Problem 9-48

What is the difference between a phase and a microconstituent?

The difference is that a microconstituent is a particular phase or combination of phases which are identifiable with a microscope. Phases are the building blocks, and microconstituents are the resulting structures.

Proeutectoid ferrite is an example of a microconstituent mad of one phase ferrite. This will be identifiable in a photomicrograph of the specimen. Pearlite is an example of a microconstituent made of two phases: ferrite and cementite. It will also be observed as a feature in the photomicrograph.