BUGS: Outside the Box

General Education Guidelines

BUGS: Outside the Box is a natural history exhibition that presents two concurrent themes: the melding of art and science throughout the natural world, and the significance of museum collections. These themes along with other important topics are presented through a series of greatly enlarged insect sculptures.

Contained within this document are some general educational guidelines and concepts that cover the prevalent topics in the exhibit itself, targeted at specific age groups, to encourage the appropriate development of supportive educational materials.

Topic: Magnification.

Background: This exhibit takes advantage of the meticulously accurate sculptures based on actual insect specimens to showcase the unexpected beauty and fascinating details in their body structure not usually noticeable to the naked eye. What might other objects look like, greatly enlarged?

PRESCHOOL through GRADE SCHOOL

Activity #1: Handheld magnifiers

Providing each child with a magnifying glass, this activity can be as structured or open as you wish. Guidance can be provided by presenting students with a table full of various objects, or students can be allowed to find their own items to observe close up.

Activity #2: Dissecting Microscope

The artist that created these sculptures used only a dissecting microscope with actual insect specimens to create his art. Provided as a hands-on activity within the exhibit itself, this activity can be built upon by presenting students with additional objects that fit under the lens to observe.

MIDDLE SCHOOL through ADULT

Activity #1:

Topic: Museum Collections
**Background:** Museums have been documenting the natural and manmade worlds for centuries. Key individuals throughout history have been instrumental in devising a systematic way to document their findings, in a way that can be interpreted by professionals around the world. But what makes up a collection?

**PRESCHOOL through GRADE SCHOOL**

**Activity #1:** Design Your Own Collection

Presented with a selection of objects, students are asked to create their own collections by categorizing objects with similar characteristics. For example, several different types of buttons can be categorized in many different ways: by shape, size, color, number of holes, etc etc. Allow independent exploration of the objects, and ask leading questions afterward as to the reasoning behind various “collections”.

**MIDDLE SCHOOL through ADULT**

**Activity #1:** Behind the Scenes: Highlighting Your Collection

An After Hours, adult-only (or family) event that allows guided tours through your own collections and holdings. Always a crowd-pleaser to get to see what happens behind the scenes.

**Activity #2:** Interview with a Scientist

Another opportunity to highlight the research and collections housed within your doors, adult-only events featuring your staff and providing a forum for discussions about their work both at home and in the field.

**Topic:** Methods and techniques used to create the sculptures: “About the Artist”

**Background:** Lorenzo Possenti is the artist who created the sculptures in the exhibition. A special section showcases his tools of the trade and provides a step-by-step photographic sample of his work during the creative process.

**PRESCHOOL through GRADE SCHOOL**

**Activity #1:** Make Your Own Bug Sculpture

Using everything from modeling clay to simpler items such as foam balls and pipe cleaners, visitors can be encouraged to create their own sculpture. As an add on experience to a regular visit to a separately programmed class, this particular activity can be geared for any age and skill level.

**MIDDLE SCHOOL through ADULT**
Activity #1: Build your own sculpture

A more involved class could involve the creation of more complex sculptures, utilizing the same methodology as the pieces in the exhibition. Metal framework provides the necessary structure for these sculptures, which are then covered with DAS modeling material that is then carved and detailed. From there, a mold is created. Etc. Etc. Please contact for more details.

Topic: General Insect and Arthropod Knowledge

Background: An introduction to categorization is an early educational opportunity with the sculptures being used as reference. Other insect collections could be incorporated into this topic. Can be geared towards any age group.