Topic 1: Introduction to Riparian Ecosystems

I. Two-Minute History
Many words in English (about 60%) come from Latin, the language of the ancient Romans (ca. 1000 BCE-500 CE). Because the Roman empire extended from the Middle East to Spain and from Great Britain to Africa, Latin endured as a common second language for one thousand years after the Roman empire collapsed. Educated medieval Europeans always knew at least two languages: their first native language (French, Spanish, Italian, German, etc), and Latin. This was because Latin was the language of learning - all medieval scholarly books were written in Latin, and university courses were taught exclusively in Latin. You will discover that much of the vocabulary of biology comes from Latin, because Latin was of course the language of science for so many centuries.

II. Learning Latin Roots

riparian
English definition: located or living on a riverbank or shore
Latin root: ripa = riverbank, seashore
Related Latin words: riparenses (soldiers stationed near a river), riparius (near a river), ripula (little river)

estuary
English definition: water passage where the tide meets the river current
Latin root: aestuarium = the part of the sea coast that overflows during high tide and is muddy during low tide
Related Latin words: aestuo (boil, rage up violently), aestabundus (foaming, fermenting), aestuosus (agitated)

habitat
English definition: place/environment where a plant or animal lives or grows
Latin root: habito = to live somewhere, to inhabit
Related Latin words: habitatio (a place to live), habitator (an inhabitant), habitudo (a habit)

sedimentation
English definition: the process of depositing or settling
Latin root: sedimen = settlings, deposits
Related Latin words: sedimentum (a settling, sinking)

III. Affix of the Day
An affix is a little word or piece of a word that attaches to a longer word in order to change its meaning. For example, if you attach the affix pre- to the word "adolescent", you get "preadolescent", meaning a person who is about to go through puberty. Affixes are usually attached to the front of words (prefixes) or the end of words (suffixes).

co-
Latin root: cum = with, together
English words using co-: cooperation (to work together), coauthors (two people writing together), coeducation (when men and women are educated in the same school)
IV. Etymology Exercises

1. Fill in the blanks using words related to *habito* from the list below.

habitually
uninhabitable
inhabitant
cohabit
microhabitat

a. The octopus and the crab _____________ a little cavern in the coral reef.

b. I am an ________________ of the San Francisco Bay Area.

c. Mr. Predictable ________________ picked up the newspaper at 8:00 am every day.

d. The plant's leaf provided a ________________ for the aphids.

e. Venus is completely ________________ for humans, with extreme temperatures, storms, and no water.

2. Which of the following words uses the *co-* prefix?

coproduced
corner
couch
cocaine
coevolves
cochair
coexist
coast
cope
coffee