

Lesson number	1.3
Title of activity	Calculating a Biotic Index from Stream Macroinvertebrates (classroom activity)
Time	20-30 minutes
Student group size	1-3 students
Resources required	Classroom-based activity (per group): <ul style="list-style-type: none">● One print out of Macroinvertebrate ID Chart● One print out of Macroinvertebrate Biotic Index Student Sheet● One container with a mix of cut out images selected from this Macroinvertebrate Images file (choose a random selection of 10-25 images per group container depending on time available; some are easier than others to identify)
Venue	In-class (See Streamside biotic index activity if you have access to a stream) as a follow up lesson.)

Instructions:

1. Preview the concepts of macroinvertebrates and biotic index with the students (can use accompanying slides).
2. Explain how macroinvertebrates are sampled in the field using a kicknet.
3. Prep activity resources by:
 - a. printing out one [Macroinvertebrate ID Chart](#) and one [Macroinvertebrate Biotic Index Student Sheet](#) per group and
 - b. making two copies of the [Macroinvertebrate Images file](#) and cutting out a selection of images, making sure you have enough for 10-25 different images per group.
4. Give each group their resources and have them identify the macroinvertebrates in their container and then calculate the biotic index.



5. Note that the cut out images are different than the images on the ID Chart, so students have to make their best guess at the appropriate taxa.