Ecosystem Investigators

Macroinvertebrates.org guide

PITTSBURGH Parks Conservancy
www.pittsburghparks.org

Name: _____   Date: _____

Purpose:
- Explore the types of organisms that live in the stream.
- Make observations about structural and functional adaptations
- Learn how to use the macroinvertebrates.org tool
- Learn how to use a dichotomous key

Definitions:
- Benthic macroinvertebrates: organisms living at the bottom (benthic) of the stream. Large enough to see without a microscope (macro) and without a backbone (invertebrate)
- Structural & functional adaptations: physical features/behaviors/structures that help the organism survive
- Dichotomous key: a tool used to determine the identity of an item in the natural world. Keys consist of a series of choices that lead the user to the correct name of a given item.

Click here for a video walkthrough of the website and activities.

Activity 1: Observe
1) Go to https://www.macroinvertebrates.org/quiz
2) Start the quiz
3) Make observations about the first organism on this worksheet or a separate page
   a) Observations can include: color, size, shape, body structures (tails, antennae, sensory organs, legs)
4) Make a sketch of the organism

Organism 1
Description: *color, size, shape, body structures (tails, antennae, sensory organs, legs)*
Sketch

Activity 2: Dichotomous Key
1) Open a new tab and go to https://www.macroinvertebrates.org/key#_
2) Using the yes or no prompts, find your organism by using your observations. (If you need more clarification, you can click on the boxes for examples.)
3) Return to the quiz and select that organism from the dropdown menu.

Activity 3: Explore.
1) You can repeat activity 1 & 2 until you complete the quiz
2) OR you can explore the website more and learn more about these tiny organisms that share our streams.

Organism 2
Description: *color, size, shape, body structures (tails, antennae, sensory organs, legs)*
Sketch

Organism 3
Description: *color, size, shape, body structures (tails, antennae, sensory organs, legs)*

Sketch