STEM Inquiry Activity
For grades 2-6

Activity One:
Magnificent Moths & Butterflies

What you need:

- A small notebook and a pencil
- The Field Journal Guide

This guide to take notes from

What to do:

Moths and butterflies, like all animals, have traits or features that help them survive in the wild. These features such as their color, their body type, sounds they make (or don't make) and their behaviors protect them from predators, help them find food, and find a mate.

1. Your mission is to become a field scientist and moth & butterfly researcher. You are going to be on the lookout for moths and butterflies and make some observations. Make sure to use not only your eyes, but also your ears and your nose, to make the best observations you can.

2. Use the Field Journal Guide to help you make and record observations in your journal.

3. Good things to know before you start:
   Native moths help songbird young to survive in the spring. A healthy giant silkworm moth produces between 200 and 1000 eggs, which baby birds love to eat. Be on the lookout for Luna, Cecropia and Promethea Moths in northwest Ohio as well as Monarch, Eastern Tailed Blue, The Black Swallowtail and Viceroy Butterflies

   The average life span of a butterfly or moth can range from a few days to several months in species that **overwinter** as adults. Because insects are cold-blooded creatures, a butterfly and moth could technically live for many months past the average life span. An individual insect's lifespan depends on the climate and what stage of life it is in when the weather changes.

   Overwinter: How an insect passes the winter season in their same habitat. This can be done inside buildings, under tree bark, or beneath fallen leaves or other plant matter on the ground, among other places.

4. Now, on a nice spring day, take a pencil, your journal and the Field Journal Page out to a quiet spot where you can hunt for butterflies and moths. See if you can observe butterflies and moths in different parts of their life cycles throughout the spring and into the summer. To grow into an adult they go through 4 stages: egg, larva, pupa and adult. So, you'll be looking for eggs, caterpillars, cocoons or chrysalises and flying butterflies & moths.

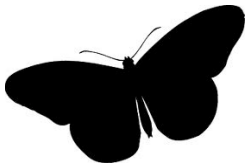
Please visit Journey North for Kids, a global study of wildlife migration, at learner.org/jnorth for activities and information.

For Butterfly and Moth facts and identification:
http://www.butterfliesandmoths.org
http://www.ohiolepidopterists.org/bflymonitoring/species/photos.htm
https://www.ndsu.edu/pubweb/~gefauske/ndmoths/identification.htm**Ohio** Butterflies of Ohio Field Guide [Paperback] by Jaret C. Daniels

For information and activities especially for children: http://www.kidsbutterfly.org/

This activity was inspired by and is dedicated to Mrs. Linda Penn.

Field Journal Guide



You are now ready to look for butterflies and moths.

Here are for things you should pay attention to as you make your observations.

1. **Color and pattern** - can be used to attract a mate, to hide itself from predators or scare predators away
2. **Body** - shape and size, wings to fly, etc.
3. **Sound** - does it make a noise or sound or is it very quiet
4. **Behavior** - what does the animal do while you are watching it?

Here are some things you should make sure to write down in your journal.

(1) Date, (2) Type of Animal you observed, (3) Describe where you are and (4) The habitat you are in.

Record what you observe in your journal. Make basic sketches of what you see.

Note: To grow into an adult butterflies and moths go through 4 stages: egg, larva, pupa and adult. Record the animal in any stage you observe.

List two features about the animal, which you think help it survive and tell why those features help the animal.

Feature #1

Feature#2

Is this animal predator, prey or both?

Create a food chain using your field notes

_____ consumed by _____

_____ consumed by _____

_____ consumed by _____

Final Sketch

Draw and color the moth or butterfly you observed. Do some research to determine which kind of butterfly or moth it is and label it.