

This Problem open book and open notes, but you are expected to work individually to obtain your answers. This will constitute 10 % of your overall grade. You have about 1.5 weeks to complete this assignment (due 4/25/17) and submit it to me by email. Please email me concerning any specific questions so as not to use valuable class time on this. Since there are no calculations, please submit your answers as a MS Word document with a file name consistent with the protocol Lastname, Firstname – PS#4.doc.

1) Please read the paper (Verdugo et al., Marine Chemistry 92 (2004) 67–85) provided as a ‘Handout’ on the Course Materials webpage for 4/13/17 and discuss the following questions as they relate to class material and other assigned readings (i.e. Libes). Please be brief and to the point.

- a) What is marine snow?
- b) What holds it together?
- c) What is the link between dissolved and particulate organic matter as described in the paper?
- d) How does the “gel phase” influence what we refer to as the “Organic Carbon Continuum”?
- e) What influence might gels have on the amount of particulate organic material that reaches the sediment?