

HOPI BLACK DYE SUN FLOWER

THIRD GRADE: MITCH AGRICULTURE



NAME: _____

I AM A SEED SAVER!



This year, your class will be in charge of harvesting, saving, growing, and returning the Hopi Black Dye Sunflower Seed from our school garden to the Hopi community.

Hopi Black Dye Sunflowers are a special seed. As we work through this book, we will learn from Hopi people about the importance of their seeds to their culture and traditions.

Do you have special traditions that are important to your family?



SUMMER HARVEST

It is Summer! It is time to harvest seeds from the Hopi Black Sunflowers planted in our garden last Spring.

These sunflower seeds make a purple dye and are special to the Hopi.

Today we will harvest these seeds to return to them.

THE HOPI

The Hopi have lived in Northern Arizona since time immemorial, or before human memory. In Hopi language, their land is called *Tuuwanasave*, which means, "the center of the universe".

In their origin story, Ma'saw told the Hopi to take care of the earth. One of the ways that the Hopi care for the earth is through agriculture. Hopi life revolves around agriculture, especially corn. In the Hopi language, the word for Agriculture is *Natwani*.

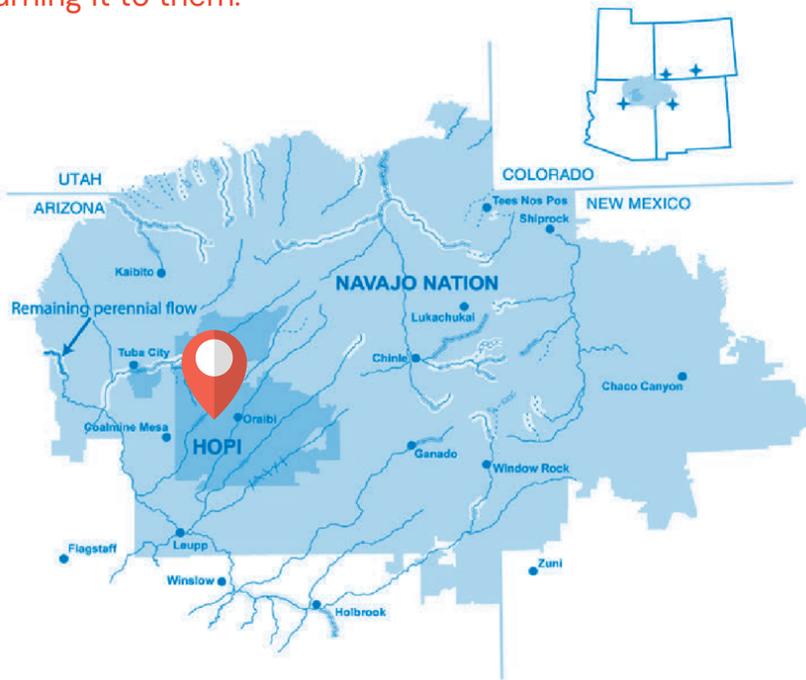
These ancient agricultural traditions of the Hopi are still practiced today.

Farming continues traditions in each new generation. As one Hopi gardener said, "This is not about growing vegetables; it is about growing kids."

What do you think this means?

Why is farming important to the future of the Hopi?

The Hopi Black Dye Sunflower is another plant that the Hopi take care of. We support the Hopi seed keepers by growing this sunflower in our garden and returning it to them.





FALL SAVE

It is Fall! It is time to save the Hopi Black Dye sunflower seeds. We do this through a process called "winnow & thresh".

These seeds are special to the Hopi and their traditions.

It is important for us to carefully save these seeds and return them to the Hopi.



In 1882, the United States government issued an order that took millions of acres of Hopi land. Today, the Hopi live on a much smaller piece of land called the Hopi Reservation.

The Hopi Reservation is much hotter than their original lands. Today, the Hopi experience 57 days a year with temperatures over 100 degrees F and less than 10 inches of rain.

This weather can make it difficult to grow their traditional foods and save their special seeds.

But the Hopi have stayed strong.

Hopi farmer Michael Kotutwa Johson in his corn field.
Photo credit: Al Jazeera

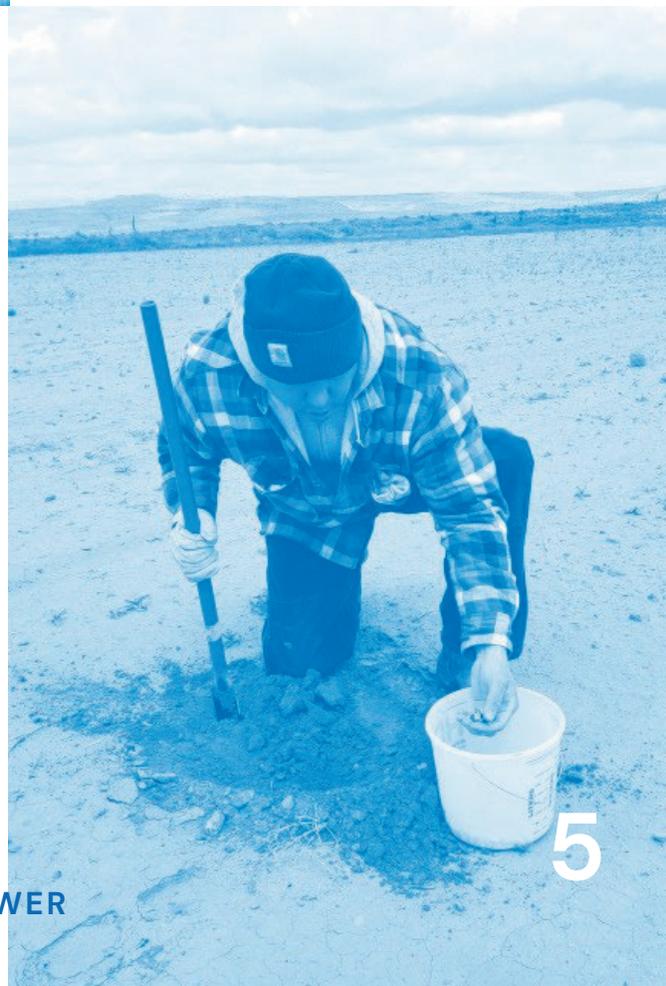
Today, the Hopi still grow the seeds that continue their agricultural traditions.

They use special methods called "dry farming", like planting many seeds in a hole 6-18 inches beneath the soil.

In the Hopi community, the words "Hopi qatsit hintsakqw a'ni tumalaniikyanguw put angqw naat mongvaswa" can be heard, meaning "despite the difficulty of the Hopi way of life, good things undoubtedly still come from it."

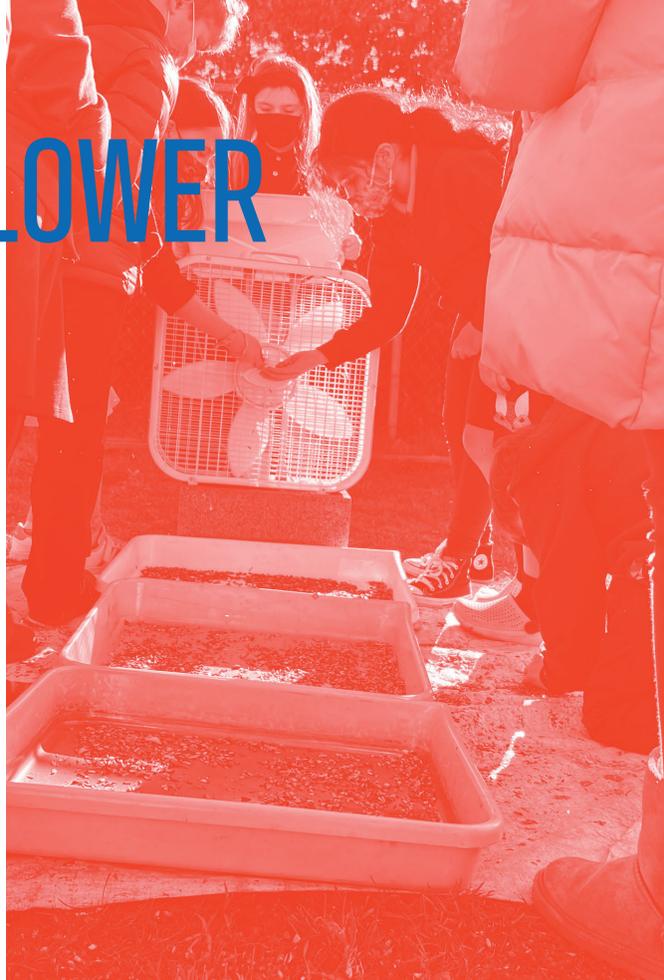
What do you think this means?

FALL: HOPI BLACK DYE SUNFLOWER



FROM SUNFLOWER TO SEED

Write the steps we took to separate the seeds from the sunflower plant.



1.
2.
3.
4.
5.



WINTER DYE

The Hopi Black Dye Sunflower Seed is important to the Hopi people. It makes a dye that can be used to change the color of cotton, wool and their traditional baskets. This process is called natural dying.

It is different than the way most materials are dyed today. Let's learn about the similarities and differences.

This is a T-Chart. Each side of the chart represents an idea or thing.

Listen to Hopi basketmaker Iwa Honestewa describe the process of natural dyeing and basketmaking. Then watch the story of a typical t-shirt.

What did you learn about natural and synthetic dyes?
Which would you choose?

NATURAL DYE

SYNTHETIC DYE



WINTER: HOPI BLACK DYE SUNFLOWER



WINTER RETURN

Now that we have learned about the importance of the Hopi Black Dye Sunflower to the Hopi, we are going to make sure their seeds are returned to them.

Many Indigenous people across the world are saving their seeds like the Hopi. Now you are a part of this important movement.

MESSAGE FROM MITCH

We are returning the Hopi Black Dye Sunflower seeds grown in our garden back to the Hopi Nation.

We have learned about the importance of Hopi seeds to continue their traditions. Why is it important to return these seeds to their care?

Write a message to send with these seeds to the Hopi community.



SPRING SPROUT

It is Spring! Today, we will sprout the Hopi Black Dye Sunflower seeds.

Together, we will continue the life cycle of this seed and grow more seeds to send to the Hopi community.

The word for the Hopi Black Dye Sunflower is Tceqa' Qu' Si.

HOPI BLACK DYE SUNFLOWER

Draw your sunflower as a seed and after it sprouts. Fill the space in the box with your drawings.



SEED

A large empty rectangular box with a blue border, intended for drawing a sunflower seed.

SPROUT

A large empty rectangular box with a blue border, intended for drawing a sunflower sprout.



SUMMER PLANT

Today, we will plant the Hopi Black Dye Sunflower in our garden.

Despite the challenges that the Hopi have experienced, like being pushed onto a smaller and hotter piece of land, they have stayed strong. One way is through saving seeds.

The plants we grow will create more sunflower seeds and future third graders will return them to the Hopi.

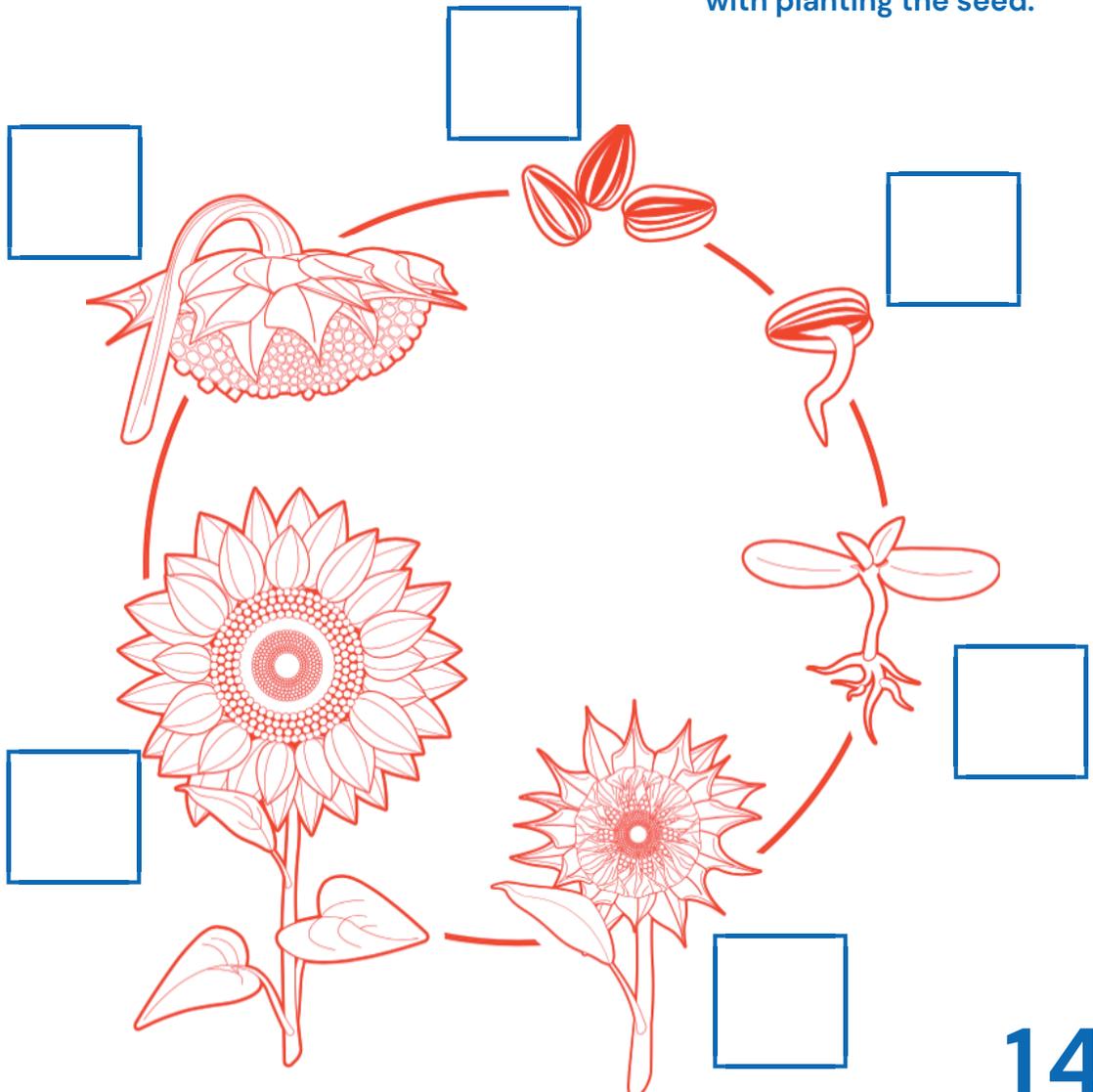
THE LIFE CYCLE OF SUNFLOWERS

When you plant a sunflower seed, you start its life all over again!

If a sunflower seed is not planted in the soil, eventually it will die.

You are important to the life cycle of the Hopi Black Dye Sunflower!

Number the steps of the sunflower life cycle, starting with planting the seed.



WRITE A NOTE TO A THIRD GRADER

Next year, you will be a fourth grader!

There will be new third graders that will harvest and return more of the Hopi Black Dye Sunflower seeds to the Hopi community.

Saving seeds is a way to save memories. It helps communities remember the important and sometimes difficult events that happened to them. Even though these memories are difficult to remember, it is important that we don't forget them. We can make sure that these events never happen again, and honor and support the people who were hurt.

Below, write the future third graders a note about how and why we return these seeds to the Hopi.