Homework (questions 1-3) and study guide on sexual reproduction. Please turn in questions 1-3 to show you examined this week’s material. **You will on an exam be responsible for understanding all the material on the guide. Questions 4-6 are examples of additional questions that could be asked on the final.**

1. What has happened to the y chromosome over its evolutionary history?

2. Explain the advantage asexual organisms have with respect to numbers over sexual organisms.

3a. Explain why the lottery theory for the maintenance of sexual reproduction is no longer accepted despite it being the only theory for the maintenance of sexual reproduction reported in introductory textbooks.

3b. Be able to state theories 2 and 3 in a few sentences.

4. Compare and contrast with respect to requirements for mutation, requirements for population numbers, and so types of organisms and changes required in the environment (including favored phenotypes for resistance), the two accepted evolutionary theories for the maintenance of sexual reproduction.

5. What type of world is envisioned by theory three? Does the fact that over 10% of all our genes code just for immunity, support this vision?

6. a. Describe how organisms can become locked into sexual reproduction. b. Define genetic imprinting.