1. Sketch California’s San Joaquin Valley and label the following features below:

San Luis Obispo  San Francisco  Fresno
Coastal Range  Sierra Nevada Range  Valley floor edges
Monterey  Sacramento  Stockton
Kings River  Sacramento River  San Joaquin River
Tuolumne River  Stanislaus River  Calaveras River
Mokelumne River  Merced River

Refer to your own map or the map found at the website:
http://www.lbl.gov/MicroWorlds/Wetlands/WetlandsClue2.html

2. List some trace elements commonly found in sea water.

arsenic (As), boron (B), molybdenum (Mo), uranium (U), and selenium (Se)

3. List some agricultural products that are grown in the San Joaquin Valley.

cherries, almonds, pistachios, garlic, apples, etc.
4. List waterfowl that might live in a wetlands area.

**mallards, night herons, cranes, and egrets**

5. Find and circle Se (selenium) on the periodic chart below:

What are the elements just above Se in the periodic chart? **S** and **O**

Find and circle the other trace elements found in sea water. (As, B, Mo, U, circled here with dashed line)

6. 1 mg = ____ 1/1000 ____ g

100 µg = ____ 1/10 ____ mg

7. How much Se is found in each tablet of your vitamin bottle? **variable**

**variable** tablets would cause an overdose of Se (more than 200 µg in a day).