



Virtual Monarch and Meadow Month Activity: The Migration Game

This outdoor game is meant to help families understand monarch migration as well as the obstacles the butterflies face during their incredible journey.

Overview:

The roundtrip journey of monarchs takes **four** generations and covers nearly 3,000 miles each way. The butterflies spend the winter huddled together in the Oyamel fir forests on mountain tops in Mexico. After living off their fat reserves for the winter, millions of monarchs mate and head north in March. The migrating monarchs must find milkweed to lay their eggs and produce the next generation to continue the journey.

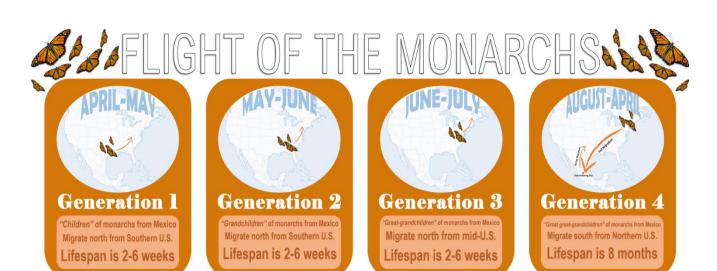


Photo courtesy of Nature.com

Their trip is fraught with danger.

Spring storms, loggers, predators, pesticides, lack of milkweed for larvae food, lack of nectar sources and human activity can kill monarchs outright or prevent them from reproducing. Adult monarchs that make it to their summer homes in the northern United States and Canada will feed on nectar, reproduce, and live for only a few weeks. At the end of summer, the last generation will fly all the way back to Mexico and spend the winter there. It is an astounding journey.

In this game, families pretend to be monarch butterflies during migration. Participants who play will mimic the flight of butterflies from one location to another, eventually flying full circle. The "monarchs" start in Mexico and lay eggs in Texas, then succeeding generations do the same in the Midwest, New Jersey, and Canada. It's a race against the clock (or each other) to see who makes it to Canada and returns to Mexico in the fall.







Game Materials:

- Signs or maps to represent Mexico, Texas, Kentucky, New Jersey, and Canada
- Flower or photos to represent milkweed placed at each sign
- Participants acting as obstacles (loggers, pesticides, predators, etc.)

Set Up:

- Spread out signs to represent Mexico, Texas, Kentucky, New Jersey, and Canada across the yard.
 Mexico is the starting line and Canada is furthest away.
- Place a plant or picture of milkweed next to each place sign.
- Two participants will then stand at the starting line of Mexico. They will represent the first adult monarchs migrating north in spring.
- Any additional participants will be spread out *between* the signs. They will hold objects/display body motions representing obstacles to monarch migration. Obstacles may include waving of arms to represent loggers who cut down the fir forests, spraying bottles of water to represent pesticides on farmland, pretending to be predators like birds, chasing the "monarchs" with pretend butterfly nets to represent butterfly collectors, pretending to be driving cars or trucks to represent windshields etc.
- Can you think of other obstacles that may harm the migrating monarchs?

Play:

- 1. The two "monarchs" migrating north in spring will stand at the sign that says Mexico. This is start. Someone will shout "go".
- 2. The two "monarchs" will run (fly) past loggers and try to avoid any other obstacles in the way until they reach the next location (Texas). When they get to the sign that says Texas, they will each tag the flower or photo next to the sign.
- 3. After touching the flower or photo, the two "monarchs" will pretend to transform through the four body stages of the monarch life cycle: crouch down like you are an egg, stand up and wiggle like a caterpillar, fold arms across chest as chrysalis, then put arms out and fly to the next state (Kentucky)
- 4. Along the way to Kentucky they will fly past (avoid) obstacles. At Kentucky they will tag the milkweed photo and repeat step 3.
- 5. The "monarchs" then fly from Kentucky to NJ trying to avoid obstacles along the way. Once again, they will tag the milkweed photo or flower and repeat step 3.
- 6. Once the two monarchs reach the final northern limit (Canada), the last generation of "monarchs" will fly all the way back to Mexico. If playing competitively, the first one back to Mexico wins.

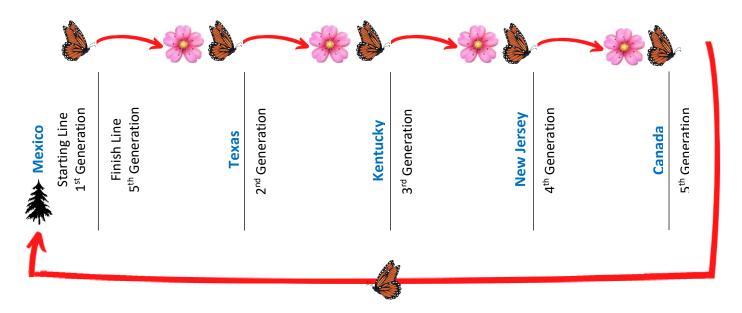
Note: This game can be played with just the two "monarchs" who race from Mexico and back. The obstacles are optional or can just be static objects that are avoided on the journey. The more people available, the more fun this game is. So, get the whole family outside and take the flight of the monarchs!



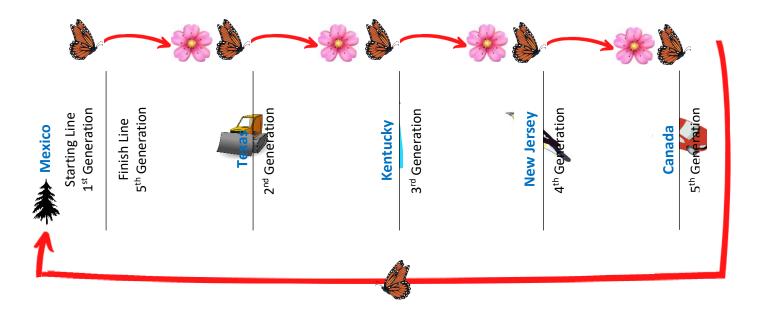


Game Play Examples:

Version 1: Race without obstacles



Version 2: Race with obstacles



Additional Resources

- Monarch Watch
- Journey North
- Monarch resources for Kids