

# Aquatic Insects

## Age/Grade Range

- Ages: 7-10
- Age modifications available

## Group Size

- In pairs or small groups
- 5-30 students

## Time

- Set-up: 30 minutes
- Activity: 1 hr

## Materials

- Aquatic insects in water
- Magnifying glasses or microscopes
- Containers/trays for viewing
- Sieves
- D nets (fine mesh)
- Small hand nets or aquarium nets
- A piece of cardboard or Bristol board big enough wrap around a kid
- 2 balloons
- A snorkel or long tube
- Photos of the insects
- Worksheets

## Set-Up

1. Get the materials ready for the insect dress up.
2. Collect some aquatic insects using a net and keep them in some plastic trays with water.
3. Set out the trays at different stations in the classroom. Students will first be examining these insects, then going out to catch their own.



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## Topics

- Ecology and Animals

## Objective

- Learn about what lives in the water.
- Learn some basic insect identification and collection skills.
- Understand how aquatic insects adapted to their habitat.



## Activity Directions

### 1. Introduction:

We are going to look at some awesome insects that live in water! I've collected a bunch that we will look at and then you can try and find your own as well!

### 2. Insect Adaptations:

To live in water, these creatures need some adaptations to help them, does anyone know what adaptation means? It's something special that you do to help you survive!

- a. I need a volunteer – get them to wrap themselves in the Bristol board. You are now a Caddisfly Larvae! They make a house around themselves out of anything they can find – leaves, sticks, rocks. An artist gave one some gems and gold and they made a house out of that! (show them that photo)
- b. Who wants to be the next insect? Give them two blown up balloons to put under their arms. You are a Water Beetle! The balloons represent the air bubble that a lot of water beetles carry around. Ask them to look for these beetles coming to the surface for more air, and carrying these bubbles back down with them on their backs or under their 'wings'.
- c. Who wants to be the next insect? Tell them to lie on the ground with their feet in the air and hold the cardboard tube in the middle. You are a Mosquito Larvae! They hang upside-down at the surface and breathe air with a tube while they catch food underwater.

### 3. Insect examination:

Now let's see if you guys can find some of these bugs and can spot their special adaptations! Set-up beforehand different stations with certain insects you have found, see if they can find them too. This helps them see what to look for. Tell them to try and find some of those insects! Use clipboards if you have them, magnifying glasses, identification sheets and photos.

### 4. Insect collection:

- a. Explain again where certain insects live. Certain insects live in fast streams under rocks, some skim along the surface, some live in mud in ponds and lakes, explain how to collect the different ones and show them the tools
- b. Demonstrate how to collect insects; hip waders, D nets, sieves, buckets, little hand nets
- c. Give them small buckets and nets and let them loose. Have them try to identify their catches before releasing them back into the water.

## Modifications

- For older students, switch the order of the activity so that they collect the insects first and then can bring them back to the classroom to view under a microscope.

## Print Outs

- Aquatic Insect Student Worksheet

