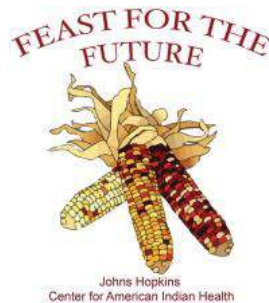




Traditional Foodways Education Program (TFEP)



Johns Hopkins University
Center for American Indian Health
Tuba City, Arizona



Introduction

Agriculture has always been central to traditional Diné (Navajo) society. Agriculture, livestock, the social kinship system (K'e), the Four Sacred mountains, traditional values, and the language (Diné Bizaad) are pillars of Diné identity. The Traditional Foodways Education Program (TFEP) aims to revitalize agricultural teachings, while incorporating other pillar teachings, among Navajo youth through a structured, interactive curriculum. In recognition of the rich cultural knowledge that our Navajo Elders possess, the TFEP promotes intergenerational teaching by inviting Elder Instructors to teach the lessons.

By participating in this program, students will gain an understanding of traditional Diné food practices, including: traditional harvesting, how to prepare and cook blue corn foods, ceremonial use of agricultural produce, how to harvest tadi'diin (corn pollen) and the role of corn pollen in Diné culture, among many other food-related lessons. Students will also learn about other pillars of Diné life, such as the K'e social kinship system, learning to respect oneself through respect for the fields/garden, and traditional stories and games. Diné Bizaad (Navajo language) is also used by Elder Instructors in teaching each lesson.

The curriculum was developed with enough flexibility so that each Elder Instructor is welcome to teach the lesson his or her own way, while still emphasizing the primary learning objectives. Lastly, the curriculum is organized seasonally according to ceremonies and agricultural activities that coincide with each season. For example, the Fall lessons focus on harvesting, storing, and preparing foods. The Spring lessons focus on preparing the field/garden for planting, understanding traditional methods of planting, and learning different methods of watering and maintaining the field/garden. The Summer lessons focus on garden/field management, wool dyeing, corn pollen harvesting, and preparing for harvest.

Acknowledgements

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Table of Contents

Introductory, Fall, & Floater Lesson Overview	4
<i>Introduction to TFEP Program, K'e (Kinship) System, and Clan Origination Stories*</i>	5
<i>K'e – Understanding how clans relate to one another*</i>	6
Fall Lessons	7
<i>Harvest (Ineest'a)</i>	7
<i>How to Make Juniper Ash (G'aad)</i>	8
<i>Harvesting Corn Husks</i>	9
<i>Grinding Corn/ Blue Corn Bread</i>	10
<i>Food Preparation – Blue Corn Foods (Blue Marble/Dumpling)</i>	11
<i>Navajo Cake (Navajo Spelling)</i>	12
<i>Food Storage & Drying</i>	13
<i>Storytelling/Christmas Program</i>	14
<i>Floater Lesson: Planting**</i>	15
<i>Floater Lesson: Weeding Lesson/Watch your crops**</i>	16
<i>Floater Lesson: String Games **</i>	17
<i>Floater Lesson: Letting your field rest**</i>	18
Spring Lessons	19
<i>Stars & Moon Cycles (including Navajo Calendar)</i>	20
<i>Field trip to Lowell Observatory</i>	21
<i>The Corn Plant Model</i>	22
<i>Respecting Yourself, Respecting the Cornfield</i>	23
<i>Watering/Planting Methods</i>	24
<i>Traditional Tools used in Planting</i>	25
<i>Introduction to Navajo Calendar</i>	26
<i>Identifying Traditional Seeds</i>	27
Summer Lessons	28
<i>Introduction to Garden/ Garden Management</i>	29
<i>Planting Cycles & Native plants</i>	30
<i>Native Plants and Medicine</i>	31
<i>Wool Dying</i>	32
<i>Sheep Camp and Farm Field Trip</i>	33
<i>Corn Pollen Harvesting</i>	34
<i>Making Cooking Tools</i>	35
<i>Preparing for Harvest</i>	36
<i>Sheep Shearing</i>	37

Introductory, Fall, & Floater Lesson Overview

Introductory Lessons

Lesson 1: K'e- Clan Systems*

Lesson 2: K'e- Clan Systems and Kinship*

Fall Lessons

Lesson 3: Harvest

Lesson 4: How to make Cedar Ash

Lesson 5: Harvesting Corn Husk

Lesson 6: Grinding Corn

Lesson 7: Food Preparation- Blue Corn Foods

Lesson 8: Navajo Cake

Lesson 9: Traditional Food Storage

Lesson 10: Storytelling and Christmas Program

Floater Lessons

Floater Lesson- Planting**

Floater Lesson- Weeding**

Floater Lesson- String games**

Floater Lesson- Letting your field rest**

** Introductory lessons to be used at the start of the program. If program does not start in fall semester, adjust accordingly*

***Lessons may be used in any semester as substitutions are needed*

Lesson 1

Introduction to TFEP Program, K'e (Kinship) System, and Clan Origination Stories

Time

1 hour

Materials

- Navajo Clan Legends book
- Clan worksheet
- Drawing Paper
- Crayons
- Kinship system paper
- Stories of 4 clans

Learning Objectives

1. Introduction to the TFEP program
2. To learn Navajo clan origination stories and to identify subgroups of clans
3. To learn how to introduce themselves using their four clans
4. To understand the concept of the clan system and why it's important to know where they come from

Activity/Lesson:

- Introduction/Purpose of the TFEP Program (8 lessons)
- Read four clan stories: Kinyaani, Honaghanni, Todichiini, Hashtl'ishnii (in this order)
- Drawing of clan symbols/protectors
- Discuss why it's important to understand clans (knowing relatives, courtship taboos)
- Introduction game: Name, where you're from and clans (if they know it).
- Students to complete clan worksheet as part of homework lesson and return for next class

Teaching Notes:

Students should take turns reading the clan origination stories for the four main clans and identify subgroups of clans. Keep in mind that some clans do not have protectors.

Introduce the concept of how all work together: Mother Earth, Father Sky, Mother Water, Father Sun. These elements make things grow by working together. This will be repeated in other lessons. Link garden lesson about soil, water, and sun.

Lesson 2

K'e – Understanding how clans relate to one another

Time: 1 hour

Materials Needed

- Navajo Clan Legends book
- Clan worksheet
- Drawing Paper
- Crayons
- Kinship system paper
- Stories of 4 clans

Learning Objectives

1. Understand the concept of the clan system
2. Understand why it's important to know where you come from, who your relatives are, and to understand who you are as a person
3. To understand how clans relate to one another
4. Introduce concept of respecting garden the way one respects self
5. Make garden rules

Activity/Lesson:

- Review last lesson.
- Introduction with name, clans and where they come from (review homework from last class)
- Discuss conversations that happened with family around K'e homework
- Exercise- Figure out how everyone is related and learn how to address one another.
- Assignment- Write first two clans or all four clans on a paper and go up to friends and family. If they are related, student puts the person's name under the clans and writes how they are related.

Teaching Notes:

Explain why we need to respect people within our families (clans) and how that relates to farming and gardening. We all share food and work together as a community to have a bountiful harvest. Harvesting, planting, and other farming activities were times that families gathered together.

Children should understand why maintaining a clean and neat garden free of pests and weeds will help produce a better harvest.

Lesson 3 – Fall

Harvest (Ineest'a)

Time: 1 hour

Materials Needed

- Garden
- Buckets or cloths for carrying vegetables
- Grinding stone
- Burlap (dry food)
- Corn Stalk
- Ripened fruit
 - Tomatoes
 - Chiles

Learning Objectives

1. To learn the traditional definition of harvest (harvesting represents old age)
2. To learn how to identify when crops are ready to be harvested
3. To demonstrate harvesting and show samples of ripened fruit/vegetables
4. To learn the appropriate time to harvest corn pollen
5. To learn different cycles of harvesting and why they are significant

Activity/Lesson

- Demonstrate different ways of harvesting plants and vegetables (steamed, dried, frozen). Burlap is used to demonstrate drying.
- Demonstrate how to grind corn, corn meal is used for blue corn foods and kneel-down bread
- Show ripened samples (tomatoes, chilies, corn stalk).
- Discuss appropriate time to harvest corn pollen (2 weeks before corn is ripe)
- Sharing with others and feeding family first is the traditional way
- Storage and selling/trading are only for surplus foods beyond what your family needs
- Harvest celebrations and activities such as family get together, feasts, traditional food preparation, etc.

Teaching Notes

A good opportunity to have a local farmer come and talk about Harvest practices, selling and so forth.

Medicinal purposes are to fight off colds, treat migraine headaches.

All herbs used by Navajo are medicine.

Ash is used to change the color and taste of the blue corn.

Juniper ash is also used during sweat lodge.

Lesson 4 – Fall

How to Make Juniper Ash (G'aad)

Time: 1 hour

Materials Needed

- Matches
- Juniper tree clippings
- Metal plate
- Metal grill
- Bowl
- Sifter
- Comb for ash
- Grinding stone
- Newspaper
- Pre-made food
- Poster board illustrating steps

Prepared in advance:

- Blue corn mush
- Dried juniper/cedar ash (2 weeks in advance)

Learning Objectives

1. Introduce one method for preparing blue corn foods
2. To learn importance and uses of Juniper Ash (an important component in making blue corn foods, also used for medicinal purposes)
3. To learn the medicinal and nutritional value of juniper ash
4. To learn appropriate brushes for ash/stove and hair (recommend color coding: yellow for hair, red for ash/stove)

Activity/Lesson

- Burn cedar, cool, sift and bag
- Prepare the ash for use in cooking blue corn foods
- Participants sample prepared blue corn mush
- Discuss how Juniper Ash is likened to “scrubbing,” or cleaning the veins

Teaching Notes

Show poster board of steps for preparing blue corn tamales

Emphasize that adults should be present anytime you are using fire for any purpose

When Juniper ash is ready, it changes color from green to purple. Can also smell/taste when it is ready.

Lesson 5 – Fall

Harvesting Corn Husks

Time: 1 hour

Materials Needed

- Fresh Corn
- Bowl
- Knife
- Apron
- Pre-soaked corn husks
- Scissors
- Mountain tobacco

Learning Objectives

1. To learn how corn husks are used in blue corn food preparation
2. To learn how corn husks are used in ceremonies (i.e. Mountain tobacco)
3. To learn the difference between ceremonial tobacco use and commercial tobacco use

Activity/Lesson

- Demonstrate how to cut husks off corn with a knife/scissors
- Children will dry and store the husks for future use
- Discuss mountain tobacco/corn husk use. Emphasize difference between ceremonial use (Mountain tobacco "pulls bad stuff out") while commercial tobacco contains carcinogens (cancer-causing substances)
- Can be used to create angels for kids to play with, to make holiday decorations (i.e. wreath), and to make rope (when wet).

Teaching Notes

A poster board or handout to show the steps will be helpful

Have several adults on hand to help with using knives to remove husks from corn

Lesson 6 – Fall

Grinding Corn/ Blue Corn Bread

Time: 1 hour

Materials Needed

- Grinding stones
- Brush
- Iron Skillet
- Large bowl
- Metal Spatula
- Manual corn grinder
- Sifter
- Dried Blue Corn
- Dried corn husks
- Nutritional fact sheet

Learning Objectives

1. To learn common uses for blue corn food (compared to other types of corn)
2. To learn nutritional value of blue corn, juniper ash
3. To learn medicinal value of blue corn (i.e. healing food for ulcers, wounds, sores)

Activity/Lesson

- Demonstrate traditional and modern style of corn grinding
- Have students compare and contrast the different styles
- Review how the concepts are the same, but the delivery of activity is different

Teaching Notes

Grinding can be done by traditional grinding stones or the manual corn grinder.
Have an oven on site and preheat at 250 degrees for baking ground corn.
Put corn on shallow pan and evenly distribute.
Bake for 20 minutes, should smell like popcorn.
Remove corn from pan and cool.
Grind again until it is fine like flour.
Store flour in a cool dry place.

Food Preparation – Blue Corn Foods (Blue Marble/Dumpling)*Time:* 1 hour*Materials Needed*

- Grinding stones
- Blue corn flour
- White flour
- Modern grinder
- Juniper ash
- Corn husks
- Boiling pot
- Large bowl
- Large spoons
- Poster board of blue marble/dumpling
- Recipe handout
- Poster board

Prepare in advance:

- Blue corn marble/dumpling sample

Learning Objectives

1. Blue corn is most commonly used for foods, compared to other types of corn
2. Explain how to make blue marble/dumpling

Activity/Lesson

- Discuss process (using poster board and materials) of how to make blue corn marble/dumplings.
- Food grinding activity (optional)
- Elder/youth cooking demonstration
- Sampling of blue corn marble/dumpling

Teaching Notes

This is a good opportunity for an elder to help with the class to explain about the medicinal properties of blue corn.

Children can also bring parents during this activity.

Navajo Cake (Navajo Spelling)

Time: 2 hours (12 hours baking in earth oven)

*Purchase premade Navajo Cake

Materials

- Ground white corn
- Corn husks
- Hot boiling water
- Brown sugar
- Fire pit
- Wood
- Mixing sticks
- Mixing bowls

Learning Objectives

1. Navajo cake is used in kinaalda, a celebration of womanhood
2. Male and female roles in preparing cake, females prepare batter, males oversee the cooking overnight
3. Introduce the ceremony and why this is an important event for young girls

Activity/Lesson

- Make Navajo cake
- Mix flour, prepare batter, pour into earth oven
- Elder/youth cooking demonstration
- Poster board of Navajo Cake process
- Trip to Moenave: Nora Kaibetoney

Teaching Notes

This is a good opportunity for students to use their stirring sticks from Summer Lesson 7.

Children can also bring parents during this activity.

An elder should be present during the lesson to assist students in this activity.

Bring pre-prepared cake samples to give to students to take home.

Food Storage & Drying*Time:* 1 hour*Materials*

- Steamed Corn
- Dried Apricots
- Corn flour (blue, white, etc.)
- Jams
- Dried Kneel-down bread
- Navajo cake dried
- Ts'aalbei
- Yucca fruit

Learning Objectives

1. The purpose of food storage and root cellars
2. Explain the process of drying food
3. Explain how to prepare dried foods for use in winter months

Activity/Lesson

- Demonstration of drying apricot
- Show pictures of drying steamed corn and Navajo cake
- Elder / youth activity for dried foods demonstration and how to cook during the winter months

Teaching Notes

Elder should help in the classroom to explain the drying methods and what corn husks are used for.

Elder should also explain how steamed corn and Navajo cake are dried and how to cook them throughout the winter.

Lesson 10 – Fall

Storytelling/Christmas Program

Materials Needed

- Costumes
- Props
- Script

Learning Objectives

1. Learn and act out a traditional story “The Water Boy”
2. Assign roles to students

Activity/Lesson

- Present play to family and community members
- “The Water boy” story teaches children to ask for help, forgiveness, family and community togetherness, defeat laziness, teaches a positive attitude, alertness, and patience.

Planting*Time:* 1 hour*Materials*

- Seeds
- Shovel
- Water
- Planting sticks

Learning Objectives

1. To review Garden Rules- Respect!
2. To plant seeds for the summer
3. To learn how to plant
4. To learn how/why the cornfield is sacred (garden/cornfield is made for a reason)
5. To learn traditional taboos of cornfields

Activity/Lesson

- Review basic Garden Rules- Respect yourself, others around you and the Garden
- Plant with the kids.
- Talk about how to plant corn, watermelons, and squash.
- How many seeds in an area
- How far apart to plant
- How deep to plant the seeds
- Fixing the area around where you planted
- Watering directions- how often.
- Remind Students that the Cornfield/Garden is sacred. There is a reason for it.
- Reminder of traditional taboos (do not go barefoot in cornfield, do not engage in affection in cornfield, do not plant or go to cornfield during menstruation)

Teaching Notes

Garden Rules- Respect

Work with an elder on the basics on planting.

Traditional Taboos when in the garden.

Floater Lesson

Weeding Lesson/Watch your crops

Time: 1 hour

Materials

- Shovels
- Hoes
- Rakes
- Gloves
- pitchfork

Learning Objectives

1. To identify garden supplies and their uses
2. To understand the importance of weeding
3. To understand that K'e means getting help from family and friends
4. To define and identify weeds
5. To learn how to weed (method, how often)

Activity/Lesson

- Introduce the garden supplies
- Garden tools in the past to today- what did our grandparents use
- How to use the K'e/Clan system to ask for help
- Discussion on what is a weed (any plant that is not wanted or not meant to grow in a certain area), how to weed and how often it should be done
- Why it is important to weed? Weeds take nutrients from the ground (which means that it does not go to the intended plants)

Teaching notes:

Tools are made to help people. Different types of tools are made for different types of work.

It's important to use the tools properly because you might hurt yourself or someone else. You might break your tool if you misuse it.

Weeding is done so what you plant can have more water. If weeds get out of control, they will take the water from your plant.

It is always good to help your family and they will help you back. Do something alone takes longer but when you have help, it's done faster and it is more fun.

String Games*Time:* 45 minutes*Materials*

- String for each student
- Scissors

Learning Objectives

1. Understand traditional stories and their relationship to rug-weaving and wool spinning
2. Appreciate string games to enhance storytelling, teach patience and dexterity, and understand how those skills apply to rug-weaving

Activity/Lesson

- Invite an elder or cultural teacher to demonstrate string games
- Instructors and students may also demonstrate and share string games
- The Navajo elder(s) or cultural teacher(s) may also instruct from oral traditions during this lesson. The specific string games and content of the lesson are not documented here, both as this lesson varies with the teachers, and to respect the culturally-specific nature of the lesson.
- Facilitate a discussion about string games, how they have been learned and taught, the stories behind each string game, and when and where specific string games are appropriate

Teaching Notes

Remind youth of respectful ways to interact with an elder or cultural teacher. This can be a good opportunity for youth to interact with an elder or cultural teacher. Invite youth to demonstrate string games, and share how they learned them and the stories behind them.

Make sure that stories and string games shared are appropriate for the environment – some stories and string games are only appropriate to be shared in a Hogan.

Only play string games in the winter, which can be defined by the time between the thunder at the end of the fall and the thunder at the beginning of the spring.

Letting Your Field Rest

Activity/Lesson

- Invite an elder to explain the importance of letting the field rest
- Navajo elders instruct from oral traditions during this lesson. The specific stories and methods are not documented here, both as this lesson varies with the story-teller, and to respect the culturally-specific nature of the lesson.

Teaching Notes

Remind youth of respectful ways to interact with an elder.

A good opportunity for youth to interact with an elder.

Spring Lesson Overview

Introductory Lesson: K'e- Clan Systems*

Introductory Lesson: K'e- Clan Systems and Kinship*

Lesson 1: Stars and Moon

Lesson 2: Field trip to Lodwell Observatory

Lesson 3: Corn Plant Model

Lesson 4: Respecting Yourself, The Cornfield

Lesson 5: Watering/Planting Methods

Lesson 6: Traditional Tools

Lesson 7: Introduction to Navajo Calendar

Lesson 8: Identifying Traditional Seeds

Floater Lesson- Planting**

Floater Lesson- Weeding**

** Introductory Lessons, see Fall lesson plans*

***Lessons may be used in any semester as substitutions are needed*

Lesson 1 - Spring

Stars & Moon Cycles (including Navajo Calendar)

Time: 1 hour

Materials

- Constellation poster
- Navajo months calendar
- Crayons
- Construction Paper
- Scissor
- Handouts (7 sisters dilyehi)

Learning Objectives

1. Identify stars representing cycles of farming and harvesting
2. Identify other star constellations
3. Understand why "Dilyehi" is important
4. Moon cycles in Navajo tradition
5. Introduction to months and translation of the meaning
6. Coyote stories

Activity/Lesson

- Read the Navajo story of how moons and stars were created
- Give handouts on the basic constellations and moon cycles
- Coloring activity; moons and stars constellation
- Homework: activity to identify constellations when they go home with their parents
- Create Calendar for the month to see how the moon changes on a daily basis- (Charting the moon hand out)

Teaching Notes:

The star constellations are important to identify and know as these are the signs for important dates, most importantly, the "dilyehi" constellation in the northern sky is the sign that planting season has begun and will also determine when planting season ends.

The moon cycles each month represent when certain ceremonies are to be done.

Lesson 2 – Spring

Field trip to Lowell Observatory

Time: approximately 6 hours

Materials

- Permission slips

Learning Objectives

1. Identify star constellations
2. Students should understand why “dilyehi” is important
3. Observe the moon in current cycle
4. Tour of observatory

Activity/Lesson

Field trip to Lowell Observatory

Teaching Notes:

The star constellations are important to identify and know as these are the signs for important dates, most importantly, the “dilyehi” constellation in the northern sky is the sign that planting season has begun and will also determine when planting season ends

The moon cycles each month represent when certain ceremonies are to be done and each cycle have names that children should understand

Each month, children will create a Navajo calendar for the month.

Lesson 3- Spring

The Corn Plant Model

Time: 1 hour

Materials

- Drawing paper
- Crayons
- Grasshopper's Song story
- Handouts
- Different colored corn

Learning Objectives

1. To learn the parts of the corn plant and their uses in traditional culture
2. To understand the importance of the corn plant in planning
3. To learn how to prepare the field for planting
4. To make a map/layout/plan for planting
5. To brainstorm simple garden rules.
6. To understand the male and female roles as it applies to the corn plants

Activity:

Review last lesson

Preparation of the garden:

- Make a garden design/layout
- Discuss out how to get the garden ready

Garden rules (review traditional taboos related to the garden)

Teaching Notes:

Read the grasshopper story to kids, from ESG lesson. Or Water Boy story (James Peshlakai)

Facilitate a discussion on how to prepare the garden for planting.

Make a plan on what the garden will look like.

Decide on what to plant.

Draw garden design of the corn plant and how it applies to their life.

To understand the concept, review with an elder prior to lesson. Each part of the plant has a story and a meaning.

Lesson 4 – Spring

Respecting Yourself, Respecting the Cornfield

Time: 1 hour

Materials

- Poster board
- Markers
- Construction paper
- Crayons
- Planting Kits

Learning Objectives

7. Teach concept of garden; garden is sacred, respecting yourself and the garden
8. Introduction to the garden and explain why the cornfield is sacred
9. Explain rules and giving respect to the garden
 - Never sleep in garden, no touching/kissing ever allowed
 - No flip flops or the corn will not grow right
 - If you have your period, you should not be in the field
 - 4 No's
 - Taboos (not removing snakes)
10. Children should have a basic idea that how you present yourself reflects where you come from.
11. The garden will provide food for your family and for extended families.
12. Children are pure at heart, when they plant something it will grow well.

Activity

- Garden is sacred- Garden input and output poster
- My garden, my rules- list of rules- Respect yourself, each another and the garden
- Traditional rules of a garden

Teaching Notes

Make a rules poster for the class; have children sign the poster and post it in a visible area where they can see the poster for the rest of the program.

Draw garden design for their home.

Lesson 5 – Spring

Watering/Planting Methods

Time: 2 hours

Materials

- Bus
- Permission slips

Learning Objectives

1. Learn the differences between irrigated dry land farming and drip line irrigation systems
2. Learn the history of Kerley Valley farms and irrigation system

Activity/Lesson

- Kerley Valley field trip to look at irrigated fields. Field trip to ESG to look at drip line system.
- Interactive activity with Elder, discussion on irrigation system and history of Kerley Valley
- January thru March- Farmers clean up the irrigation ditch so the water can flow.
- What is a Water-Master?
- March- Burning of weeds
- Nanil-yensh
- Haahagl'aad
- Process of planting and watering

Teaching Notes:

Children will have the opportunity to interact with an Elder and Farmers in Kerley Valley

Children should wear appropriate shoes and clothing for a short walk along irrigation canal and on fields

Seeds from flood irrigation will not grow in a dry-farming planting method.

Lesson 6 – Spring

Traditional Tools used in Planting

Time: 1 hour

Materials

- Gish (planting stick)
- Corn for planting
- Handout of planting and cooking tools

Learning Objectives

1. Differences in tools for home and farming use, Gish for farming is longer than Gish used in home
2. Explain the concepts of the tools are the same, but methods have changed.
3. Identify the tools and their uses
4. Traditional tools vs. contemporary tools
 - i. Farming tools
 - Home garden tools

Activity/Lesson

- Demonstrate and show the different tools
- Matching names to tools (vocabulary)
- Picture of men with planting stick, one with donkey, one with tractor, one with tiller
- Planting of corn in garden during this time

Teaching Notes:

The emphasis during the spring lesson is on how the planting stick was used to plant.

Lesson 7 – Spring

Introduction to Navajo Calendar

Time: 1 hour

Materials

- Poster of Navajo Calendar
- Blank Papers
- Markers, pencils, markers
- Poster boards

Learning Objectives

1. Learn the Navajo names of months in the calendar year
2. Identify the characteristics of the months
3. Create a book on Navajo months

Activity/Lesson

- An Elder will talk to the children about the names of the months in Navajo and why they are named.
- Repeat, write down English name/ Navajo name of each month
- Choose a month and draw a picture of its characteristics, put the month in English and Navajo
- Put all months together to make a small book for younger children to read.
- Find out the months of planting and harvest time.

Teaching Notes:

Teach the kids the Navajo names/ English names of each month.

Discussion on each month- why was it named a certain way

Write the correct Navajo spelling of each month

Make a small book for younger kids to use as a learning tool.

Identifying Traditional Seeds

Time: 2 hours

Materials

- Blue Corn
- White Corn
- Yellow Corn
- Multi-Colored Corn
- Melon seeds

Learning Objectives

1. Identify the different types of corn that are native to the land in Tuba City
2. Understand what each corn is used for.
3. Identify the different melon seeds that are native to the land
4. Understand the difference between Native seeds to seeds purchased from store
5. Understand the concepts of cross pollination and GMO seeds

Activity/Lesson

- Elder will come in and discuss the different types of seeds
- Go into detail about what each corn is for.
- Native melon seeds
- Compare native seeds to store bought seeds
- Discuss cross pollination and GMO seeds

Teaching Notes:

Bring different types of seeds

Example- Blue corn is made for blue corn foods

Example- Yellow and White corn are made for ceremonial purposes

Multicolored corn- made for decorations

Different ways to use corn

** Floater Lessons 11 and 12 – See Fall Lesson Plans

Summer Lesson Overview

Introductory Lesson: K'e- Clan Systems*

Introductory Lesson: K'e- Clan Systems and Kinship*

Lesson 1: Garden Management

Lesson 2: Transplants –Plant Cycles

Lesson 3: Native Plants and Medicine

Lesson 4: Wool Dying

Lesson 5: Sheep Camp and Farm Fieldtrip

Lesson 6: Corn Pollen Harvesting

Lesson 7: Making Cooking Tools

Lesson 8: Preparing for Harvest

Floater Lesson- Planting**

Floater Lesson- Weeding**

** Introductory Lessons, see Fall lesson plans*

***Lessons may be used in any semester as substitutions are needed*

Lesson 1 – Summer

Introduction to Garden/ Garden Management

Time: 1 hour

Materials

- Hoe
- Rake
- Hose
- Shovels
- Gloves
- Organic pest control tools

Learning Objectives

1. Introducing the students to the garden, create rules and talk about respect.
2. Review lesson on respecting the corn field and respecting yourself
3. Maintaining field and also talking and singing to plants
4. Learn how to control pests using traditional methods
5. Students should know that all animals have teachings

Activity/Lesson

Introduction:

Summer youth and elder program- 8 lessons

Passing the teachings from an elder to the youth

Look at garden

Work and reward of a corn field

Garden rules: Respect yourself, one another, the garden

Basics of maintaining a corn field and why:

- Learn the corn song and what it means
- Listen to the Water Boy story and apply concepts to farming and gardening

Work in garden:

- Prepping/planning the garden
- Compost for the garden
- Planting
- Pulling weeds

Teaching Notes

Review lesson on respecting yourself, respecting the cornfield- making rules for the garden

Children should understand why maintaining a clean and neat garden free of pests and weeds will help produce healthier produce

Lesson 2 – Summer

Planting Cycles & Native plants

Time: 1 hour

Materials

- Hoe
- Rake
- Hose
- Shovels
- Gloves
- Native plants for transplanting
- List of common native plants
- Navajo Tea/ Mormon Tea

Learning Objectives

1. Review calendars, stars and moon cycles from previous lessons
2. Understanding common Native plants in the area
3. Transplanting of Native plants

Activity/Lesson

- Read story on how stars and moon were created
- Introduce the stars constellation and focus on "dilyehi" which is the sign that planting season has begun and will also determine when planting season will end.
- Handout for basic constellations
- Navajo Calendar- Navajo names and descriptions of the names
- Review common native plants (provide pictures)
- Transplant native plants- basic steps on how to do it.
- Scavenger hunt

Teaching Notes

Read story on how the moon and stars were created and talk about the moon cycles
Navajo calendar
Have children transplant Native plants such as sage and yucca

Lesson 3- Summer

Native Plants and Medicine

Time: 1 hour

Materials

- Handout
- Shovel
- Material
- Bowl
- PowerPoint

Learning Objectives

1. To identify medicinal and edible plants
2. Create picture, Navajo name, English name, medicinal/edible purpose of plant worksheets
3. Learn why you need to say a prayer for medicinal purposes.

Activity/Lesson

- Habitat hike with local Elder to identify plants in area
- Matching activity with common plants to their medicinal use
- Talk about common medicinal and edible plants
- Nature walk to Dodson Pond
- Yucca soap demonstration
- Corn plant to show the root, stem and leaves

Teaching Notes:

Take an elder on the walk with the children so they can explain why its important to make an offering to the plant

Elder and youth interaction is the primary goal of this lesson

Prepare some yucca soap and have children wash themselves with this.

Wool Dying

Time: 1 hour

Materials

- Plants
- Large Boiling Pot
- Firewood
- Wool for dying
- Drying rack
- Display of plants used for dying wool

Learning Objective

Children will identify Native plants used in dying wool

Activity/Lesson

1. Invite Elder to give demonstration of Wool dying
2. If there is time, have children participate

Teaching Notes

Opportunity for Elder visit and interactive wool dying demonstration.
The purpose of the lesson is to introduce to children how Native plants are used other than for medicinal or food purposes.

Sheep Camp and Farm Field Trip

Time: 4 hours

Materials

- None

Learning Objective

Children will visit a sheep camp and farm. Will have the opportunity to work on the farm and learn the day to day activities of maintaining a farm or sheep camp

Activity/Lesson

Field trip

Teaching Notes

- Elder, farmer, and youth interaction for half day activity.
- Children will work alongside elders on the farm and ranch
- Plant corn in May, wait approximately 100 days before harvesting
- Harvest in mid-summer

Lesson 6 - Summer

Corn Pollen Harvesting

Time: 1 hour

Materials

- Large bowls
- Sifter
- Cloth material

Learning Objectives

1. Learn the traditional definition of harvest - harvesting represents old age
2. Harvesting
3. Ceremonial purposes of corn pollen
4. Corn pollen is first to be harvested, then about 3 weeks later the corn is harvested
5. Different cycles of harvesting and why

Activity/Lesson

Discuss the traditional definition of harvesting.

Demonstrate how to harvest plants

Life cycle of plants represents seed to old age

Tasting of corn pollen

Lesson 7 – Summer

Making Cooking Tools

Time: 1 hour

Materials Needed

- Sticks from diwoozhi plant
- Knife
- Sandpaper
- Handouts
- Cross-word puzzles

Learning Objectives

1. Review spring lesson 8 – handout on traditional tools used in planting and their use
2. Children will learn how to make stirring sticks (idistiin) used in preparing Navajo cake and blue corn mush

Activity/Lesson

- Making stirring sticks
- Learning about other traditional cooking tools (grinding stones and brush)

Teaching Notes

Prepare sticks ahead of time, have several adults on hand to assist groups of 4 students

Knives will be used by the teacher

Kids will sand down the sticks with sand paper

Lesson 8 – Summer

Preparing for Harvest

Time: 1 hour

Materials

None

Learning Objectives

1. Review Spring lesson K'e – kinship and why it's important to share
2. Review corn plant model and how it applies to planning
3. Children should decide how much of their harvest to share and sell
4. Children will learn the signs of harvest
5. Learn to help each other as a community

Activity/Lesson

- Identifying and learning the signs that crops are ready to be harvested
- Each student should outline a plan on how to divide their harvest among family and how much to sell
- Ask students how they will utilize their produce sales to improve their garden
- Students should consider how much of their food they will store, consume, and sell.
- Students should also consider how they will save their seeds

Teaching Notes

Look for signs of harvest such as drying of tassels, drying of stems on watermelon, smell and look of plants.

Talk about different methods of food storage for later lessons.

Saving seeds will also be a future activity so children should be aware of which seeds need to be saved.

Sheep Shearing

Time: 1 hour

Materials

- Sheep
- Shearing scissors
- Tables

Learning Objectives

1. Sheep is life
2. When to shear a sheep
3. How to shear a sheep
4. Using K'e to get help

Activity/Lesson

- Elder will talk about the importance of having sheep
- What are the different ways sheep help the Navajo way of life
- When to shear a Sheep
- How to shear a sheep

Teaching Notes

- Elder to talk about history of sheep and sheep herding.
- Discuss why we herd sheep.

** Floater Lessons 12 – See Fall Lesson Plans