

# **Benthic Macroinvertebrate Lab**

# **Phinizy Center for Water Sciences**

## **Rubrics**

### **Level 4**

- Student can describe at least three reasons why water quality is important and at least two different ways to use bioindicators to assess the health of a waterway.
- Student can describe what aquatic macroinvertebrates are, understands that some species are pollution tolerant and some are pollution intolerant, and can describe how biodiversity of the aquatic macroinvertebrates can be used to assess stream health.
- Students can describe where in the stream you would find suitable habitat for macroinvertebrates and can list three different ways that macroinvertebrates and their habitats can be negatively impacted by urbanization.

### **Level 3**

- Student can describe at least two reasons why water quality is important and at least one way to use bioindicators to assess the health of a waterway.
- Student can describe what aquatic macroinvertebrates are, understands that some are pollution tolerant and some are pollution intolerant species, but cannot describe how biodiversity of the aquatic macroinvertebrates can be used to assess stream health.
- Students can describe where in the stream you would find suitable habitat for macroinvertebrates and can list two different ways that macroinvertebrates and their habitats can be negatively impacted by urbanization.

### **Level 2**

- Student can describe at least one reason why water quality is important but cannot describe how bioindicators are used to assess the health of a waterway.
- Student can describe what aquatic macroinvertebrates are, but does not understand that some are pollution tolerant and some are pollution intolerant species, and cannot describe how biodiversity of the aquatic macroinvertebrates can be used to assess stream health.
- Students can describe where in the stream you would find suitable habitat for macroinvertebrates and can list only one way that macroinvertebrates and their habitats can be negatively impacted by urbanization.

### **Level 1**

- Student cannot describe why water quality is important and cannot describe how bioindicators are used to assess the health of a waterway.
- Student cannot describe what aquatic macroinvertebrates are, does not understand that some are pollution tolerant and some are pollution intolerant species, and cannot describe how biodiversity of the aquatic macroinvertebrates can be used to assess stream health.
- Students cannot describe where in the stream you would find suitable habitat for macroinvertebrates and does not understand how macroinvertebrates and their habitats can be negatively impacted by urbanization.