

# Intro to Fabrication Quiz

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# Intro to Fabrication – Quiz Ideas

- 1) What is the purpose of the CMP (Chemical Mechanical Planarization) area?
  - A. Deposit a planar film on the wafer
  - B. Remove films or topography
  - C. Oxidize the wafer
  - D. Add impurities to the silicon lattice
- 2) What Fab Area sees the wafer the most in a typical Traveler?
  - A. Photolithography
  - B. Implant
  - C. PVD (Physical Vapor Deposition)
  - D. Wet Process
- 3) Which of these Fab Areas is most likely to process a wafer after a Photo pattern has been printed on photoresist?
  - A. CMP (Chemical Mechanical Planarization)
  - B. PVD (Physical Vapor Deposition)
  - C. Dry Etch
  - D. Diffusion
- 4) Which of the Fab Areas listed here deposits temporarily a film on the wafer?
  - A. CMP (Chemical Mechanical Planarization)
  - B. Metrology
  - C. RDA (Real-time Defect Analysis)
  - D. Photolithography

# Intro to Fabrication – Quiz Ideas

- 5) Which of these groups of Fab Areas is typically used to deposit films on wafer? Select the best answer.
- A. CVD, PVD, and Diffusion
  - B. Implant, Photolithography, and CMP
  - C. Diffusion, Dry Etch, and Wet Process
  - D. CVD, Photolithography and RDA
- 6) Critical Dimensions, Film Thickness, Film composition and Stress are examples of processes performed by what Fab Area?
- A. Probe Testing
  - B. Parametric Testing
  - C. Metrology
  - D. RDA (Real-time Defect Analysis)
- 7) Which of these is NOT true?
- A. Dry Etch can perform anisotropic etches
  - B. Wet Process can perform anisotropic etches
  - C. Dry etch can pattern features smaller than what Photo can pattern
  - D. Wet Process is used to remove unwanted films and impurities
- 8) Phosphorous and Arsenic are examples of:
- A. Dopants added to the wafer in the Implant Area
  - B. Films deposited in the CVD (Chemical Vapor Deposition) Area
  - C. Elements with 4 valence electrons (electrons in the outer shell)
  - D. Elements present in the photoresist

# Intro to Fabrication – Quiz Ideas

- 9) Which of these statements is TRUE about a reticle?
- A. A reticle has the pattern we want to print on the photoresist
  - B. The reticle is the lens system in the Photolithography equipment tool
  - C. Reticle is synonymous with Photoresist
  - D. The reticle is used as a hard mask for Dry Etch
- 10) If you have a deep trench with a high aspect ratio and you need to conformally deposit a thin film in the trench, which of these Fab Areas may NOT be the best choice for this process?
- A. CVD (Chemical Vapor Deposition)
  - B. Diffusion
  - C. PVD (Physical Vapor Deposition)

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