

Butterfly Migration – Grades 3 and up

Purpose:

To explore the different aspects of butterfly migration. They will learn about migration patterns of a Monarch, learn about the mysteries of migration and create their own migration pattern of a Monarch butterfly on a map.

Curiosity Classroom:

1. Introduction to migration concept: What is migration? Why do butterflies migrate? Which butterflies migrate? Brainstorm questions interested in finding out about migration.
 - a. How do butterflies get directions?
 - b. Where do butterflies stop to eat?
 - c. Where do butterflies stop for the night?
 - d. How many Monarchs travel together at the same time?
 - e. Can they fly in the rain? If not, then what do they do?
 - f. Can Monarchs communicate with one another? How?
 - g. How far can they fly in one day?
2. Internet exploration- Journey North & Monarch Watch
3. Create a migration pattern with the map
4. Thermal demonstration of monarch flight
5. Potentially use GPS to chart migration in garden

Indoor 4-H Children's Garden

1. Brief introduction of the indoor garden
2. Explore and interact with butterflies
3. Observe how long a butterfly can fly in the air and/ or where do butterflies stop to eat? Stop watches, clipboards, pencils and observation charts will be provided.

Curriculum Standards and Benchmarks:

Migration

Science

Strand I. Constructing New Scientific Knowledge

Elementary:

1. Generate questions about the world based on observation.
Key Concepts: Questions lead to action, including careful observation and testing.
2. Develop solutions to problems through reasoning, observation, and investigations.
Key Concepts: (K-2) gather information, ask questions, think; (3-5) observe, predict, collect data, draw conclusions, conduct fair tests; prior knowledge.
3. Manipulate simple devices that aid observation and data collection.
Tools: Various data collection tools suitable for this level, such as hand lenses, wind direction indicators...
5. Develop strategies and skills for information gathering and problem solving.
Key Concepts: Sources of information, such as reference books, trade, books, magazines, websites, other people's knowledge.
6. Construct charts and graphs and prepare summaries of observations.

Strand II. Reflecting on Scientific Knowledge

Elementary:

1. Develop an awareness of the need for evidence in making decisions scientifically.
Key Concepts: (K-2) observation, (3-5) data, evidence, sample, fact, opinion.
2. Show how science concepts can be illustrated through creative expression such as language art and fine arts.
Key Concepts: poetry, expository work, painting, drawing, music, diagrams, graphs, charts.

4. Develop an awareness of and sensitivity to the natural world.
Key Concepts: Appreciation of the balance of nature and the effects organisms have on each other, including the effects humans have on the natural world.