seal on amino acid decarboxylation test tubes is to keep oxygen out. This will insure the medium environment is anaerobic thus forcing the culture to ferment if it can. Another function is to keep volatile amines in solution.
10. The oxidase test is used to detect the presence of **cytochrome c oxidase**.
11. If the vaspar seal is not present on the amino acid decarboxylation test media after inoculation, the volatile amines will leave the solution and cannot be detected. The pH would not rise and the results would always appear as negative.