

Name _____

Date _____



THE MONARCH BUTTERFLY

ETERNAL TRAVELER



They are beautiful and unique, so majestic that they are called Monarch. Monarch butterflies are recognized worldwide for their longevity and amazing trip they make, they mainly live in Canada and the United States. From there, they make a migratory trip of thousands of kilometers to Mexico to survive the winter.

It's very early in the morning, Grandpa's old truck is driving slowly down the road dodging potholes and stopping occasionally to observe the landscape.

"Grandpa, how beautiful is all this! Where are we going? Where are you taking me?" Rosita asks in an excitedly.

"I told your parents to come to Mexico for vacation in the fall because I want to take you to a place, so you know a wonder of the nature," Grandpa told me.

Rosita and her grandfather, Tomás, are going on excursion to the Piedra Herrada Sanctuary, on the outskirts of Valle de Bravo, Mexico State. It is a beautiful forest with a wide variety of pines, cedars, and Mexican oyamel.

Her grandfather is taking her to enjoy his favorite yearly activity, traveling to this valley to enjoy the impressive spectacle of the migration of the Monarch butterflies coming from the forests of Canada. At the entrance, there is a large sign that says 'Welcome to Piedra Herrada, Valle of Bravo. The forests of the house of the Monarch butterfly. Help us keep them.' Rosita was astonished at all the green and all the silence.

In the parking lot, a young man was waiting with two horses to take us to see the butterflies. Rosita was excited to go; she was already imagining the faces of her friends when she told them about her experience. The horses



carefully moved along the narrow path of loose stones. After an hour of riding, we began to see a few butterflies with orange, black, and white colors in front of us.

"Look, Rosita," said Grandpa, "These butterflies may look fragile and light, but they are strong. They were born to travel. They come from the cold Canadian mountains and have flown over 4000 km. It is not just any trip, it is estimated that they fly 120 kilometers

in a day, taking advantage of the north winds. Imagine that sight, millions of butterflies traveling together, like living clouds, over hills, plains, trees, and cities.

In addition to being beautiful, they have a longer lifespan than other species of butterflies who have a life cycle of 24 days. The monarch lives up to nine months, almost 12 times longer.

A local lady came up to greet them and be their tour guide. She moved with agility along the stony path. When Tomas recognized her, he greeted her smiling, "How are you doing Panchita? We haven't seen each other for a year. This is my granddaughter, Rosita, from the United States. She is spending a few days with me and I wanted to her to see the nice show that the Monarch gives us each year.

"Hello Rosita, welcome. It's nice to meet you!" said Panchita, adjusting the shawl on her shoulders.

"Nice to meet you, ma'am," Rosita answered cheerfully as she got off the horse to run through the bushes looking from side to side.

Tomas got down and walked behind and laughs at his granddaughter's bliss. While Rosita runs, he chats with Panchita about the weather, the flowers, and the number of butterflies that arrived this year.

"Grandpa, what do butterflies eat? Do they like tacos?" Rosita asked.

"Don't make me laugh Rosita, they don't eat tacos like you or don't drink tequila like me. When they are adults, they drink nectar from the flowers. They draw energy from the nectar that they need for their long journeys. When they are caterpillars, their main food is milkweed. The caterpillars store up the toxic substances from the milkweed which makes the Monarch butterfly a poisonous species and is a defense mechanism against predators." answered her grandfather.



"Tell me, Panchita, why does the Monarch butterfly travel so far to Mexico if they don't eat tacos or drink tequila?" asked Rosita laughing.

"Rosita, Mexico has important things they need other than food. They don't eat when they

hibernate, they only drink water. That's why they look for areas that have plenty of water. The considerable number of trees in these forests help to maintain the temperature and humidity to provide the proper conditions for the butterfly's survival. Oyamel, those trees you see there," she said, pointing towards the forest.

"they live in them, attaching themselves to their trunks and branches, and hibernate. Look, sometimes there are so many on a branch that the branch bends. They also look for a partner to mate with."



"So, they get married here? They all look the same. How do you know whether it is a boy or girl?" Rosita asked.

"Ay Rosita, how funny you are, we say male and female, not boy and girl. I know the difference because females have a darker orange color and the

black stripes of their wings are thicker. The males are a little bigger, they have thinner stripes, and a black dot on each of the rear wings.

Do you know? Of all these, only the females will return in March to deposit eggs in the milkweed, from which new generations will be born.

Those descendants will arrive at the starting point by the end of summer and will be the ones that make the journey back here when the cold of autumn begins. These monarchs that arrived here for the first time are the grandchildren of the butterflies that left Mexico last March." explained Panchita.

"How do they manage to find the same place every year?" Rosita asked with curiosity.

"Every fall, the Monarchs manage to find the mountains of Mexico as if by magic. They are endowed with a complicated navigation system that considers the height of the sun and analyzes the light which guides them to the south. This orientation allows them to know how to come here next year where his predecessors were this year. It's amazing that sometimes they even return to the same tree." Panchita told Rosita.

Monarch butterflies don't know about borders, they are a resource shared by several countries.

Caring for them should be a shared responsibility. Knowing more about them, the routes they cross, the dangers they face, and their needs, toxins can be removed can help in their preservation.

In the last 10 years, the population of the Monarch butterfly that reaches Mexico has decreased by 9500. The Monarch butterfly migration is threatened by the destruction of the habitat along its migratory route.

Because of this, plans have been developed between Canada, United States, and Mexico, to have healthy, toxin free migratory routes, which guarantees an appropriate environment for the survival of the Monarch to along its route.



Rosita opened her eyes, admired seeing so many butterflies together, they seemed like autumn leaves with colors ranging from white to orange. Almost shouting, Rosita said, "Grandpa, look at the bunch in that oyamel!"

"Rosita, speak more softly, we must try not to make noise, every time butterflies get scared, they flutter spending energy they need to be able to make the return flight." Panchita explained to her.

"I brought something to eat," Grandfather quietly interrupted. "Let's sit for a while and eat while we watch the beauty of the landscape." They spent time eating, talking happily, enjoying the view, and listening to the sounds of nature.

"It's time to go back," Grandfather said while getting back on his horse.

"It's too soon, Grandpa!" Rosita protested.

"We must let the butterflies sleep. We have to go now. When it gets dark, it's harder and more dangerous to get back, and the horses can slip on the stones." Grandpa told her.

"Well, nothing I can do if grandpa says so. See you soon, Panchita, I won't ever forget this day. I promise to research more about Monarch butterflies." Rosita said.

The horses descend carefully, Panchita followed them closely, occasionally leaning on a stick she was using like a cane. Rosita looked back one last time, trying to burn a picture of all this beauty into her memory.

"Do you know what, Grandpa? I want to be like Monarch butterflies." Rosita said.

"Why do you want to be like them?" Tomas asked her.

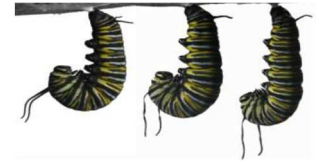
"Because I would like to travel like they do and come here every year to visit you, Grandfather." Rosita told Grandpa.



NAME _____

ACTIVITY 1:

Find out what the following words mean.



1. MIGRATION:

2. LONGEVITY:

3. HIBERNATE:

4. PREDATOR:

5. TATARANIET:

ACTIVITY 2:

According to the text, choose the best answer.

1. Monarch butterflies make their migration every year _____

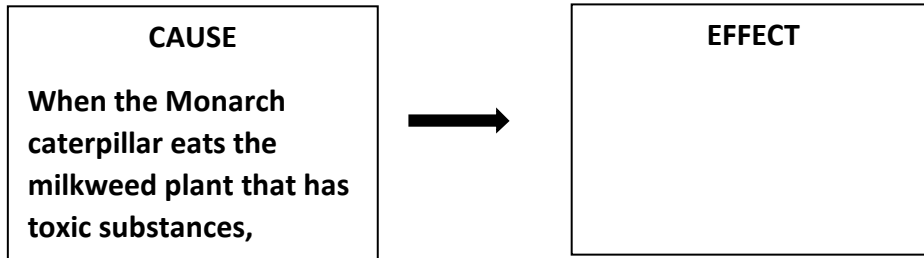
- a. to take advantage of the north winds.
- b. because they were born to fly.
- c. to survive during the winter.
- d. because they feed on milkweed.

2. Rosita and her grandfather Tomás, go on an excursion to see the Monarch butterflies at:

- a. the Mexican Oyamel.
- b. the forests of Canada.
- c. the mountains of Mexico.
- d. the sanctuary of Piedra Herrada.



3. Look at the following diagram:



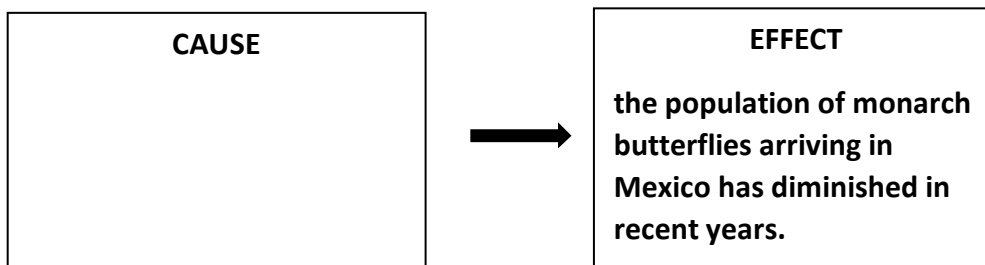
- a. it can return to where its predecessors were.
- b. it starts looking for a partner to reproduce.
- c. they become poisonous to protect themselves from predators.
- d. they accumulate energy to make their return trip.

4. Monarch butterflies only lay their eggs in:

- a. the humid areas of the forests.
- b. the leaves of milkweed plants.
- c. the trunks of oyamel.
- d. near the Valle de Bravo.



5. Look at the following diagram:



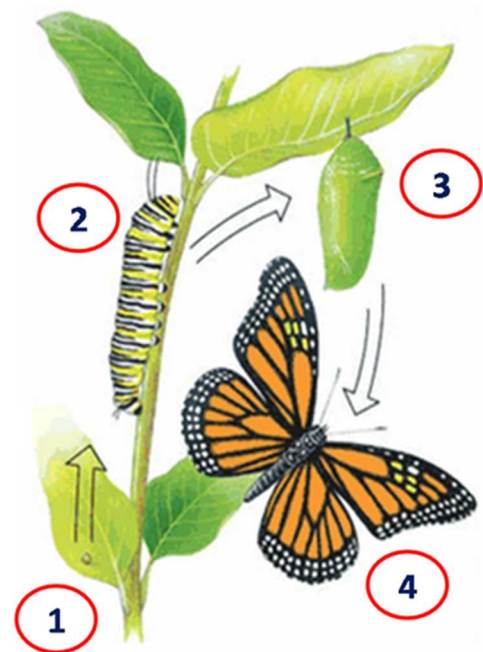
- a. Because they are equipped with an excellent navigation system,
- b. Because the habitat on the migration route has been destroyed,
- c. Because of the cold of the Canadian mountains,
- d. Because they travel in the fall,



ACTIVITY 3:

1. Why does Rosita want to be like Monarch butterflies?

ACTIVITY 4:
METAPORPHOSIS OF THE MONARCH BUTTERFLY



Write on the line the name of the stage of the Metamorphosis of the Monarch butterfly that corresponds to it:

1. _____
2. _____
3. _____
4. _____

ACTIVITY 5:

Circle the male Monarch butterfly:

