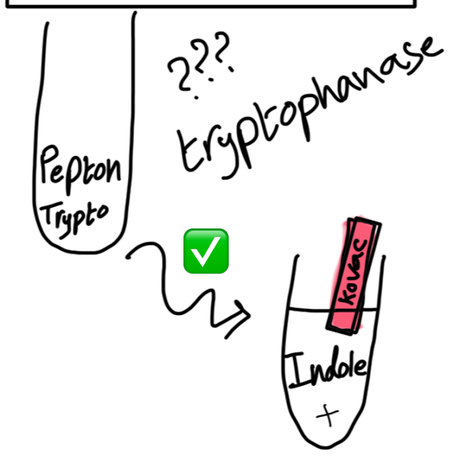
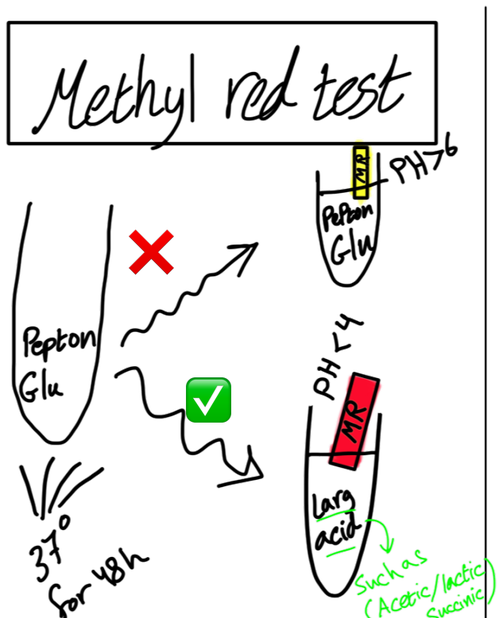
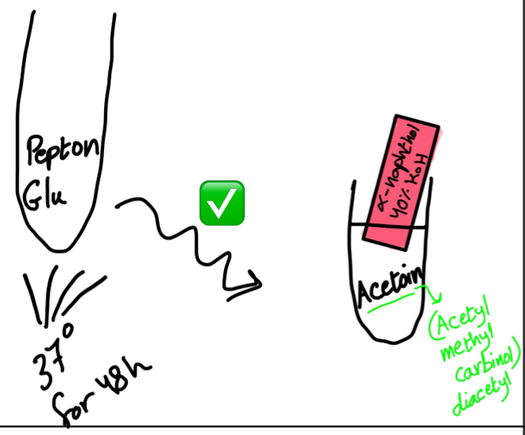
Indole test



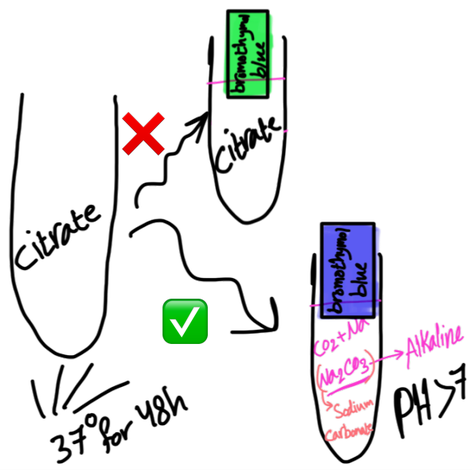
Methyl red test



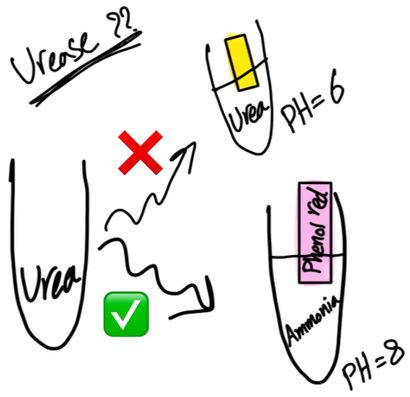
Voges-Proskauer test (V.P)



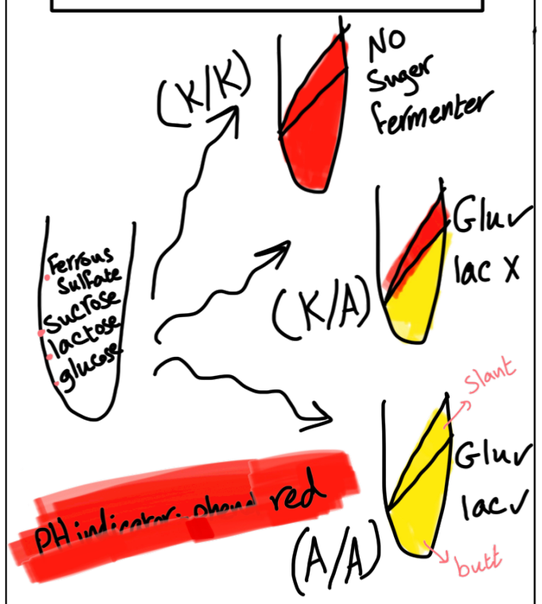
Citrate utilization test



Urease test

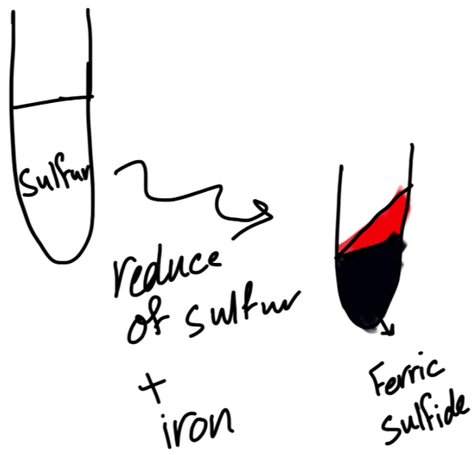


TSI



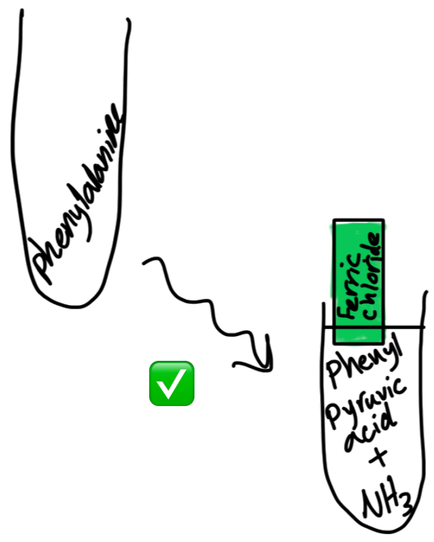
PH indicator: phenol red

H_2S production



Phenylalanine deaminase

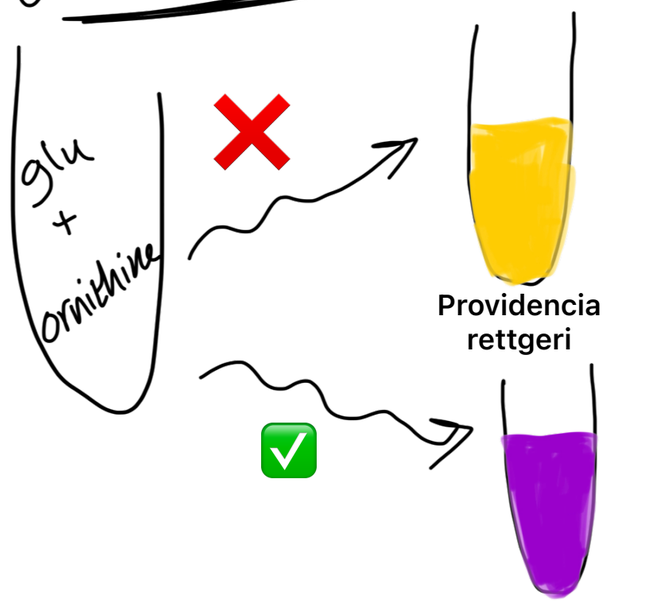
Phenylalanine deaminase ??



Distinguishes Proteus from Salmonella & Shigella

Ornithine decarboxylase

Ornithine decarboxylas ??



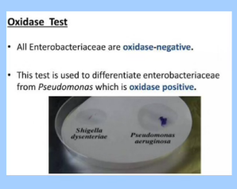
Bromocresol purple (Indicator)

(API)

The analytical profile index (API) (Biochemical tests for identification)
Several API systems for different groups of organism

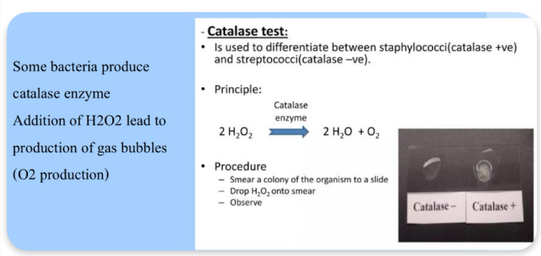
Oxidase test

Some bacteria produce Oxidase enzyme Detection by adding few drops of colorless Oxidase reagent Colonies turn deep purple in color (positive)



Catalase test

Some bacteria produce catalase enzyme Addition of H2O2 lead to production of gas bubbles (O2 production)



Coagulase test

Coagulase test:
Some bacteria produce coagulase enzyme
Coagulase enzyme converts fibrinogen to fibrin (plasma clot)
Detected by slide or test tube method