Lab #4 (week of 9/26): Plant Adaptations: Flowers, Seeds, Fruits

A. **Pre-lab reading**:
   1. text sections 17.9, 17.11, 17.13
   2. CD exercise 31C p. 1 (parts of flowers)
   3. CD exercise 31D p. 1 (all), p. 2 (don't click to see fertilization), p. 6 (dry vs. fleshy fruits), p. 7 (general germination)
   4. Lab manual "Flowers, Fruits and Seeds", exercises 1A, 1B, 2B
   5. NOTE: lab will include an outdoor portion, so be prepared!

B. **Quiz 3** covers
   1. classification, dichotomous keys, plant diversity (the quiz may include keying out objects with a key provided by the TA)
   2. What is a fruit (structurally, functionally – from pre-lab reading)?
   3. Science process, graphing

C. **Homework #3** due

D. **Homework assigned (hw4 due week of 10/3)**: You will list 5 different kinds of produce commonly thought of as vegetables (vs. fruits) and 5 different spices. For each, identify the part of the plant (flowers, stems, roots, buds, seeds, leaves, etc.) we use (eat in the case of vegetables, use to season foods, in the case of spices). You are NOT to pick multiple vegetables or spices that are clearly varieties of one another (i.e., multiple kinds of squashes, tomatoes, lettuce, etc.) and may NOT use examples used in class. Information should be presented as two typed lists (one for the vegetables, one for the spices), on one page, with answers in complete sentences. Standard homework formatting rules apply.

   If you have trouble thinking of vegetables and spices, a visit to the grocery store will help. To find out what part of the plant is used, the best place to look first is a good dictionary. You should be sure to completely research their answers, though – a vegetable may be defined as a "bulb", for example, but you will need to explain what plant part a bulb is to completely answer the question.

   Information for each vegetable/spice is worth 1 point; answers should be graded on accuracy.

Next Week (week of 10/3): **Lab #5: Microscopy and Pond Diversity**

A. **Student reading** for lab 5: Text sections 16.18-16.23

B. **Quiz #4** will cover plant adaptations
   1. Parts of flowers (including which are male, which are female)
   2. Adaptations for pollination (including basic characteristics of bird, bee, and butterfly-pollinated flowers from Table 1 p. 34 in the lab manual)
   3. Adaptations for seed dispersal (dry vs. fleshy fruits etc.)

4. "Questions for Review" from the lab manual, except #'s 5, 7, 9
5. What is a protozoan, what are algae from text 16.18
6. Science process & graphing

C. **Homework #4** due