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## Teaching Medicinal Plants Used by Native Americans

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# I-LEARN TEACHING RESOURCES

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## *Teaching Medicinal Plants Used by Native Americans*

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**Summary:** Many plants around the world have been used in traditional medicine practices for generations. Native Americans in the Great Plains utilize different native plants for multiple purposes. These purposes vary from ceremonial use, medicinal use, and food sources. Medicinal uses range from curing headaches to being used in research to cure cancer. The four plants discussed in this lesson are significant to the Lakota, Nakota, and Dakota culture.

**Lesson Description:** In this lesson, students will also be able to identify four medicinal plants, describe their characteristics and discuss medicinal uses. Students will use their senses to experience the uses of these medicinal plants. The plants highlighted in this lesson are Chokecherry Tree, Prairie Sage, Lead Plant, and Purple Cornflower. The senses used may consist of smelling the aroma of sage, burning the root of the purple coneflower, or tasting the infusion of the Lead Plant.

**Grade Level:** Grades K-5

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**Estimated Time for Completing Activity:** One 50-minute period

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### **Learning Outcomes:**

- Students will identify four medicinal plants.
  - Students will describe morphological characteristics of four medicinal plants.
  - Students will explain the uses of the four medicinal plants.
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### **South Dakota Standards of Learning:**

#### **South Dakota Agriculture, Food, and Natural Resources Cluster Standards**

- PS 1.2 Classify and identify plants.

#### **South Dakota Oceti Sakowin Essential Understanding and Standards**

- Essential Understanding 1: Indicator 1: Analyze the land base and natural resources of the nine reservations in South Dakota.

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- Essential Understanding 1: Indicator 2: Analyze the interrelationships of Oceti Sakowin people, places, and the environment as they relate to all reservations in South Dakota.
  - Essential Understanding 7: Indicator 2: Analyze the actions taken by individuals and communities in an effort to bring about positive social change.
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**Prerequisite:** None

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## **Materials:**

- Plant pictures (Chokecherry Tree, Prairie Sage, Lead Plant, and Purple Cornflower)
  - Medicinal plant worksheet
  - Chokecherries
  - Dried White Sage
  - Purple Coneflower heads
  - Dried Leadplant
- 

## **Vocabulary:**

- Medicinal
- 

## **Lesson Links:**

- [https://www.wildflower.org/plants/result.php?id\\_plant=ecpu](https://www.wildflower.org/plants/result.php?id_plant=ecpu)
  - <https://plants.ces.ncsu.edu>
  - <https://puc.sd.gov/commission/dockets/HydrocarbonPipeline/2014/HP14-001/testimony/betest.pdf>
- 

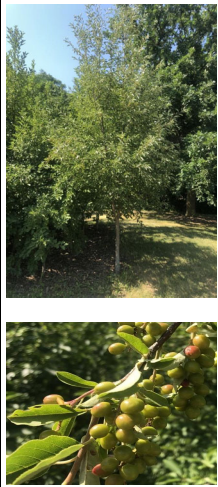



## **Background:**

Traditional Lakota thought describes the Native American relationship to, not only plants, but all living matter on Mother Earth in a single phrase “Mitakuye Oyasin”, which translates to “we are all related”. The phrase “We are all related”, is not specifically targeted to our families or communities but to what the Lakota people understand to be living or alive. Lakota people recognize the power of the sun, wind, animals, stars, insects, plants, spirit world, specific places on earth and all humans. When Lakota people concentrate on plants and their medicines, they have to take in account all of these components of life as well. Medicinal plants to the Lakota people have always been more than just a physical treatment to a human, but a spiritual one as well. When learning about plants or harvesting we should treat the plant as a relative like how we would treat a brother, sister, father or mother.

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Most plant medicines that are ceremonial and are integral part of Native American sacred ceremonies. Native people collect these sacred plant medicines depending on the time of year to remain in balance with themselves and other relatives such as the stars, spiritual world and mother earth. So, plants are here on Mother Earth to be our relative and vice versa, that recognized relation should always be honored.

**Plant Information Table**

<b>Common Name</b>	Chokecherry Tree	Purple Coneflower	White Sage	Lead Plant
<b>Latin Name (Family name)</b>	<i>Prunus virginiana</i>	<i>Echinacea purpurea</i>	<i>Artemisia ludoviciana</i>	<i>Amorpha canescens</i>
<b>Lakota Name</b>	Čhanpǎhá	íčhápe hú	pǎžeží hóta	ziŋtká wóte
<b>Image (s)</b>				
<b>Morphological Characteristics</b>	Large deciduous shrub or small tree; egg-shaped leaves with the edge being Serrate; white flower; The red fruit	Flowers occur singly atop stiff stems and have domed, purplish-brown, disc flowers in the center and drooping lavender rays around them	Leaves are lance shaped and are striking silvery-green and fragrant; could have yellow, white, or gray flowers.	Leaves are covered with short, dense hair; the covering gives a gray tint to the leaves; tiny purple flowers.

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	turns black when ripe.	in a daisy-like fashion.		
<b>Medicinal Uses</b>	Branch and branch bundles used in Native American ceremonial uses; fruits are eaten and dried for later; stems are sometimes used to make arrows	Root is chewed to relieve toothache, sore throat, tonsillitis, stomachache; the smoke from burning the root is inhaled to treat headaches; the dried prickly head is used to brush hair; echinacea is also being investigated to treat cancer	Leaves and stems burned for smudging; infusion used to treat stomach aches and disorders; used in Native American traditional ceremonies	Leaves are used to make tea; the tea can stand alone as an excellent beverage but is also effective in treating lung congestion; leaves dried and added to smoking mixtures; leaves used in baths to treat eczema

## Interest Approach

Post pictures of the four medicinal plants onto the board and ask students if they are familiar with these plants or have any background knowledge.

Introduce the plants as medicinal plants and explain their importance to Lakota, Nakota, and Dakota tribes.

## Procedure:

Introduce each plant individually and describe physical characteristics along with medicinal uses. For example: This is a Chokecherry Tree also known as *Prunus Virginiana* also known as čanpǎ́ in the Lakota language. A Chokecherry Tree is a large deciduous shrub or small tree. The leaves are egg-shaped and may have black or red fruit. This tree can also have white flowers. This tree has been used in Native American ceremonies and was also utilized to make arrows. The fruit of this tree was a source of food.

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After introducing the plant, allow students to interact with each plant by providing a part of the plant to each student.

For example: After introducing the Chokecherry Tree, pass out chokecherries to each student to taste and experience the fruit.

After experiencing the plant, allow students to share their experience and discuss how this experience made them feel.

Repeat these steps for all four plants.

Students by now are familiar with each of the medicinal plants, pass out the medicinal plant worksheet and encourage students to use the pictures of each plant to complete. (An alternative assessment is to match terms to the pictures of the medicinal plants. Attached are cutout terms that correlate to each medicinal plant).

## **Assessment:**

- Engagement in group discussions during interest approaches.
- Discussion on medicinal plants
- Ability to identify the four medicinal plants
- *Medicinal Plant Worksheet*

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## Identification of Medicinal Plants

### **Plant #1**

Name of Plant:

Latin Name:

Lakota Name:

Plant Characteristics:

Medicinal Uses:

### **Plant #2**

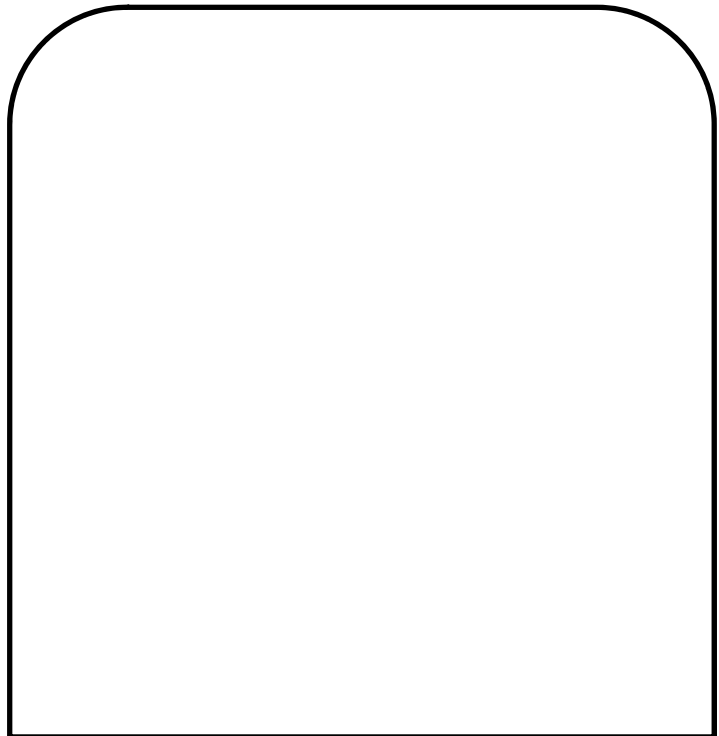
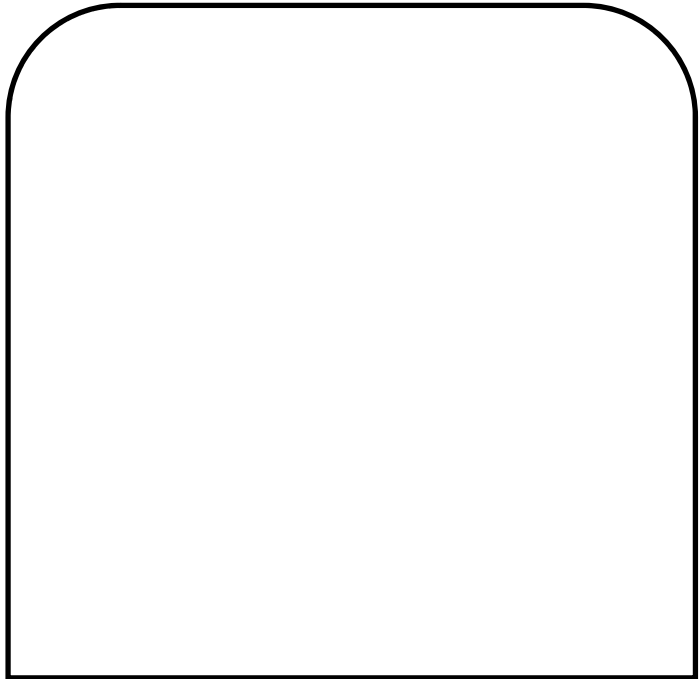
Name of Plant:

Latin Name:

Lakota Name:

Plant Characteristics:

Medicinal Uses:



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## Plant #3

Name of Plant:

Latin Name:

Lakota Name:

Plant Characteristics:

Medicinal Uses:

A large, empty rounded rectangular box with a black border, intended for handwritten notes or drawings related to Plant #3.

## Plant #4

Name of Plant:

Latin Name:

Lakota Name:

Plant Characteristics:

Medicinal Uses

A large, empty rounded rectangular box with a black border, intended for handwritten notes or drawings related to Plant #4.



# I-LEARN TEACHING RESOURCES

## Chokecherry Tree Cutouts:

<i>Prunus Virginiana</i>	čhanphá
Large deciduous shrub or small tree; egg-shaped leaves with the edge being serrate; white flower; The red fruit turns black when ripe.	<b>Medicinal Use:</b> Branch and branch bundles used in Native American ceremonial uses; fruits are eaten and dried for later; stems are sometimes used to make arrows

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## Lead Plant Cutouts:

<i>Amorpha canescens</i>	ziṅtká wóte
<p>Leaves are covered with short, dense hair; the covering gives a gray tint to the leaves; tiny purple flowers.</p>	<p><b>Medicinal Uses:</b> leaves are used to make tea; the tea can stand alone as an excellent beverage but is also effective in treating lung congestion; leaves dried and added to smoking mixtures; leaves used in baths to treat eczema</p>

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## Prairie Sage Cutouts:

<p><i>Artemisia ludoviciana</i></p>	<p>p̄heží hóta</p>
<p>Leaves are lance shaped and are striking silvery-green and fragrant; could have yellow, white, or gray flowers.</p>	<p><b>Medicinal Uses:</b> leaves and stems burned for smudging; infusion used to treat stomach aches and disorders; used in Native American traditional ceremonies</p>

# I-LEARN TEACHING RESOURCES

## Purple Coneflower Cutouts:

<p><i>Echinacea purpurea</i></p>	<p>íčhápe hú</p>
<p>Flowers occur singly atop stiff stems and have domed, purplish-brown, disc flowers in the center and drooping lavender rays around them in a daisy-like fashion.</p>	<p><b>Medicinal Uses:</b></p> <p>Root is chewed to relieve toothache, sore throat, tonsillitis, stomachache; the smoke from burning the root is inhaled to treat headaches; the dried prickly head is used to brush hair; echinacea is also being investigated to treat cancer</p>

# I-LEARN TEACHING RESOURCES

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