EECS 143 Microfabrication Technology	Department of Electrical Engineering and Computer Sciences University of California, Berkeley **Week #10 Quiz--Metal Definition**

Name _____ Section _____ Date _____

(1) At what temperature is the aluminum etchant kept? Why can't the aluminum etchant be used at room temperature?

(2) Why must the wafer be kept moving during the etch?

(3) What is the nominal etch rate of the aluminum etchant? Assuming 8000Å of aluminum and using a 10% overetch, how long should we etch?

(4) Why does the lithography step require a lower exposure time this week?

(5) Why do we do the sintering step?

(6) What will happen if the sintering temperature is too high or too low?

(7) What is "spiking" and how can it be prevented?

(8) What problems might have occurred if we used gold instead of aluminum for our contacts?

(9) Why don't we have to use a slow push/pull for the sinter?