

The Flight of the Monarch

exploring the fall migration
of monarch butterflies



Imagine you are in your bedroom. How do you find your kitchen table for dinner? Maybe you **hear** your sibling shout "Dinner time!" from down the hall. Or, you follow the **smell** of mouthwatering pizza.



These are **environmental cues** your brain uses to **navigate**, or find your way around. Most likely, you simply use your memory, as you have sat at your kitchen table for many meals in the past.

However, monarch butterflies that migrate from North America to Mexico in the fall have never made the trip before, so they cannot use their memory to navigate. They do not have maps, smartphones, or GPS devices.

Yet somehow, all migrating monarch butterflies fly southwest.



Scientists wonder...

What environmental cues does the monarch butterfly use to navigate?



Let's pretend...

If you were a butterfly, what is one environmental cue you might use to tell direction?



Scientists have learned that monarchs use their **eyes**, **antennae**, and **brain** to navigate. Inside their antenna is an internal clock telling them what time it is. They then use their eyes to find the sun in the sky. Knowing these two pieces of information, the butterflies can use their brain like a compass, knowing which direction to fly.



For thousands of years, every generation of monarch butterfly has continued to migrate north each spring and south each fall, inspiring the people they see along the way.



Native American tribes have the monarch butterfly represented in their culture in different ways. The Blackfeet Nation paint the butterfly on baby cribs because they symbolize sleep and dreams.

The Hopi Tribe has a butterfly dance to ask for rain and good health.

The people of Mexico see the monarch butterflies return around the same time as Dia de los Muertos (Day of the Dead), a holiday that honors friends and family that have passed. The monarch butterflies are believed to be spirits of the dead visiting loved ones during the holiday season. Decorations and clothing are orange and black to celebrate the monarch and the dead.