



Do you ever wonder how a butterfly gets its colors? Or how turtles hibernate? For over 160 years, the Chicago Academy of Sciences / Peggy Notebaert Nature Museum has served a unique role in the city of Chicago connecting people of all ages to nature and science through immersive exhibits, fun family events, important conservation research and in-depth education programs, inspiring the wonder in all of us.

Every day, the Nature Museum supports parents and educators to build their comfort with and confidence in teaching science. We know that empowered and supported educators lead to more time spent on science and to higher quality learning for students. Here are a few top tips from the Nature Museum Education Department to use during this activity or anytime you are leading nature and science explorations:

- ❑ **You don't need to know all the content!** Science is a process of curiosity, wonder, and exploration.
- ❑ **Spark curiosity and foster wonder!** Add questions and observations to a wonder wall so you can come back and investigate them later!
- ❑ **Help your scientist make connections and drive their own learning!** Ask open-ended questions like: “What do you see that makes you say that?” and “What do you notice?”
- ❑ **Build routines for learning – and repeat them daily or weekly.** Things like nature journals, a wonder wall, and drawing for understanding are practices that you can come back to again and again.
- ❑ **Foster social-emotional learning through local nature!** Take some time outside each day—or bring nature indoors—to practice mindfulness and experience wonder, awe, creativity, connection, and feelings of joy and calm.

Visit the [Nature Museum blog](#) for more tips and how to's.

Critter Connection Activity

Description: Students will learn about museum collections and meet some critters by observing living and preserved specimens from the Peggy Notebaert Nature Museum!

Materials:

- Drawing Paper
- Pencil and/or drawing materials
- Exploring Extinct Birds Video:
<https://www.youtube.com/watch?v=iY7Svuasg84&t=9s>
- “All about Cockroaches” Video:
<https://www.youtube.com/watch?v=shxn f7CJbfg&list=PL6p1-3LGJ9ueuBa4cYJd Bw7AEWmsBHBcc&index=4>
- “Meet Bob the Blanding’s Turtle” Video:
<https://www.youtube.com/watch?v=iNw r4WQOgWU&list=PL6p1-3LGJ9ueuBa 4cYJdBw7AEWmsBHBcc&index=15>

ENGAGE

1. Ask students if they collect anything. Allow several students to share.

For more FREE nature and science teaching and learning resources, visit:
www.naturemuseum.org/STEM - bit.ly/SummerOfWonder



2. Ask for some initial ideas about what a collection is.
3. Share with students that we'll be able to explore the Nature Museum's collection today. The Peggy Notebaert Nature Museum has a living and preserved collection!

PREPARE TO EXPLORE

4. Start by reviewing the datasheet (or setting up a blank page) for recording observations.
5. Begin exploring the preserved collection with this "[Exploring Extinct Birds](#)" video and encourage students to make scientific drawings and write notes about what they notice and learn.
6. Revisit the word collection and build on the ideas together!
 - a. As age and interest appropriate, share additional information: Collections are an essential part of a museum's research and education functions and also serve an important role in environmental conservation. Specimens--individual pieces from a collection--can be excellent tools for connecting people to a topic of study or interest, whether they're displayed in a museum or used in educational programming. They also allow people to have an up-close look at something that they couldn't otherwise access.

EXPLORE

7. Next, explore the living collection with these critter connection videos. Consider playing the videos a few times for students. Also, you may want to play them without the sound first to look at the animals without the additional information that is narrative!
 - a. "[All about Cockroaches](#)" video
 - b. "[Meet Bob the Blanding's Turtle](#)" video
8. As they watch the videos, have them look closely and ask: "What do you notice?" "What do you wonder?"
9. Let students generate their own observations and questions as much as possible and share them (with you, someone around them, or peers). As students generate observations, questions, and wonderings of their own, try not to answer their questions right away or discuss the "right answer." You can prompt with questions such as:
 - Do you see any body parts? What do they look like? How many legs or antennae (or other body parts) does it have?
 - What shapes, patterns or colors do you see?
 - What else do you see?

REFLECT and SHARE

10. Compare and contrast the cockroach body and the turtle body together.
11. Invite students to share their scientific drawings and questions!

Extensions and Variations:

- Create many scientific drawings of animals, plants or places as a group. Then you can sort, review, or even combine them into a created book!



- Connect with the Nature Museum online to find nature activities, critter connections videos and more ! (links in the footer)

My Scientific Drawings and Notes