

Date:

Answer the questions to prepare for the exam. Some of the questions are asking you to make a calculation. Show work where necessary.

1. Calculate the diversity of a stream where you collect: 12 mayflies, 9 stoneflies, 23 snails, 2 true flies, 2 true bugs, 9 dragonflies, and 6 caddisflies. (You can calculate by hand or use excel).
2. Assess the stream condition (levels 1-3) of a stream with the following invertebrates collected from it: 12 mayflies (2 varieties), 9 stoneflies (4 varieties), 23 snails (1 variety), 2 true flies (1 variety), 2 true bugs (2 varieties), 9 dragonflies (2 varieties), and 6 caddisflies (2 varieties). (Use the table we used in class.)

3. Which group (order) of organisms houses itself in a “shell” made of silk and debris?
4. Which group (order) or organisms is made up of mostly predators?
5. Name and describe the four functional feeding groups. Include why each group is important for the ecosystem.
6. Why are aquatic macro-invertebrates studied so commonly in the scientific community? What special information do they give us?
7. What is the benefit of studying AMIs for information about water quality over using digital equipment?
8. Which group (order) of organisms, that we have talked about over the past few weeks, looks sort of like a worm in the water?