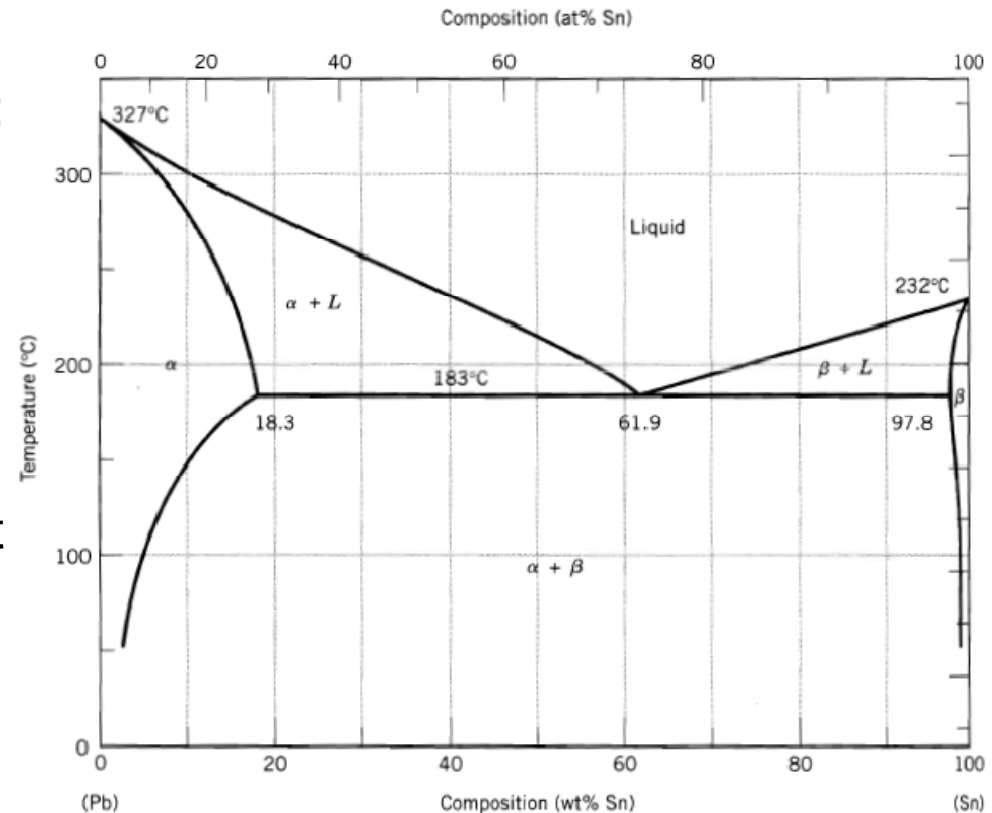


Assignment VI

- **Callister 10.18:** For a lead-tin alloy of a composition of 78wt%Sn and 22wt%Pb at 180C:

- determine the mass fraction of α -phase
- determine the mass fraction of β -phase
- determine the mass fraction of primary β -microconstituent
- determine the mass fraction of eutectic microconstituent
- schematically sketch the microstructure of the alloy



- **Atkins P7.8:** A sealed container is filled with 0.3mol $H_2(g)$, 0.4mol $I_2(g)$ and 0.2 mol $HI(g)$ at 870K and total pressure of 1 atm. Calculate the amount of components in the mixture at equilibrium given $K=870$ for the reaction:

