# Beetlemania Build-A-Beetle



### Time: 30 - 60 Minutes Number of Students: One class, 30 students

## Materials:

- Build-A-Beetle template (found at the end of this lesson plan)
- Colored pencils, markers, or crayons

# **Objectives:**

Students will be able to ...

- understand and appreciate the scope and scale of beetle diversity
- accurately identify major anatomical elements that "make a beetle a beetle."

#### **Overview:**

- Build-A-Beelte: 15 20 minutes
- Building a Beetle Zoo: 20 30 minutes
- Potential Extensions

# Lesson Steps: Build-A-Beetle: 15 - 20 minutes

- Pass out copies of the the Build-A-Beetle template found at the end of this lesson plan.
- Encourage students to draw and describe a new species of beetle, a totally new creature from their imagination.
- There are very few creative constraints here beyond sticking to the anatomical features that all beetles have in common. During the program students will have learned that all beetles have six legs, three body segments and and a pair of elytra on their backs that

protect a pair of flying wings. These features should be present in their drawings but otherwise, however wild and unique they want to make their beetle is up to them.

**Fun Fact:** Entomologists that discover new species get to name them. Since they are "discovering" their new species, they get to name it whatever they want!

# Lesson Steps: Building a Beetle Zoo: 30 minutes

Lead students in a discussion of how zoos are organized. Ask your students:

- Have they ever been to a zoo, seen one on TV or seen pictures?
- How were the animals organized?
- By color? Habitat? Predators or Prey? Size?
- What did they like about the zoos they've experienced and how they were organized.



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#### Lesson Steps: Building a Beetle Zoo: 30 minutes, continued

Continue the discussion by asking students how they would organize a zoo for just beetles. How would they group the beetles together? Would they separate predators, herbivores and decomposers? What about by size, shape or color? Habitat? Geography?

After a few minutes of discussion allow students to break out into smaller groups or, working together as a whole class, arrange their new beetle species into a "beetle zoo." Students can use the white board or scratch paper to write down the types of beetles the class has created and group the new species together. Once a system is agreed upon they should physically move the drawings of their new species so that the papers are grouped together as if they were in a real zoo. Students and teachers can then circulate around the room to appreciate and observe the new species - to visit the zoo.

### **Potential Extension: Independent Research**

The world of beetles is an incredibly diverse and exciting one. There is no way to answer all questions or cover all aspects of beetle life in one field trip. Having students pick one element of their new species (habitat, adaptation, predators, prey etc.) or of their favorite beetle from the field trip to research is a great way for students to practice their independent research skills. Using whatever research tools are available at your school (librarian, library books, Internet search etc.), you can have students search for information on a real beetle that shares

that trait with their imaginary "new species."

## **Potential Extension: Language Arts**

Have students write a short story about their new species. This can be anything from a fictional story about the adventures of their beetle to a mock non-fiction piece of writing that outlines, in more detail, the life cycle, habitat, predators etc. of their fictional species.

A Brand New Beet	le Species	
		NUTEROLY HOUSE
Species Name: Cute	beetle!	
Habitat: internet		
Food: Catsaand	dags	
Predators: Fire		
Adaptations: Cute ABSS		

# **Build-A-Beetle!**

There are about 350,000 species of beetles in the world and scientists are discovering new ones all the time. Can you use your imagination to create a new species of beetle? Remember, beetles are insects, so they have **six legs** and **three body segments**.



My name:

My beetle's name:

My beetle's habitat:

A fun fact about my beetle: