



Purpose: A quiz for safety and knowledge on general negative stain sample preparation.

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Approved:

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1. What (PPE) is needed for negative stain sample preparation with uranyl stains?

- A. Lab coat
- B. Goggles
- C. Latex gloves
- D. All the above
- E. None of the above

2. Are Uranyl stains radioactive?

- A. True
- B. False

3. Uranyl Acetate will have what background on microscope image?

- A. White particles/ black background
- B. Black particles/ white background
- C. None of the above

4. What do you do with your grids before you start your sample prep?

- A. Add sample
- B. Wash
- C. Glow-discharge
- D. Inspect grid

5. When do you use Phosphotungstic Acid (PTA)?

- A. Large Kilo-Dalton sample
- B. Small Kilo-Dalton sample
- C. PH sensitive sample
- D. None of the above

6. What buffers do I use for my sample?

- A. Any buffer I choose
- B. ddH₂O
- C. Buffer specific to sample
- D. All the above
- E. None of the above



7. What am I looking for when I inspect my negative stain grids?

- A. Continuous carbon
- B. The grid is bent
- C. Carbon is broken
- D. None of the above

8. What does glow discharging do to your grid?

- A. Hydrophilic
- B. Hydrophobic
- C. Shiny
- D. Nothing

9. What if any, needs to be optimized for your sample?

- A. Amount of stain
- B. Amount of time
- C. Amount of buffer
- D. All the above

10. What gas recipe do we use for negative staining sample prep?

- A. H₂/O₂ 30 seconds
- B. Ag/O₂ 2 minutes
- C. H₂/Ag 10 seconds
- D. Air
- E. All the above
- F. None of the above