

Gram staining : It is based on the composition of their cell wall. Their cell wall is typically rich with peptidoglycan and lacks the secondary membrane and lipopolysaccharide layer found in Gram-negative bacteria (red). Gram staining uses crystal violet to stain cell walls, iodine as a mordant, and a fuchsin or safranin counterstain to mark all bacteria. Do not stain well with simple stains required (heat) o Prepare a smear of the bacteria o Flood the smear with malachite green o Do not allow the stain to completely evaporate. Preparation of smears Fixation of smears Staining of smears o Cover the smear with crystal violet for 1 minute. Examination of smears Spore staining Spore: structure that can survive for long periods of time in inert state