NASHUA RIVER WATERSHED ASSOCIATION

Nashua River Watershed Investigations for Grades K-8

Lesson # 2-3

Title: 2-3 Build a Bug

Grade Level & Standard: Grade 2
2 2-LS4-1.Use texts, media, or local environments to observe and compare (a) different kinds of living things in an area, and (b) differences in the kinds of living things living in different types of areas.

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Objective:
Students will observe aquatic insects with careful attention made to leg shape, leg movement and where the insect swims in the water (surface, in water, bottom dweller). They will first draw the insect and then create a model of the same insect and test it in water.

Vocabulary:

- **Aquatic** - lives in water
- **Insect** - an animal (bug) with 3 body parts, 6 legs, and a hard outer shell (exoskeleton)
- **Environment** - All the physical surroundings on Earth including everything living and everything nonliving. ... People, animals, plants, and all other living things rely on the nonliving parts of the **environment** to survive.

Discussion Points: How do different insects live and move in water? What might their legs be like in order to swim and find food?

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Materials:

- Corks halved
- Straws
- Pipe cleaners
- Card stock paper
- Glue
- Craft foam
- Video of water strider
- Low flat pans of water

Procedure (40 minutes to 60 minutes):

1. In the classroom, show pictures and videos of aquatic insects that swim on the surface, in the water and crawl on the bottom of a river. Look up water striders, water boatman and dragonfly larvae (immature dragonflies).
2. Use the attached photos or real insects to draw one of the three insects.
3. Using craft materials, build insects or “bugs” adapted to aquatic environment: water strider (surface walkers), water boatman (swimmers), dragonfly with hooks on legs (bottom dwellers).

Extension:

- Pond Skaters for Kids on YouTube
  https://www.youtube.com/watch?v=Q6Ix6aVgwvk

Data Sheets:

- Build a Bug Example Sheet
- Build a Bug Support Sheet
- Build a Bug Photo Example Sheet

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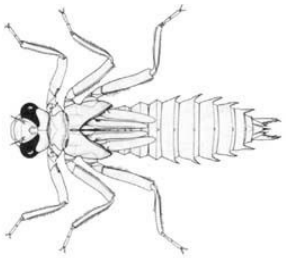
Build a Bug Examples **NRWI Lesson 2-3**

Name_____

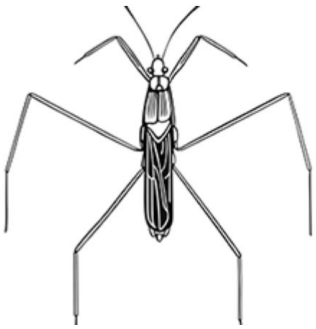
Create one insect with art materials.

1. The **Dragonfly Nymph** has small hairs, six legs, and an oval body. It crawls along the bottom of a river and hides in mud.



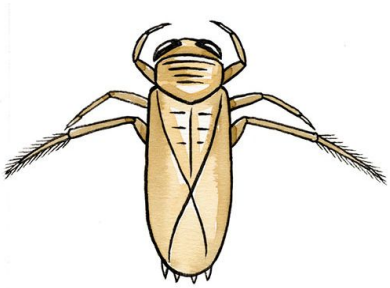
(www.anbg.gov)

2. The **Water Strider** has long legs that help it walk on top of the water.



(www.eekwi.org)

3. The **Waterboatman** has two long legs that have paddles on the end.



(WWT.org.uk)

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I AM AN INSECT
and
I LIVE IN WATER!

I CAN:

1. SWIM, FLOAT or CRAWL
2. SEE MY PREY WITH BIG EYES
3. CATCH MY PREY WITH FEET OR MOUTH

I HAVE:

- HEAD
- BODY
- SIX LEGS
- BIG EYES
- OTHER SUPER STRUCTURES (for example - swimming legs, stingers, antennae)

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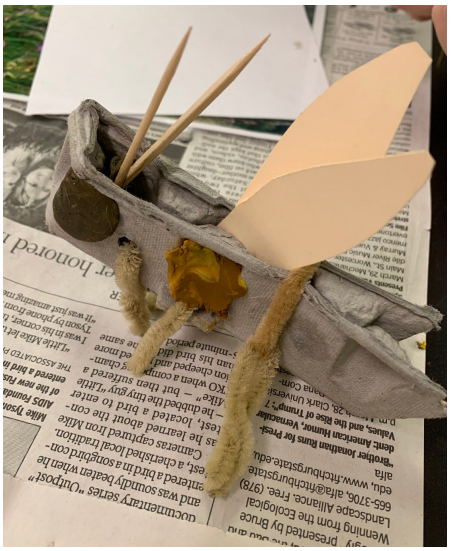
Build a Bug Photo Examples (photos Stacey Chilcoat)



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