Unit 2 Questions – Student Memory, Cognition, and Learning:

a) How do students remember information presented to them? How can we, as teachers, help students remember what they have learned?

b) What do students do when they try to understand ideas and concepts presented in a lecture, a textbook, or an activity? How can we find out what students are thinking about as they try to understand and make sense out of the information presented to them?

c) How does students' prior knowledge (in all its forms-misconceptions, schemas, perceptions, beliefs) influence their learning? What can we do to understand students' prior knowledge and use it in our instruction? How can we assess their prior knowledge?

d) What kinds of thinking and learning strategies do students use? How can we describe students' higher order thinking so that we can try to improve it?

e) What are metacognition and self-regulation? Why is it important that students engage in this type of cognition? How can we foster metacognition and self-regulation in our classrooms? Are there developmental differences in metacognition and self-regulation?

f) Given that the students in any one class will differ in their knowledge and cognition, how can teachers deal with this diversity?