Assignment 3

The due date for submitting this assignment has passed. As per our record you have not submitted this assignment.

1. Atomic movement can happen through:
   - Slip
   - Dislocation movement
   - Diffusion
   All of these
   No, the answer is incorrect.
   Score: 0
   Accepted Answer:
   None
   1 point

2. Stress required to produce plastic deformation is higher than that required for slip.
   - True
   - False
   No, the answer is incorrect.
   Score: 0
   Accepted Answer:
   False
   1 point

3. Which of the following metals can undergo plastic deformation more easily?
   - Zinc
   - Copper
   - Aluminum
   - Titanium
   No, the answer is incorrect.
   Score: 0
   Accepted Answer:
   Copper
   Aluminum
   1 point

4. Dislocation movement is easier when all of the following occur:
   - Amorphous solids
   - Covalent solids
   - Metallic solids
   No, the answer is incorrect.
   Score: 0
   Accepted Answer:
   Metallic solids
   1 point

5. Diffusion will be highest through:
   - Surface
   - Grain boundary
   - Bulk
   - All of these
   No, the answer is incorrect.
   Score: 0
   Accepted Answer:
   Surface
   1 point

6. Diffusion depends on:
   - Type of solid solution
   - Temperature
   - Crystal structure
   - All of these
   No, the answer is incorrect.
   Score: 0
   Accepted Answer:
   All of these
   1 point

7. Triple point for ice-water-vapor system is where:
   - Temperature and pressure can both vary
   - Either temperature or pressure can vary
   - Neither temperature nor pressure can vary
   - Only temperature can vary
   No, the answer is incorrect.
   Score: 0
   Accepted Answer:
   Neither temperature nor pressure can vary
   1 point

8. With reference to the phase diagram of Al-Cr system shown in the lecture, what is the approximate percentage of liquid at 60°C Cr<sub>2</sub>O<sub>3</sub> at 2100°C?
   - 0%
   - 10%
   - 30%
   - 50%
   No, the answer is incorrect.
   Score: 0
   Accepted Answer:
   0%
   1 point

9. With reference to the phase diagram of Cu-Al system shown in the lecture, what is the approximate percentage of liquid and solid in an alloy with 30% Cu at 1300°C?
   - 70 and 30
   - 80 and 20
   - 90 and 10
   - 60 and 40
   No, the answer is incorrect.
   Score: 0
   Accepted Answer:
   70 and 30
   1 point

10. Stirring can cause:
    - Reduction in pore size
    - Increase in grain size
    - Neck formation between adjacent particles
    - All of these
    No, the answer is incorrect.
    Score: 0
    Accepted Answer:
    All of these
    1 point