

Name: _____

Tests Used to Identify *Enterobacteriaceae*

Gram negative bacteria in the family Enterobacteriaceae are often identified using a series of biochemical tests including Indole, Methyl-Red, and Citrate and TSI.

Name of Test	What this test reveals about bacteria	How to set up test	What a (+) result looks like	What (-) looks like	Which stock lab bacteria test (+)
1. Indole <i>(Remember, we used a broth, not a solid slant, as the instructions indicated. You inoculated it the same way as Methyl-Red)</i>					
2. Methyl-Red <i>(For both the Indole and the Methyl-Red tests, add an entire dropperful of reagent to the test tube after incubation, rather than just 5 drops. This will produce a more visible reaction if the test is positive.)</i>					

This assignment is from the [Virtual Microbiology Classroom](http://www.scienceprofonline.com/virtual-micro-main.html) (<http://www.scienceprofonline.com/virtual-micro-main.html>) on the free science education website [Science Prof Online](http://www.scienceprofonline.com) (ScienceProfOnline.com). Visit the website to find more science education resources such as lecture PowerPoints, practice test questions, review questions, science photos, video and assignments.

Name of Test		What this test reveals about bacteria	How to set up test	What a (+) result looks like	What (-) looks like	Which stock lab bacteria test (+)
3. Citrate				The media turns a very brilliant blue.	The media stays a duller bluish green.	
4. TSI	Glucose					
	Glucose Lactose Sucrose					
	Gas					
	Sulfate reduction					

* Provide as much detail as the media reveals. This means be sure that you answer is complete, in order to earn complete points.

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