

Name \_\_\_\_\_

1. During the cooling (heat treatment), the specimen can be converted to a variety of microstructures including pearlite and martensite depending on the cooling rate. Compare the hardness and ductility between pearlite and martensite.

2. The Jominy End-Quench Test is a widely utilized standard test procedure for determining the hardenability of ferrous alloys. What is hardenability?

3. In the Jominy End-Quench Test, will the hardness decrease or increase from the water quenched end? Explain Why.

4. Do you know how long will it take for the Jominy End-Quench Test bar to be cooled to room temperature in today's test?

5. The five heat treatments we will do in today's test include Normalizing, Quench Hardening, Austempering, what are the other two?