### **Classroom Program: Water Quality Lab**

| Audience:             | 3 <sup>rd</sup> – 8 <sup>th</sup> grade students  |  |  |
|-----------------------|---|--|--|
| Length:               | 30-45 Minutes   |  |  |
| Location:             | Classroom program   |  |  |
| Program Goals:        | <ol> <li>To introduce students to the idea of biological indicators</li> <li>To help students understand water quality and its effects on<br/>organisms</li> <li>To help students understand pollution tolerance levels in<br/>organisms</li> </ol> |  |  |
| Option One Materials: | <ul> <li>Computer</li> <li>Projector</li> <li>Critter Score Card (1 for each student, multiple copies can be made of the following page for students)</li> </ul>  |  |  |
| Option Two Materials: | <ul> <li>made of the following page for students)</li> <li>Computer</li> <li>Projector</li> <li>Whiteboard</li> <li>Whiteboard markers</li> </ul>   |  |  |

• Volunteer to record data

## Procedure:

# Set Up/Introduction (2-3 Minutes)

-Explain to the class that they will now be doing a post-field trip activity and that they need to do their best to remember the things they found during the aquatic invertebrate exploration station

-Option 1: Pass out critter score cards to each student

-Option 2: Have volunteer recreate the critter score card (third page) on the whiteboard

# Lab (20-30 Minutes)

-Work through the beginning slides as a class

-Ask the questions on the slide; allow students to guess, and then click to get the correct answer

-Follow the slide directions

-**Option 1:** Have students fill out Critter Score cards individually throughout slideshow -**Option 2:** After the "One Point critter" picture Id slide pause and ask students how many organisms they caught on that slide as a class, then have the recorder write this number in the corresponding box on the data table created on the whiteboard (repeat for all three tolerance groups)

-Follow up with the "Review" slide to check for understanding

-Collect Worksheets (If Applicable)

#### Water Quality Data Table

| Creature | Amount Found | Multiply | Point | Equals |
|----------|--------------|----------|-------|--------|
| 1 Point  |              | Х        | 1     | =      |
| 2 Point  |              | х        | 2     | =      |
| 3 Point  |              | Х        | 3     | =      |

Now total your score by adding up all three scores in the column labelled "Equals"

My total Water Quality Score is: \_\_\_\_\_

#### Water Quality Index

| If your score is: | Your water Quality is: |  |
|-------------------|------------------------|--|
| Less than 10      | Poor                   |  |
| Between 11-16     | Fair                   |  |
| Between 17-22     | Good                   |  |
| 23 or More        | Excellent              |  |

Based on the Water Quality Index my Water Quality is: \_\_\_\_\_