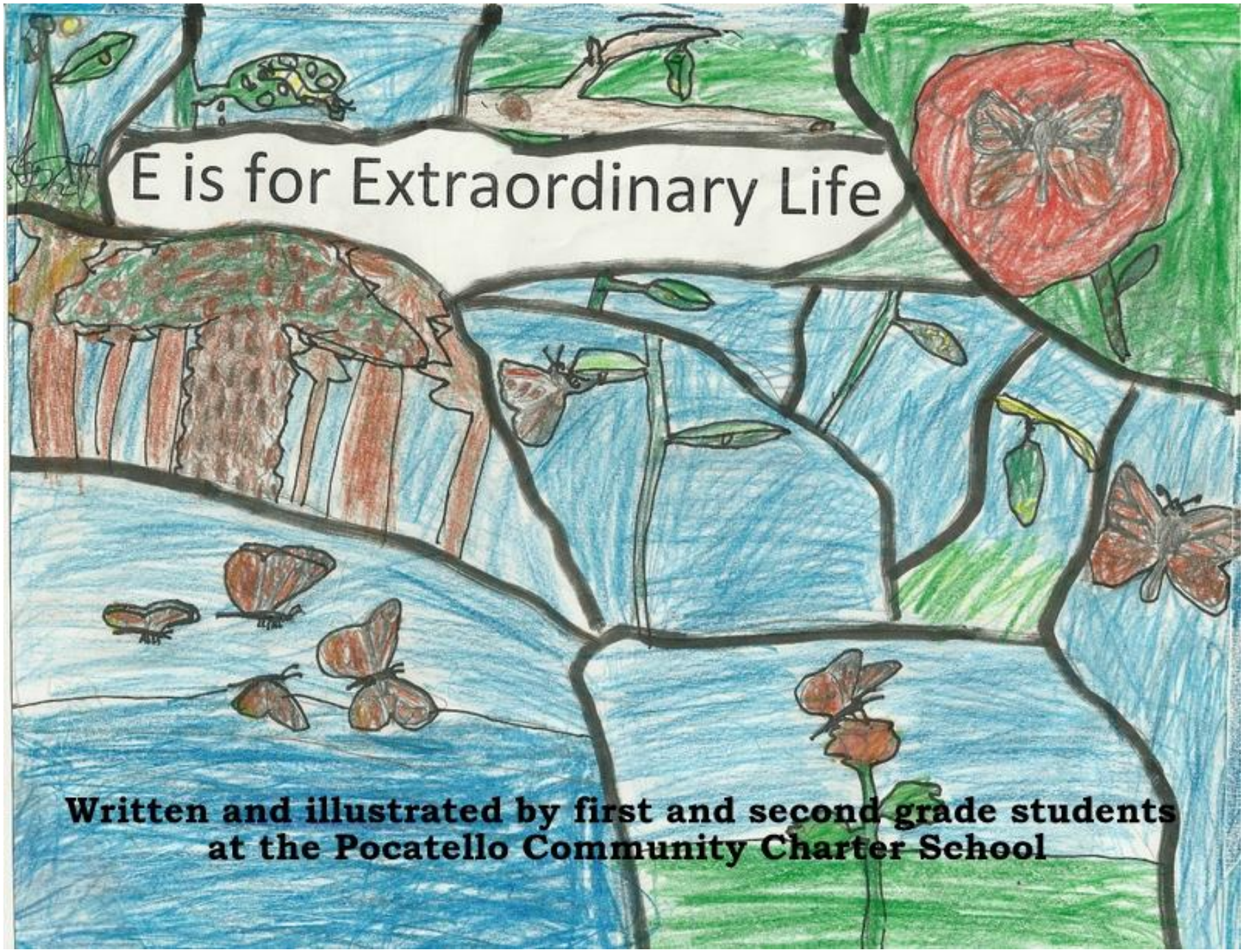
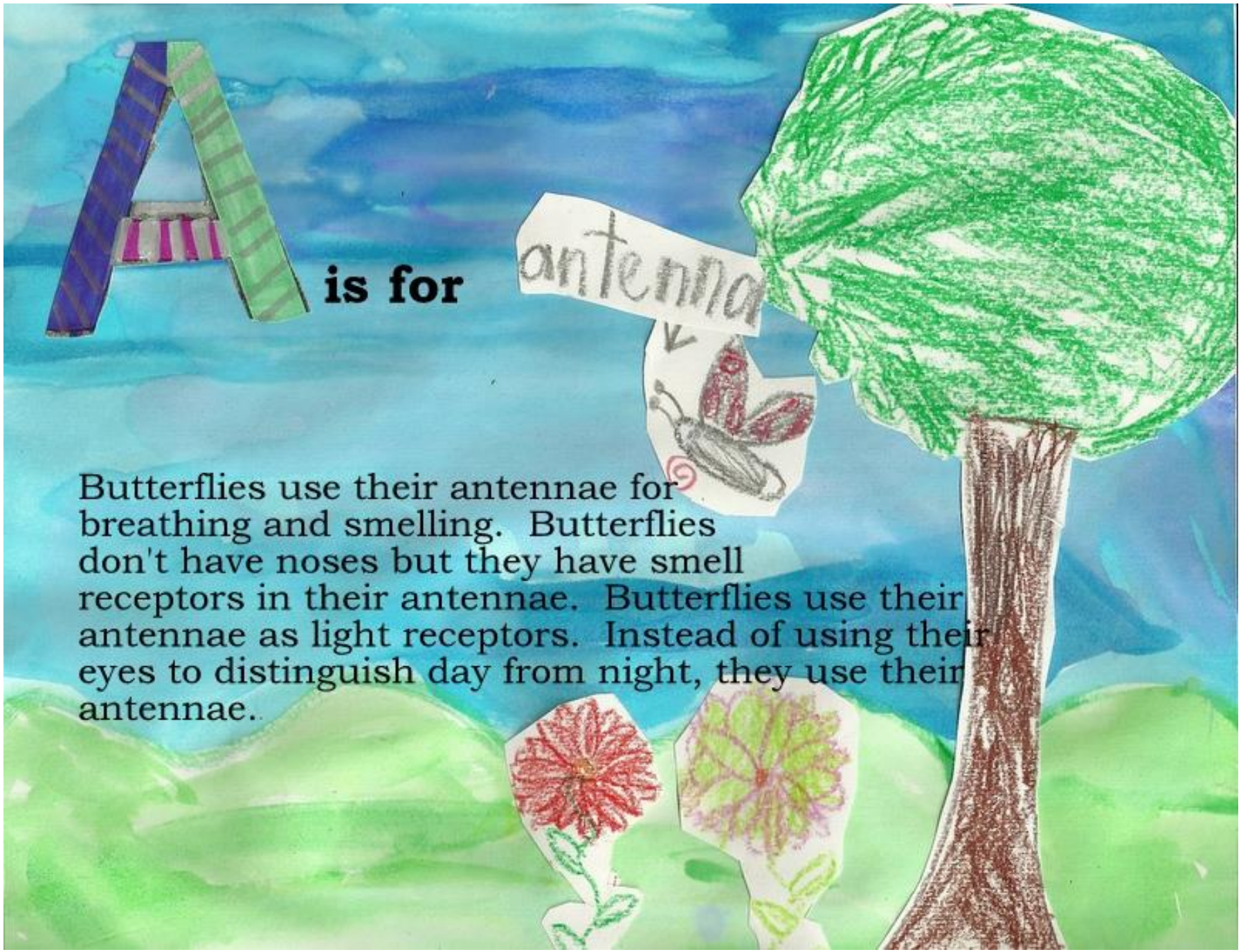

E is for Extraordinary Life
Written and illustrated by first and second grade students
at the Pocatello Community Charter School

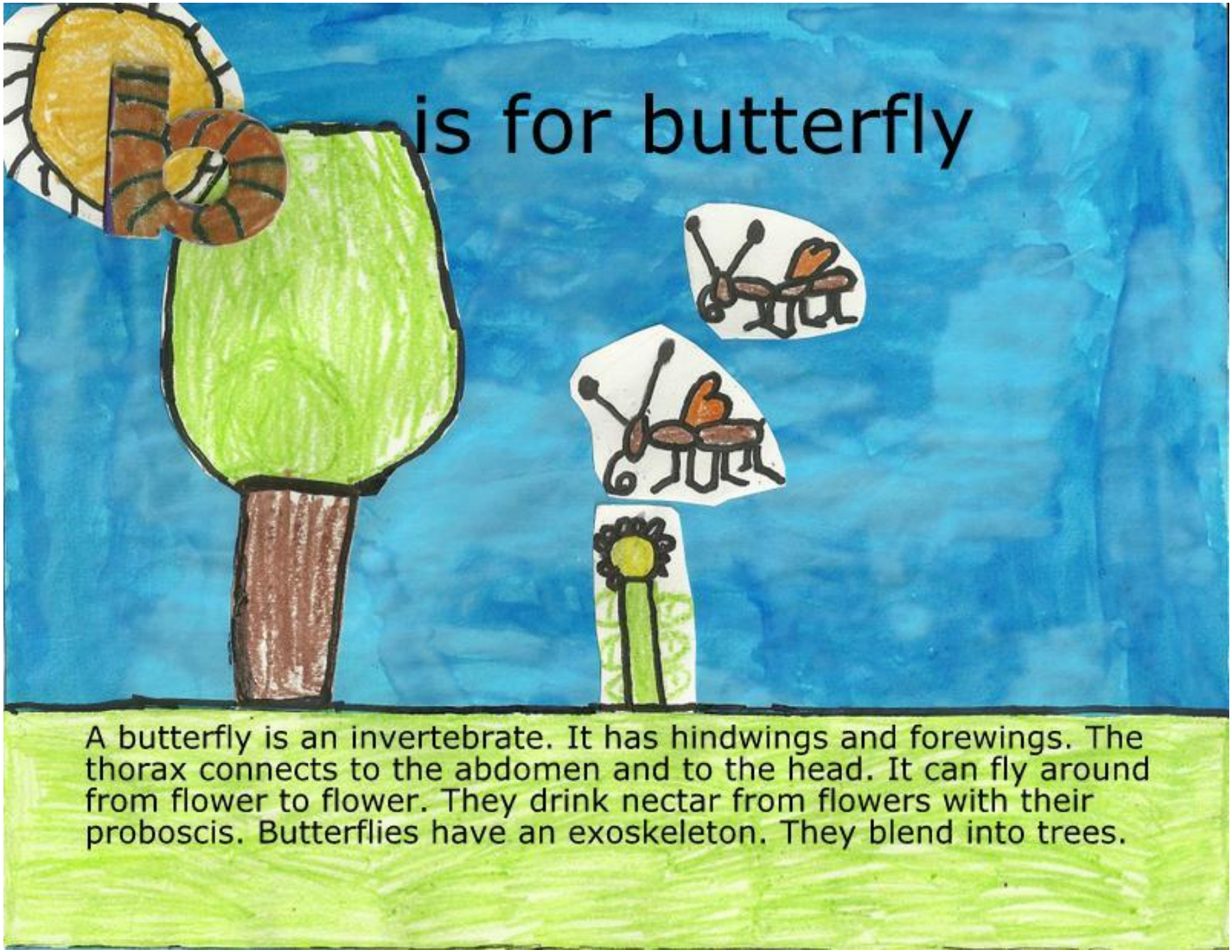
E is for Extraordinary Life

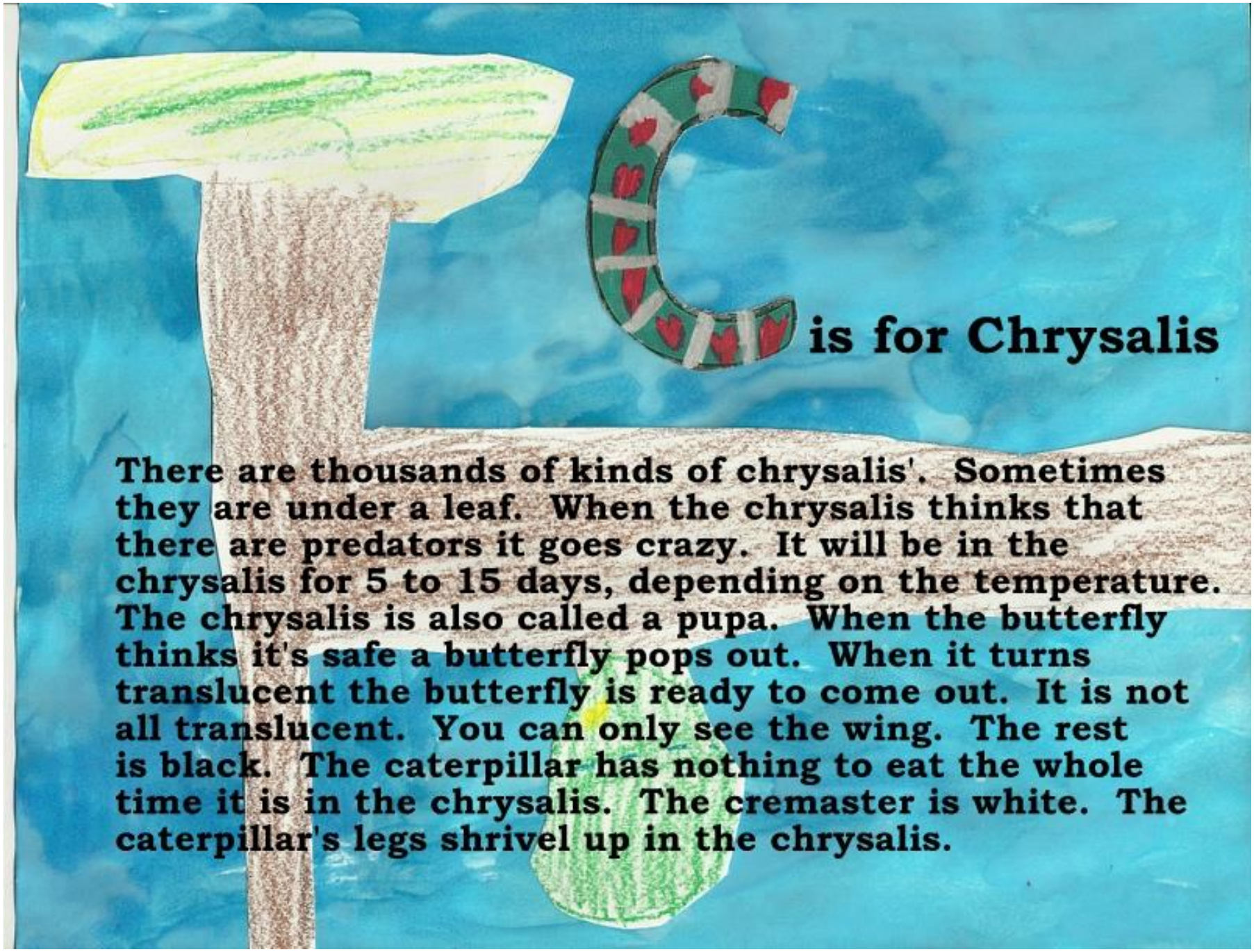
written by first and second graders at the Pocatello Community Charter School Griggs Crew 2013-2014

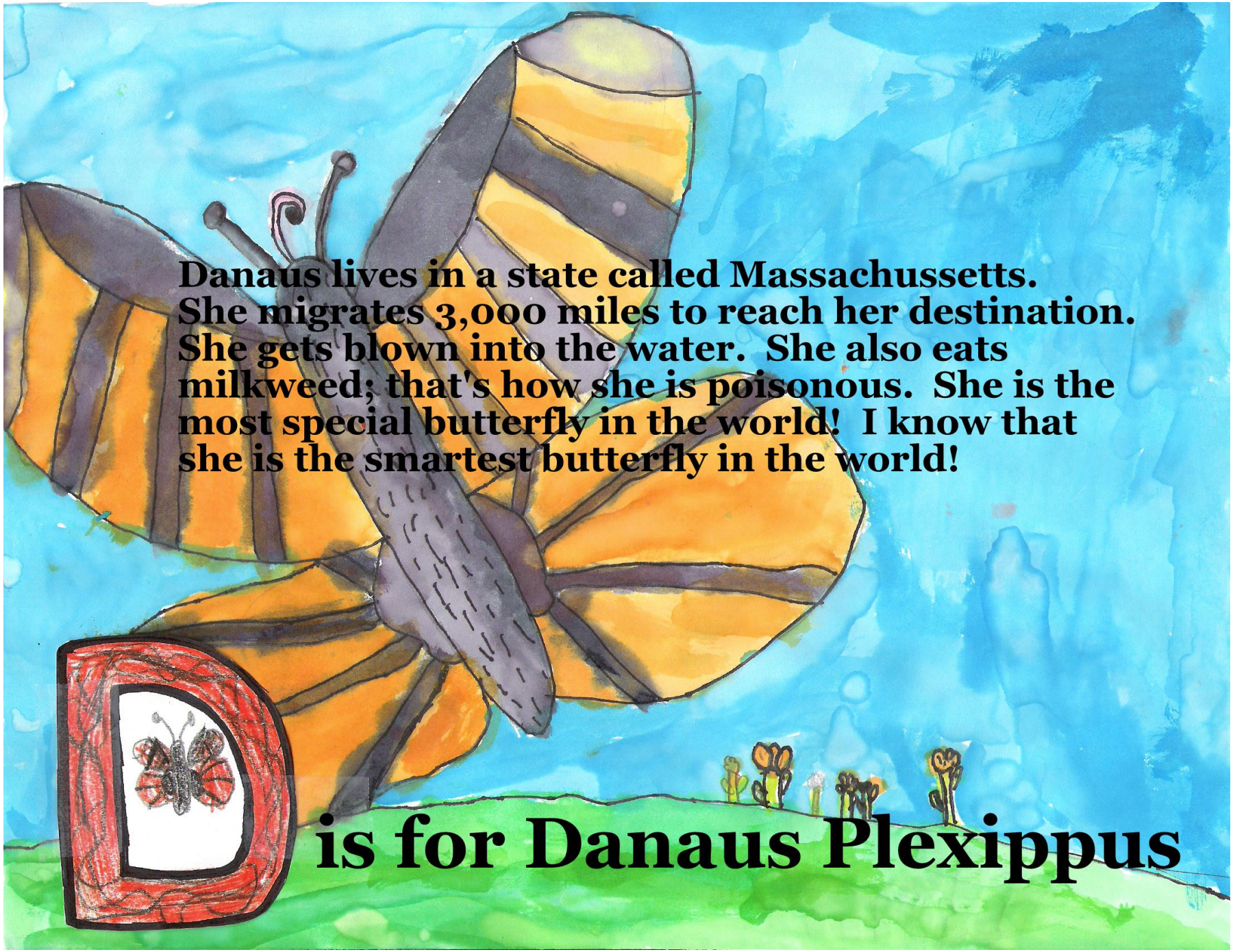
The students have been learning about Monarch butterflies this school year. They know about their life cycle and their migration. Each student has written about a topic that corresponds to an alphabet letter. The expert text they used to read, listen, and learn about butterflies is called

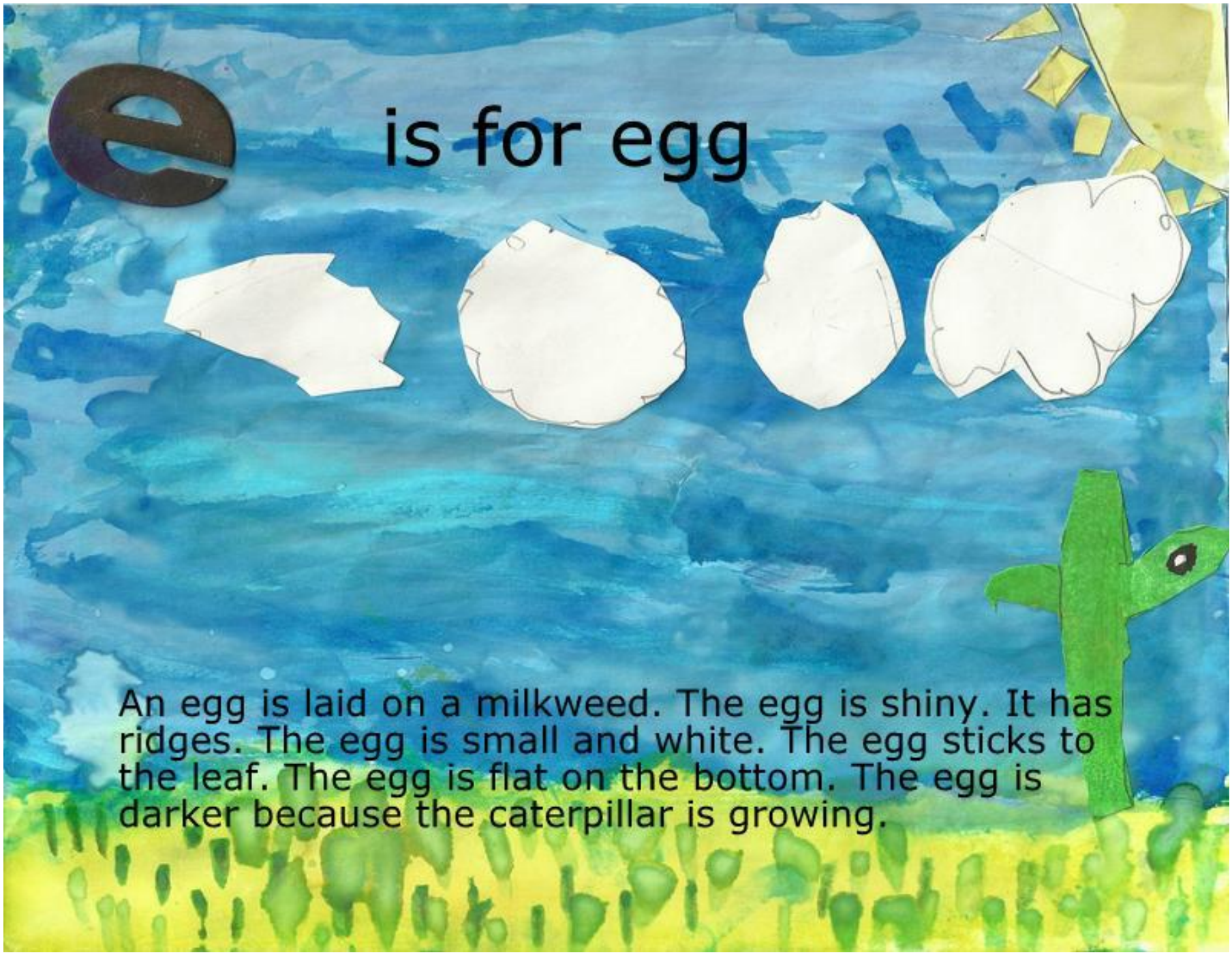
An Extraordinary Life: The Story of a Monarch Butterfly

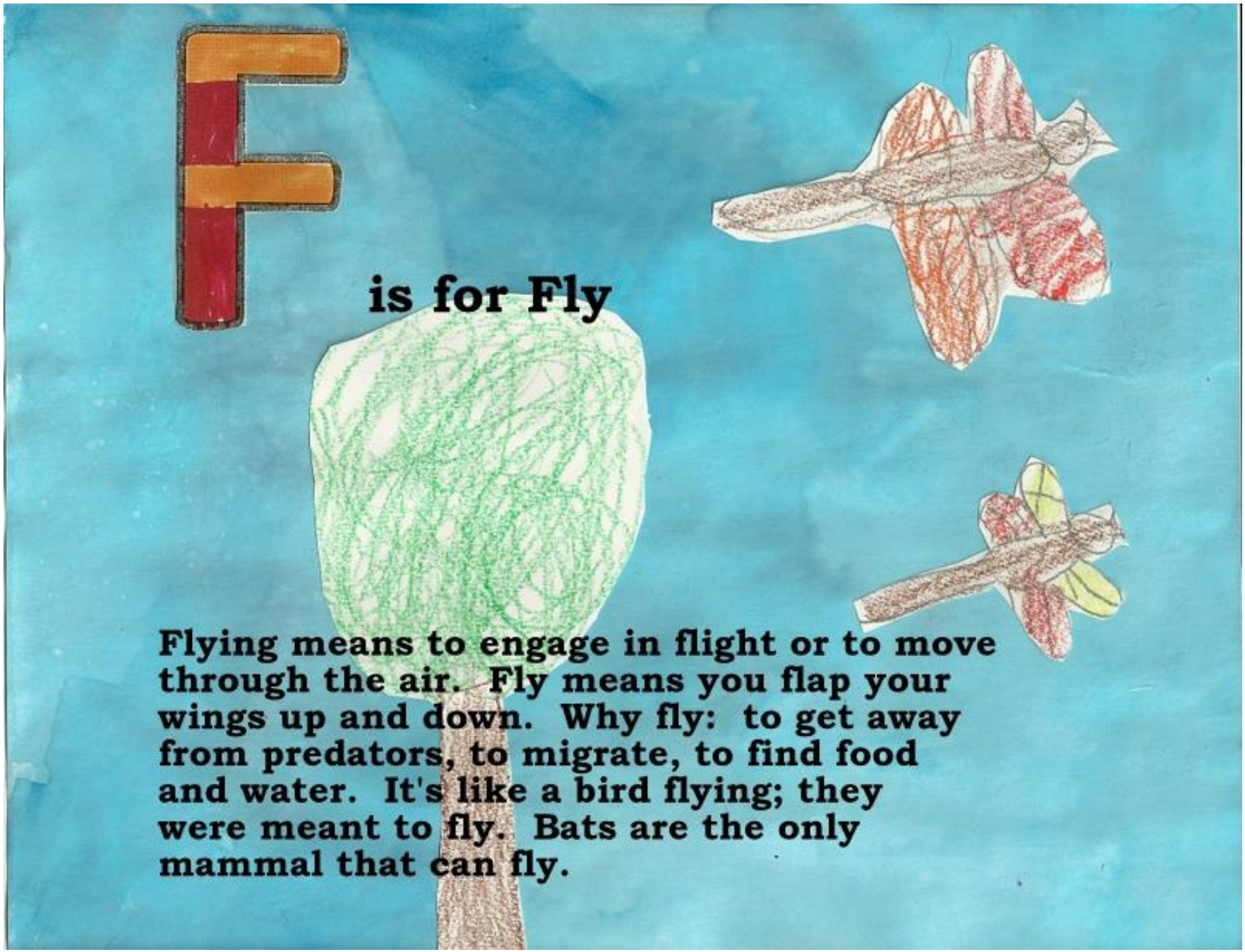

A is for
antenna
Butterflies use their antennae for breathing and smelling. Butterflies don't have noses but they have smell receptors in their antennae. Butterflies use their antennae as light receptors. Instead of using their eyes to distinguish day from night, they use their antennae.


is for butterfly
A butterfly is an invertebrate. It has hindwings and forewings. The thorax connects to the abdomen and to the head. It can fly around from flower to flower. They drink nectar from flowers with their proboscis. Butterflies have an exoskeleton. They blend into trees.

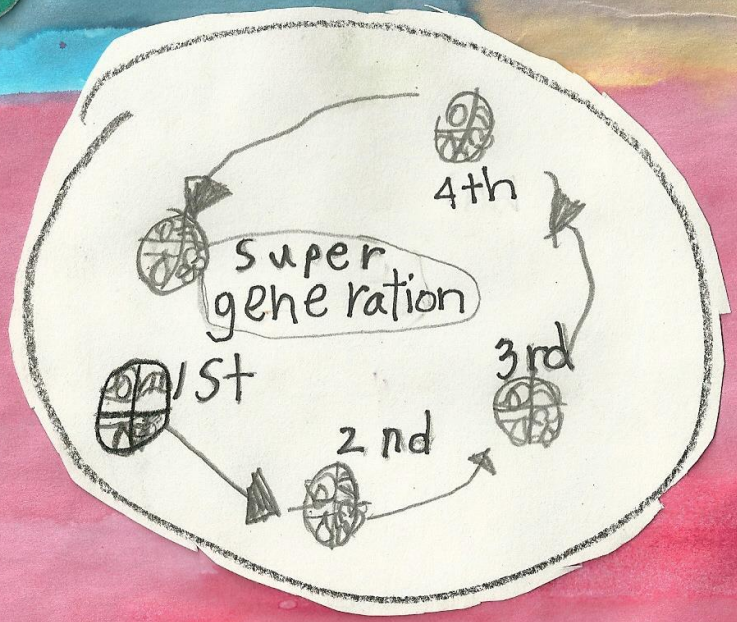

C is for Chrysalis
There are thousands of kinds of chrysalis'. Sometimes they are under a leaf. When the chrysalis thinks that there are predators it goes crazy. It will be in the chrysalis for 5 to 15 days, depending on the temperature. The chrysalis is also called a pupa. When the butterfly thinks it's safe a butterfly pops out. When it turns translucent the butterfly is ready to come out. It is not all translucent. You can only see the wing. The rest is black. The caterpillar has nothing to eat the whole time it is in the chrysalis. The cremaster is white. The caterpillar's legs shrivel up in the chrysalis.


Danaus lives in a state called Massachussetts.
She migrates 3,000 miles to reach her destination.
She gets blown into the water. She also eats
milkweed; that's how she is poisonous. She is the
most special butterfly in the world! I know that
she is the smartest butterfly in the world!
D
is for Danaus Plexippus

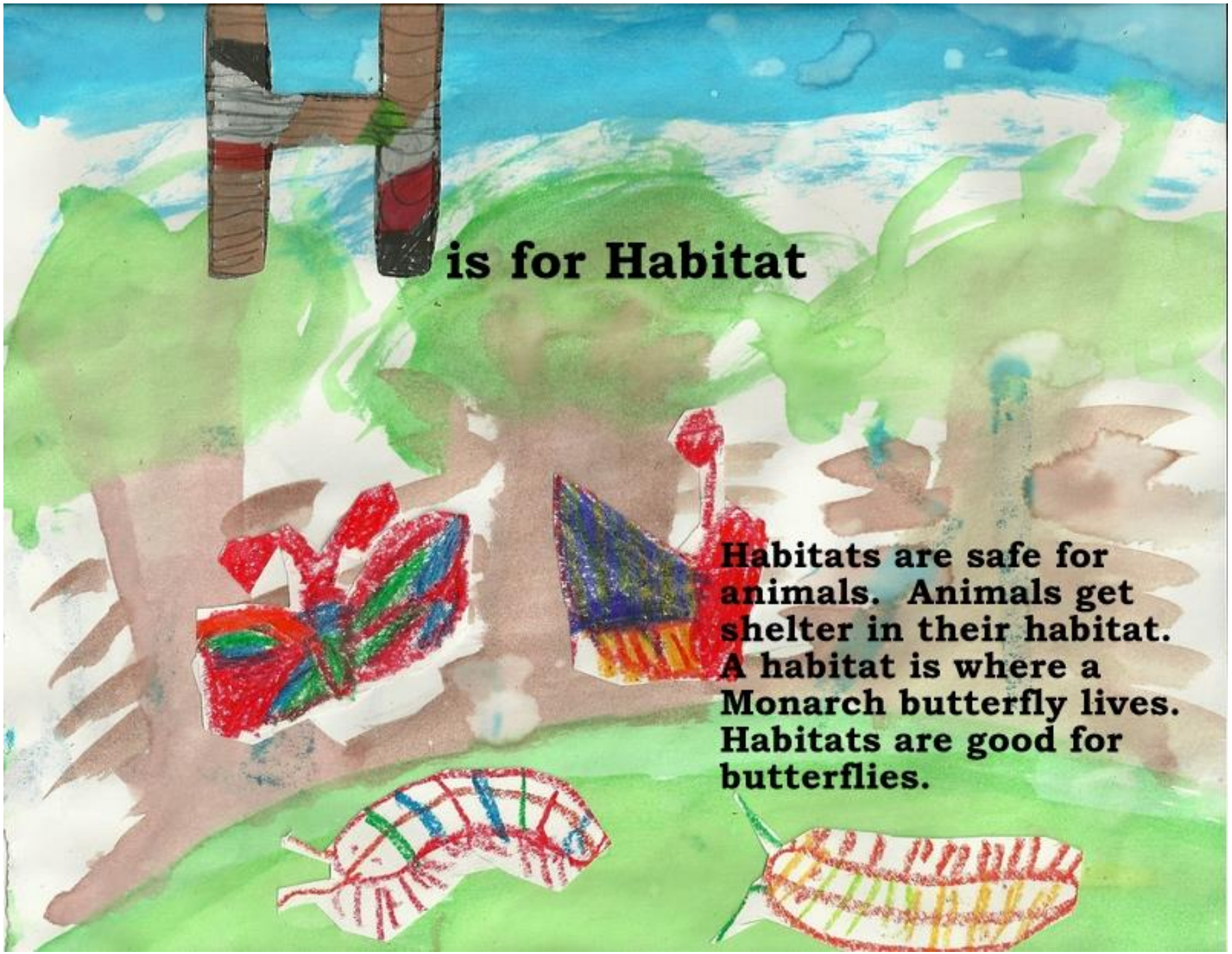

e
is for egg
An egg is laid on a milkweed. The egg is shiny. It has ridges. The egg is small and white. The egg sticks to the leaf. The egg is flat on the bottom. The egg is darker because the caterpillar is growing.


F
is for Fly
Flying means to engage in flight or to move through the air. Fly means you flap your wings up and down. Why fly: to get away from predators, to migrate, to find food and water. It's like a bird flying; they were meant to fly. Bats are the only mammal that can fly.

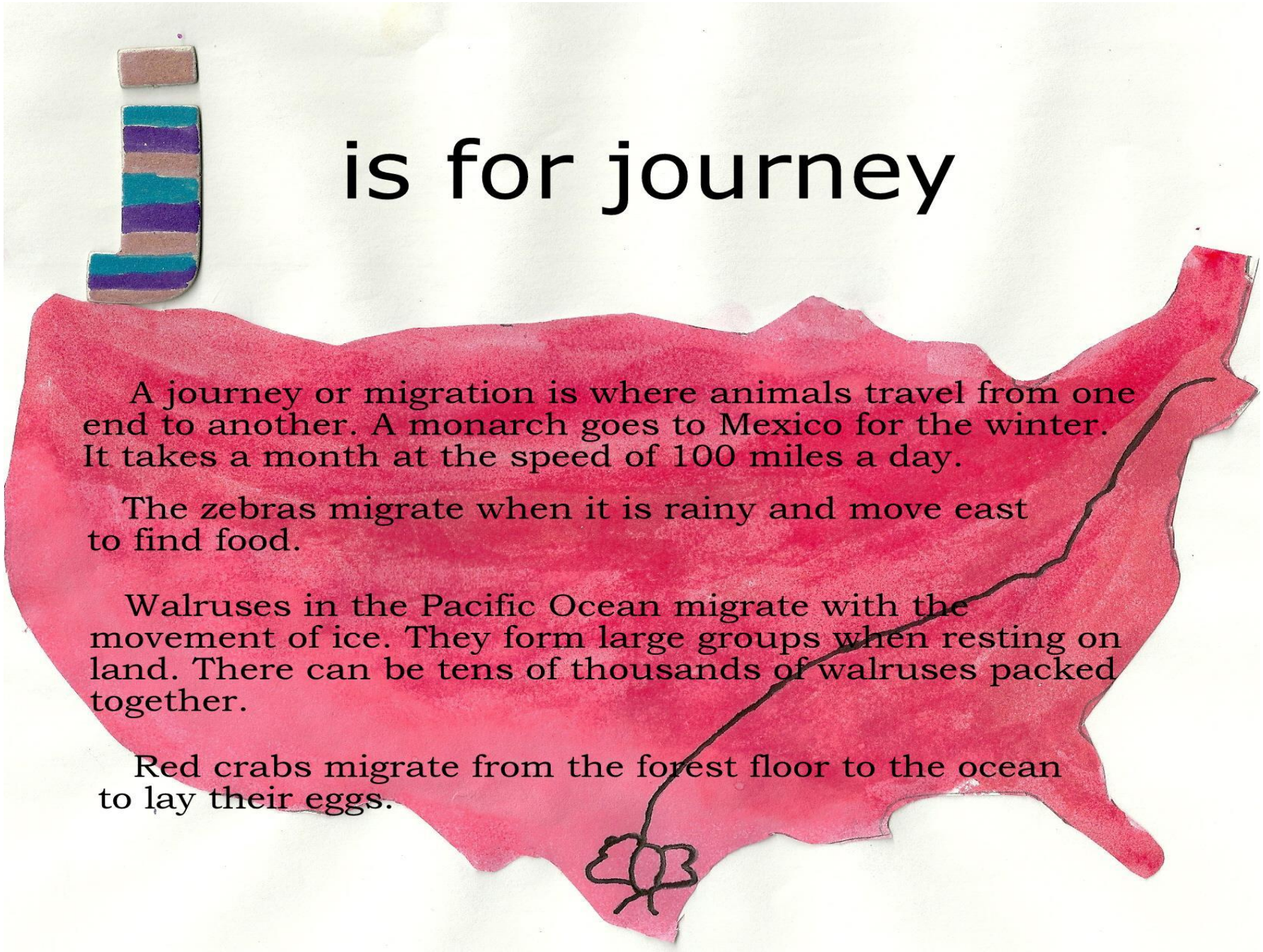
G is for generation



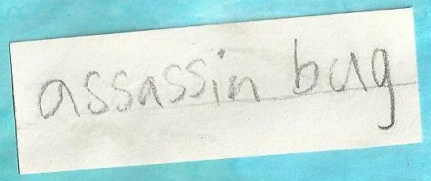
Generations are caused by laying eggs. Butterflies fly a little ways north, mate, and lay eggs. It takes 3 or 4 generations to get north. The last generation flies the last part of the migration to Mexico. It is called the super generation.

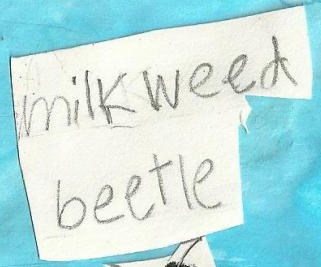

H is for Habitat
Habitats are safe for animals. Animals get shelter in their habitat. A habitat is where a Monarch butterfly lives. Habitats are good for butterflies.


An insect has 6 legs, an exoskeleton, and 3 body parts. The butterfly drinks nectar. Nectar comes from flowers. The butterfly is an insect because it doesn't have a back bone, 3 body parts, and an exoskeleton.
I
is for Insect


J is for journey
A journey or migration is where animals travel from one end to another. A monarch goes to Mexico for the winter. It takes a month at the speed of 100 miles a day.
The zebras migrate when it is rainy and move east to find food.
Walruses in the Pacific Ocean migrate with the movement of ice. They form large groups when resting on land. There can be tens of thousands of walruses packed together.
Red crabs migrate from the forest floor to the ocean to lay their eggs.

is for kinds of predators



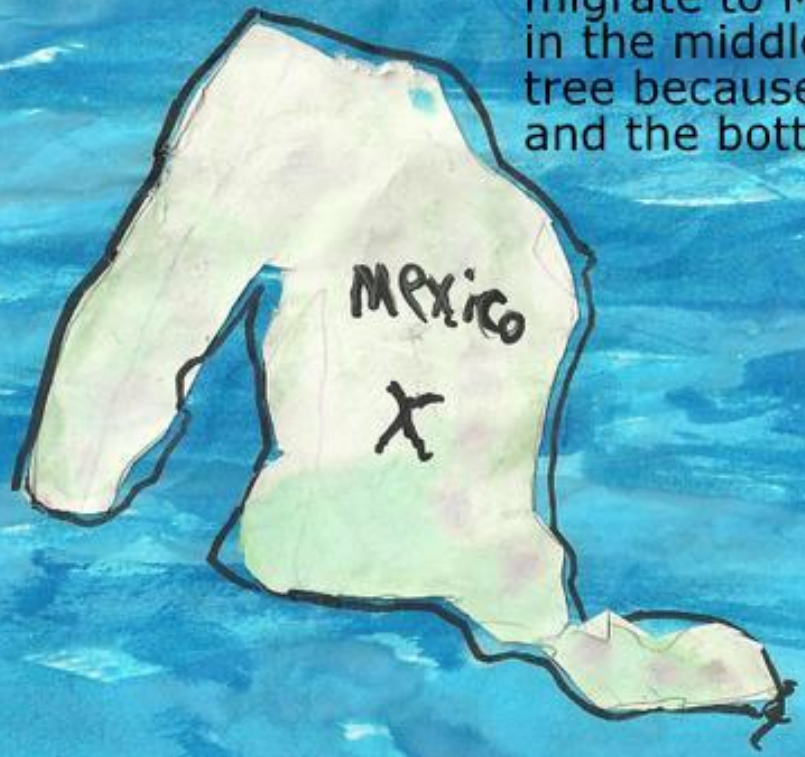


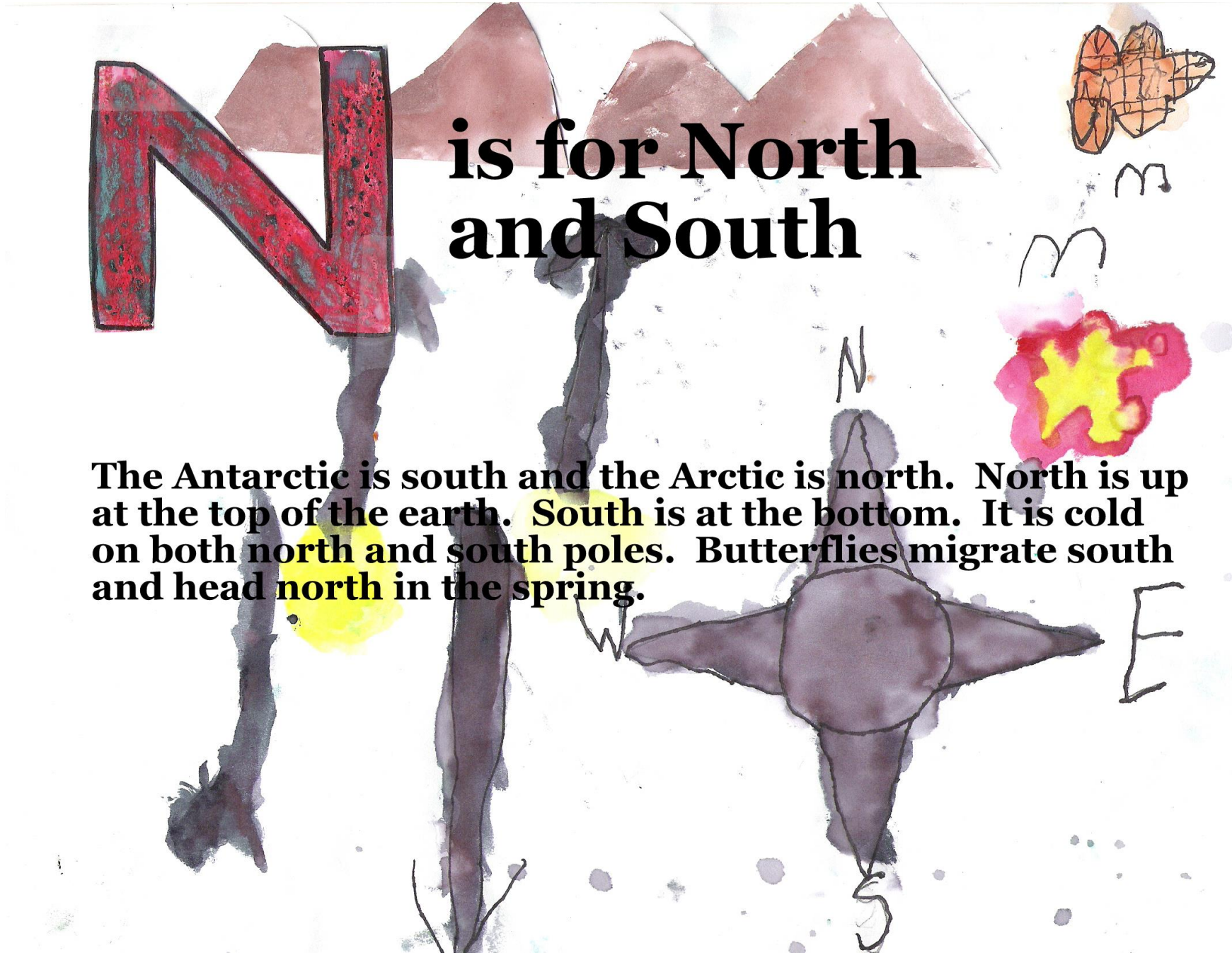
A predator is an animal who hunts for food. Assassin bugs, orioles, spiders, praying mantis, and fire ants are predators to Monarch butterflies. The Monarch butterflies and Monarch caterpillars have poison in them. They eat a little of the poison in the milkweed plant. Some predators are to a Monarch caterpillar and some are to a Monarch butterfly.


Lepidopterists tag butterflies. It takes 6 years to become a Lepidopterist. Lepidopterists study butterflies and moths. Lepidopterists can tell about what kind of butterfly it is by the pattern on its wings.
is for Lepidopterist

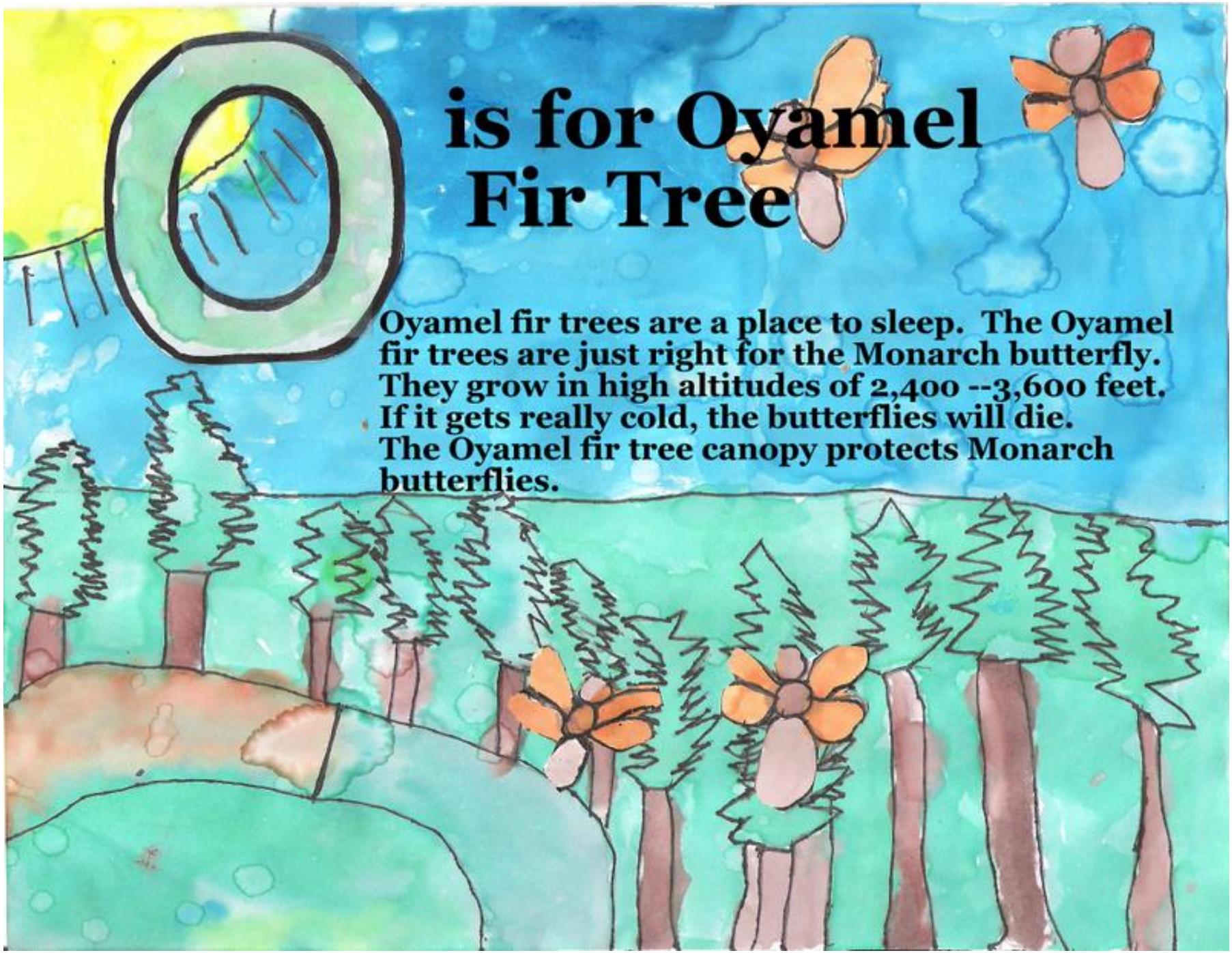
m is for Mexico

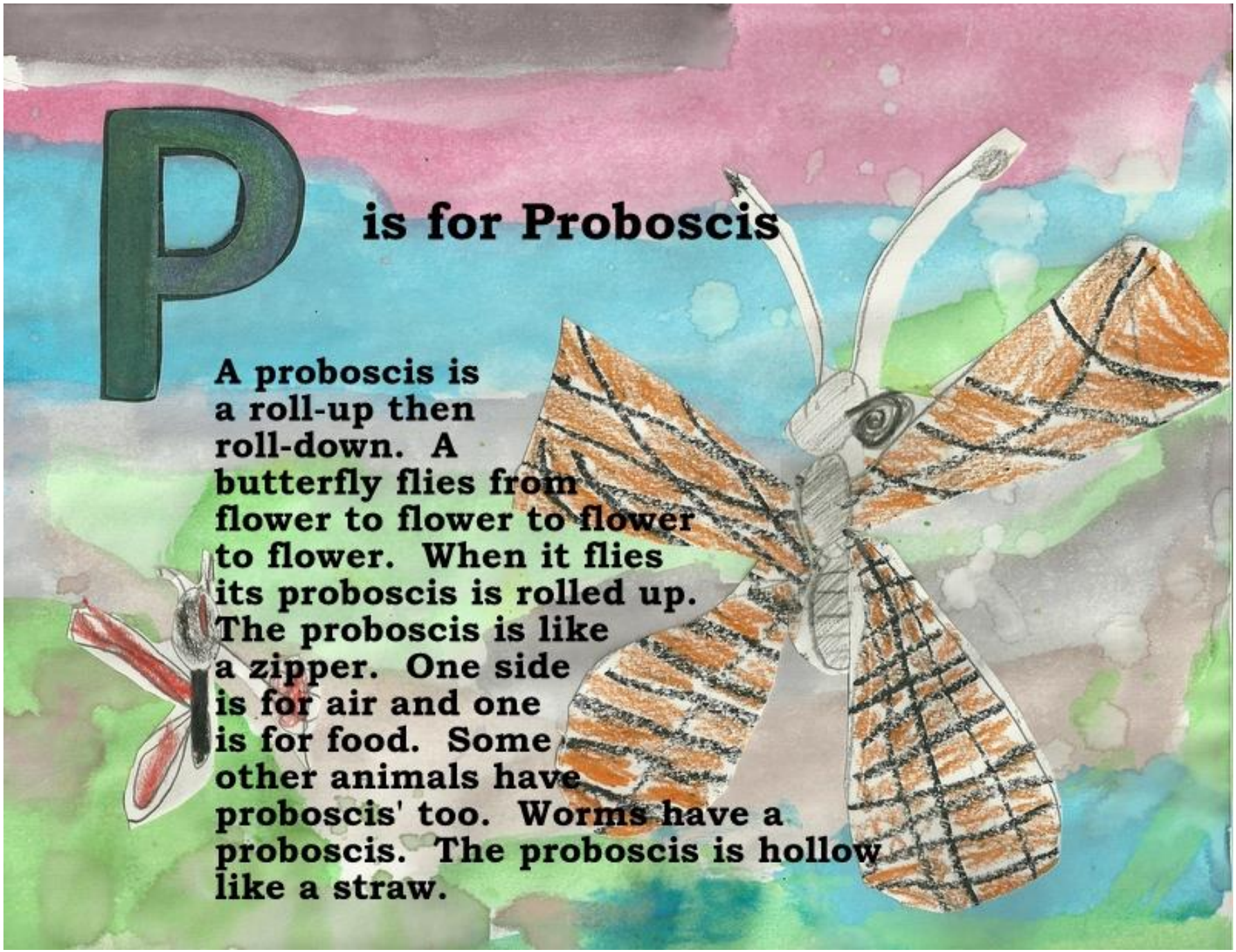
Mexico is a country. Mexico is in North America. Butterflies migrate to Mexico. They stay in the middle of the Oyamel fir tree because it is cold on top and the bottom has wild animals.

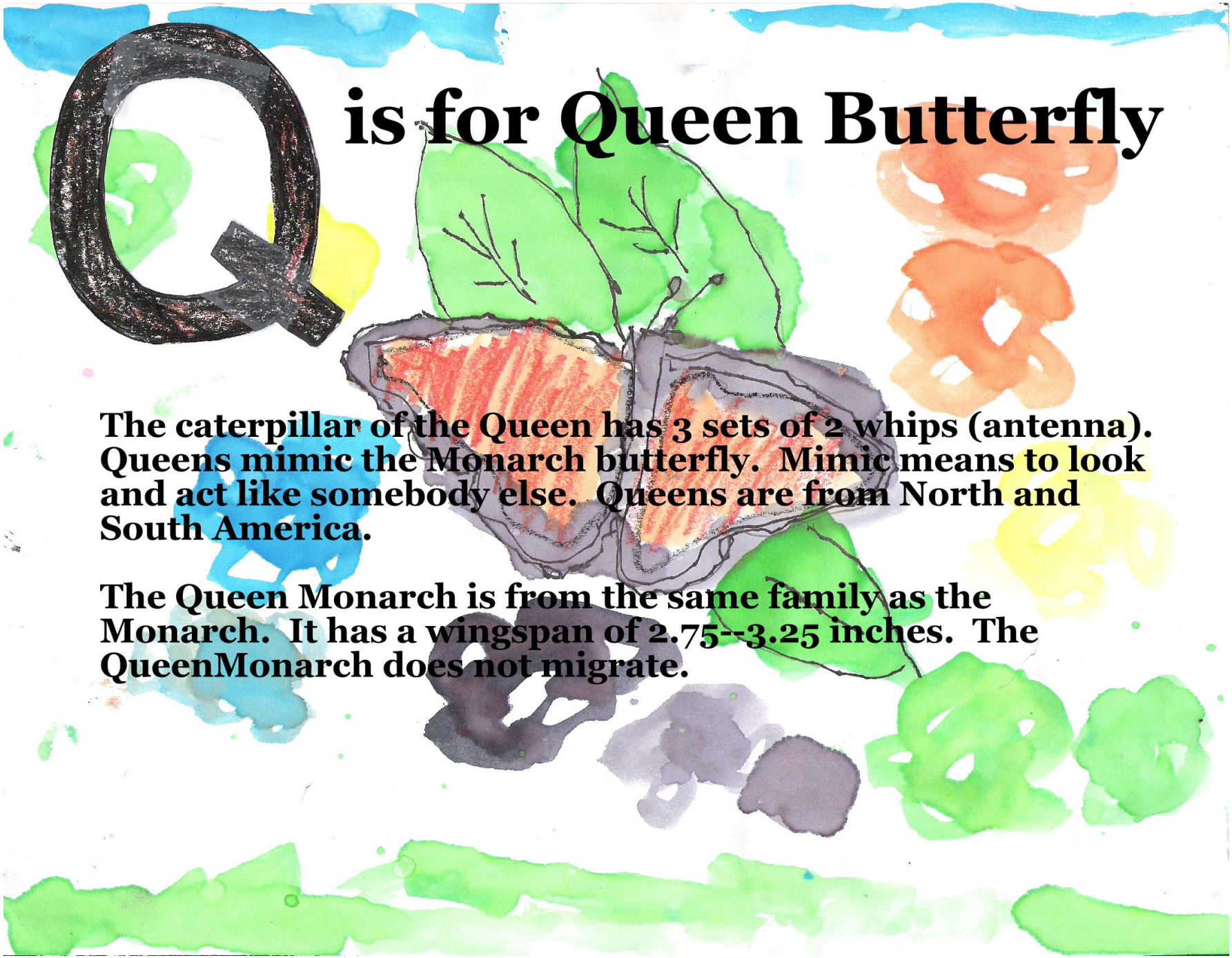


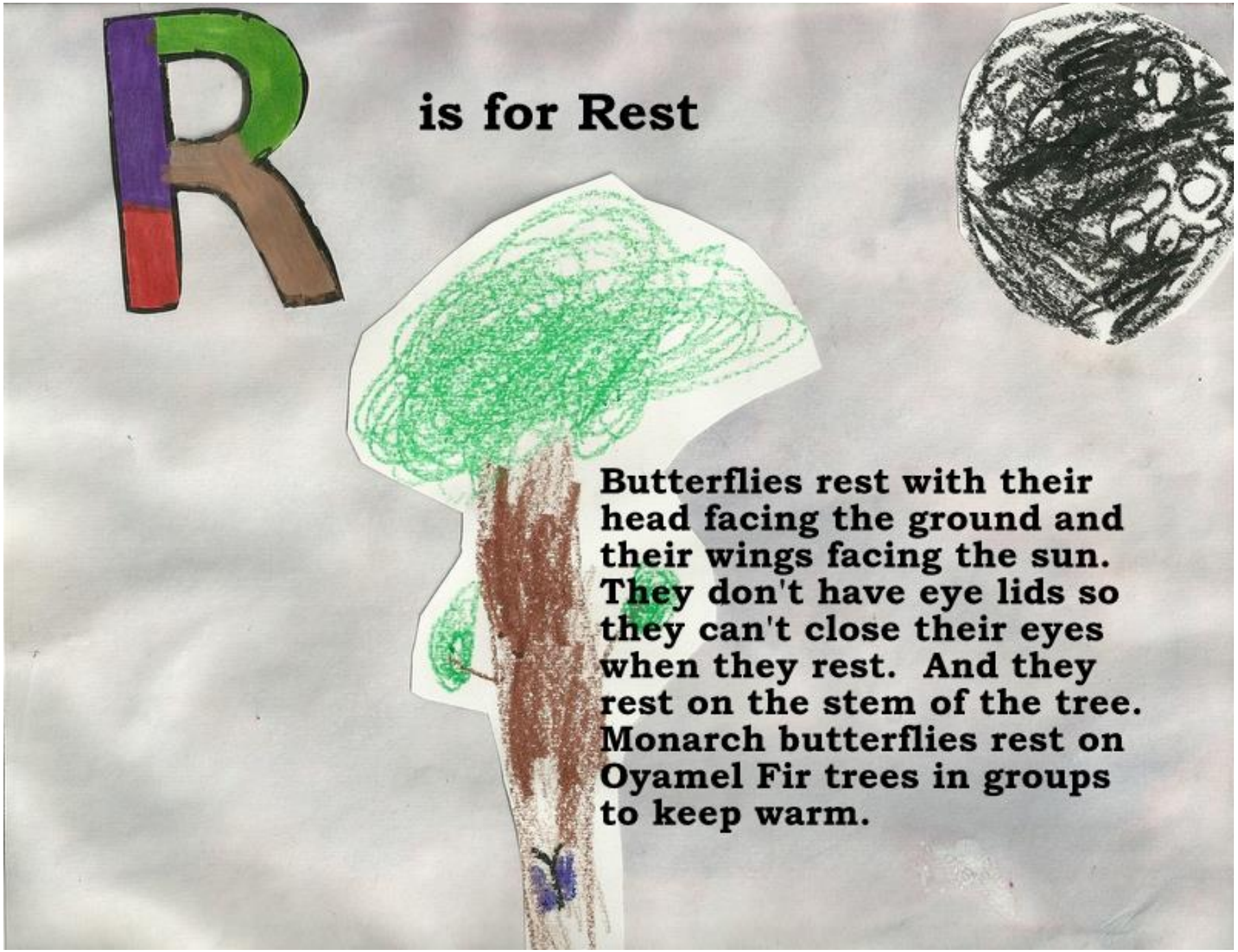


The Antarctic is south and the Arctic is north. North is up at the top of the earth. South is at the bottom. It is cold on both north and south poles. Butterflies migrate south and head north in the spring.


O is for Oyamel Fir Tree
Oyamel fir trees are a place to sleep. The Oyamel fir trees are just right for the Monarch butterfly. They grow in high altitudes of 2,400 --3,600 feet. If it gets really cold, the butterflies will die. The Oyamel fir tree canopy protects Monarch butterflies.


P
is for Proboscis
A proboscis is a roll-up then roll-down. A butterfly flies from flower to flower to flower to flower. When it flies its proboscis is rolled up. The proboscis is like a zipper. One side is for air and one is for food. Some other animals have proboscis' too. Worms have a proboscis. The proboscis is hollow like a straw.


Q is for Queen Butterfly
The caterpillar of the Queen has 3 sets of 2 whips (antenna). Queens mimic the Monarch butterfly. Mimic means to look and act like somebody else. Queens are from North and South America.
The Queen Monarch is from the same family as the Monarch. It has a wingspan of 2.75--3.25 inches. The QueenMonarch does not migrate.


R
is for Rest
Butterflies rest with their head facing the ground and their wings facing the sun. They don't have eye lids so they can't close their eyes when they rest. And they rest on the stem of the tree. Monarch butterflies rest on Oyamel Fir trees in groups to keep warm.

S is for Scent Glands

Males and females can be told apart by looking at their hindwings. Males have a black spot at the each hindwing. The spot is a scent gland that helps the males attract female mates by releasing chemicals.

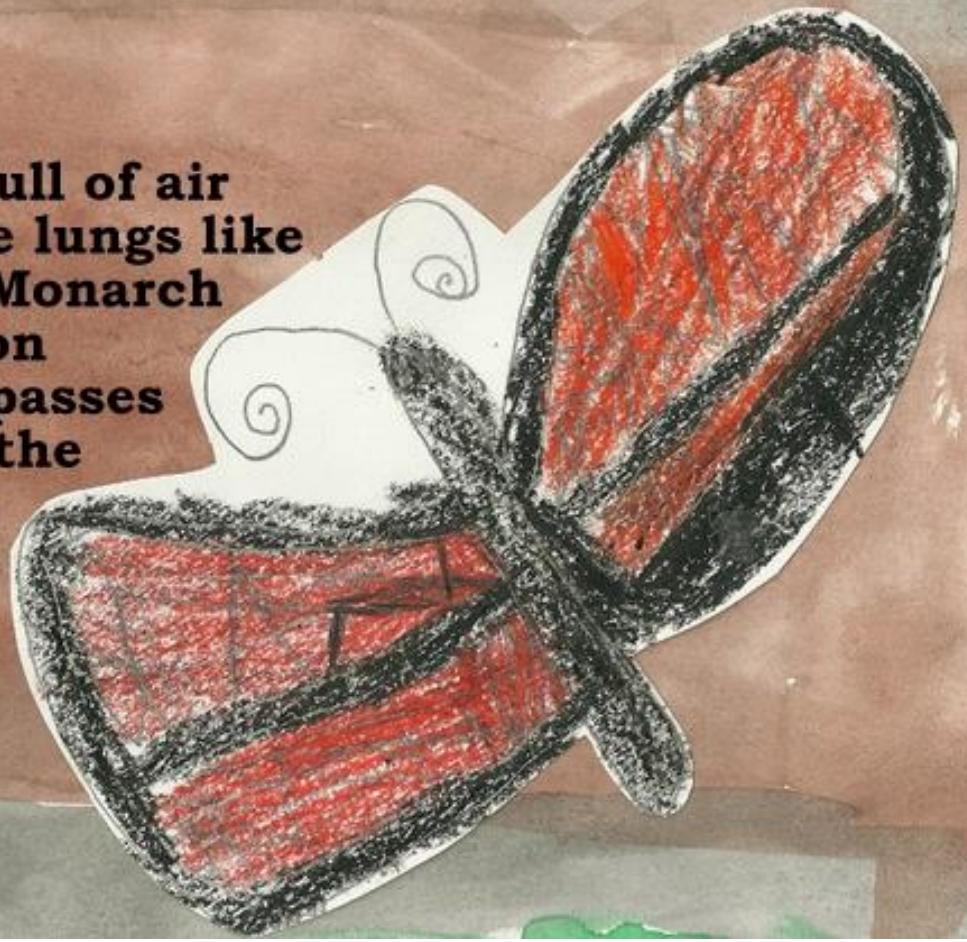
is for thermal

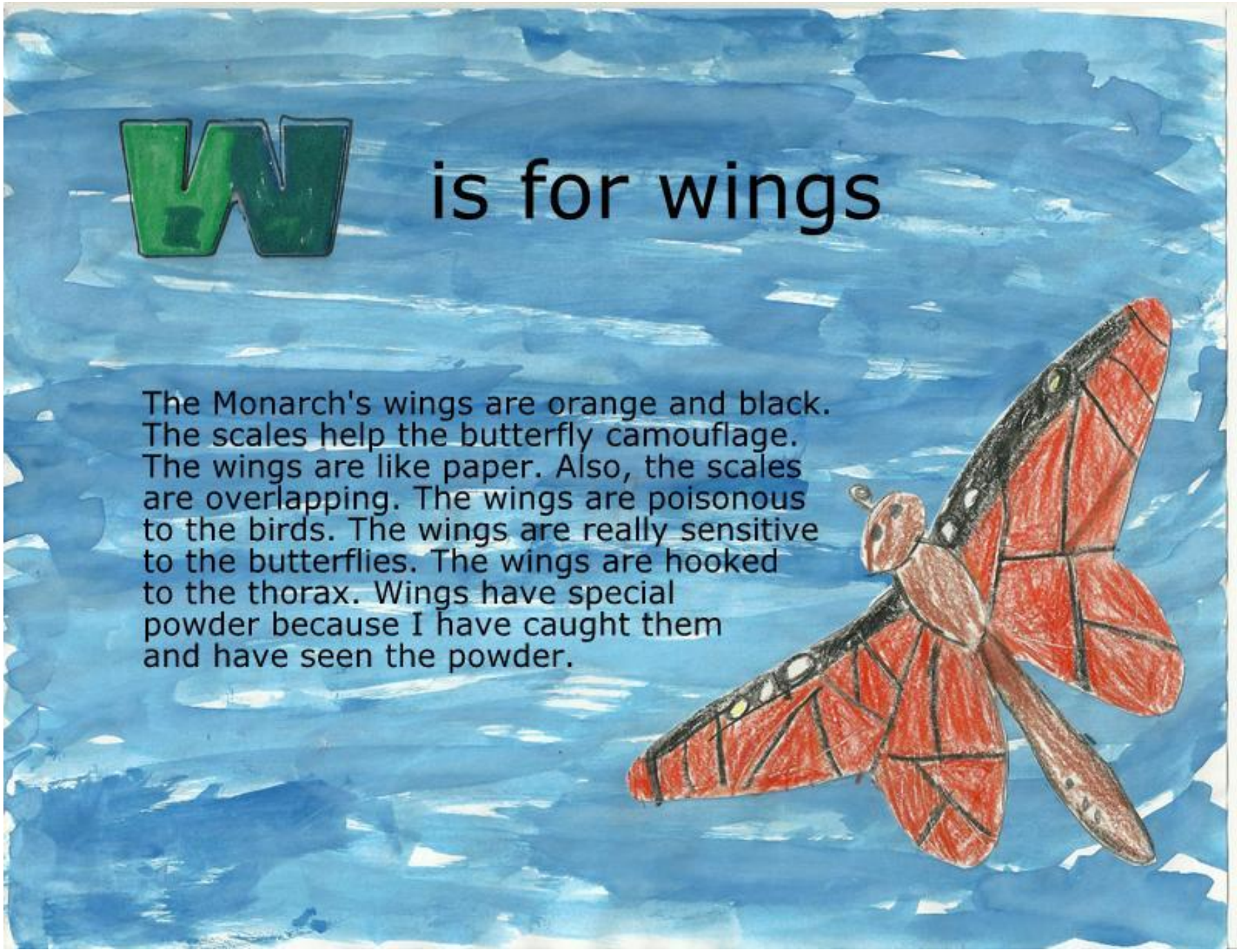
The thermal is a rising current of warm air. It spirals up and helps the butterfly so the butterfly does not have to use much energy. Thermals are caused by solar energy warming the air.


U is for Underneath a Leaf
An egg of a Monarch is layed on a Milkweed plant. It is a Monarch butterfly egg. The egg is layed under a leaf. It stays there for weeks and then a caterpillar pushes its way out. The eggshell is the caterpillar's first meal.

V is for Veins

Butterflies have veins full of air because they don't have lungs like I have. Black veins in Monarch butterflies are thicker on female wings. Oxygen passes through the veins into the tissue to keep their wings alive.

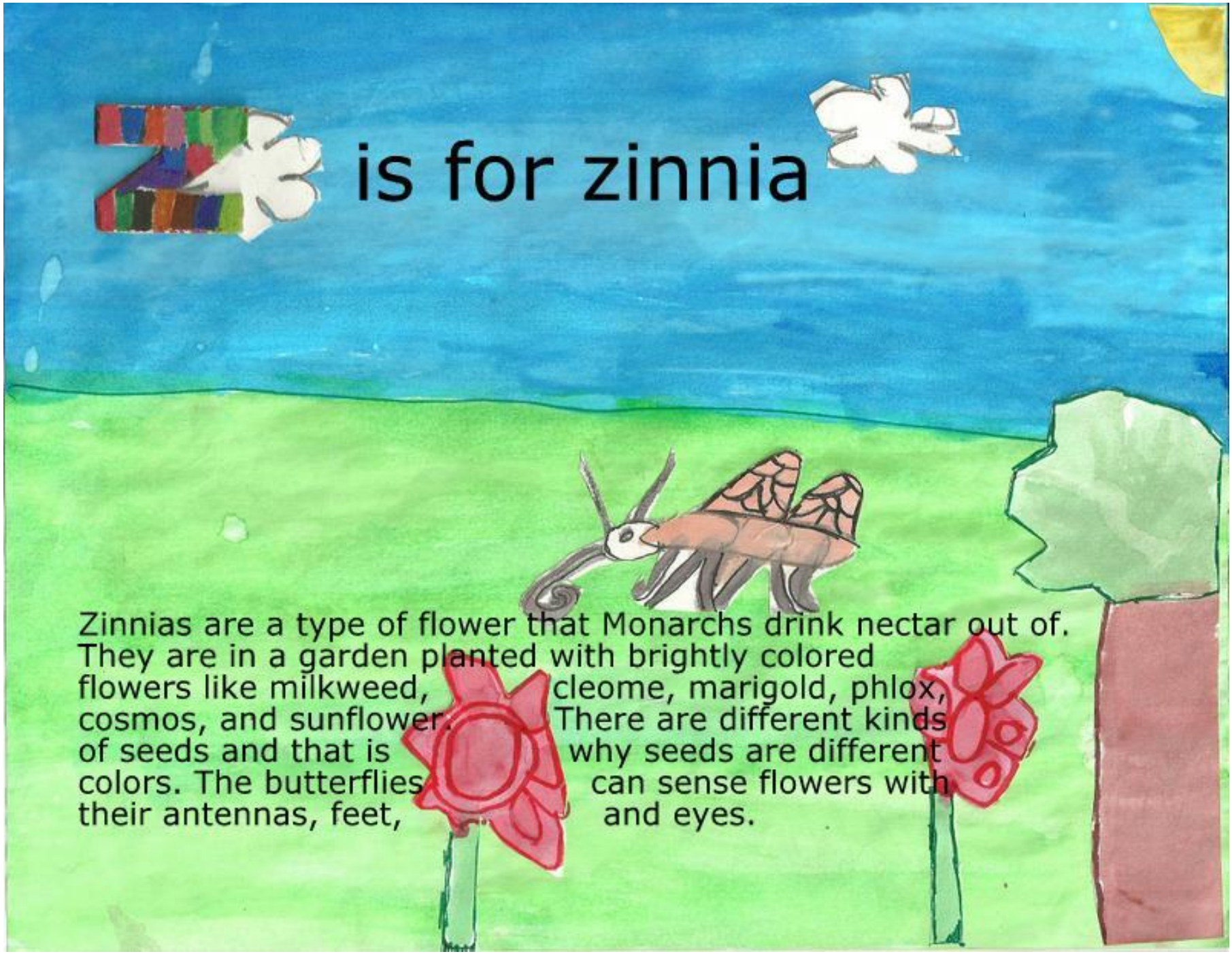



W is for wings
The Monarch's wings are orange and black. The scales help the butterfly camouflage. The wings are like paper. Also, the scales are overlapping. The wings are poisonous to the birds. The wings are really sensitive to the butterflies. The wings are hooked to the thorax. Wings have special powder because I have caught them and have seen the powder.

is for eXoskeleton

Every insect has an exoskeleton. Insects don't have bones but they do have exoskeletons. Exoskeletons are like an insects body and bones. Here are examples of insects that have exoskeletons: butterflies, Monarchs, and more. Caterpillars that are newborn have exoskeletons. All ants have exoskeletons. All insects in the entire world have an exoskeleton, big or small. Exoskeletons come in all different shapes and sizes. Exoskeletons are thin.


Y is for Yellow Swallowtail Butterfly
Yellow Swallowtails are butterflies. Yellow Swallowtails have four wings and black and yellow dots. The females have more blue dots than males. They drink nectar.


Z is for zinnia
Zinnias are a type of flower that Monarchs drink nectar out of. They are in a garden planted with brightly colored flowers like milkweed, cleome, marigold, phlox, cosmos, and sunflower. There are different kinds of seeds and that is why seeds are different colors. The butterflies can sense flowers with their antennas, feet, and eyes.