

Study Questions for Ch. 5, Nichols, pp62-75

1. Describe the “rigorous, scientific methodology” known as sedimentary facies analysis. Why is it important? What is the objective?
2. *Sedimentary facies analysis* typically incorporates information (data) pertaining to lithology, fossil content, trace fossils, etc. Of what value might these components of sedimentary facies analysis be (and what are the terms applied to these aspects of a sedimentary rock unit) for interpretive purposes?
3. Compare and contrast *sedimentary facies analysis* and *paleogeographic reconstruction*.
4. Which of the following phrases is “kosher” in terms of the sedimentary facies analysis:
 - a. Cross-laminated, fine-grained, *Cruziana* burrowed glauconitic sandstone facies
 - b. Lower shore-face, Storm shelf facies
5. Compare and contrast *lithofacies associations*, *lithofacies successions*, and *depositional systems*.
6. Think about the integration of sedimentary facies analysis with lithostratigraphy: formations, members, etc. More on this later