

**LESSON: Meet a Prairie Plant GRADE: 1st TIME: 45 min.****SUMMARY:**

Based on their prior knowledge, students generate questions about prairie plants. With the help of a field leader, students explore off trail and use their sense of sight, touch, and taste (where safe) to meet a prairie plant and answer their questions. Students are encouraged to use illustrations and words to record their discoveries and to describe their prairie plant's parts- leaves, stems, flowers, seeds, and/or roots (if possible) - in their nature journals. Afterwards, students describe their prairie plant to the rest of the class as if they were introducing a new friend. Students are required to share why they like their plant and aspects of their plant that make it special.

OBJECTIVES: Iowa Core**Science****Heredity: Inheritance & Variation of Traits**

1-LS3-1 Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

Literacy**Writing**

- W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

Speaking and Listening

- SL.1.1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.
- SL.1.4. Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.
- SL.1.5. Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.
- SL.1.6. Produce complete sentences when appropriate to task and situation.



MATERIALS & RESOURCES:

- Blank paper or nature journals
- Colored pencils
- Clip boards

PRESENTATION:

Explain to students that today, they will be learning about prairie plants. Write the words “prairie plants” on the white board and have the students read the words with you to practice pronunciation.

DIRECTIONS:

1. Create a chart on the board that has 3 columns. Label one column “know”, the next “wonder”, and the third, “learn.” Explain that this is how learning begins. Naturalists figure out answers to their questions by thinking about what they already know, then asking more questions, and then thinking about what they discovered.
2. Gauge students’ background knowledge by asking the students, “What do you already know about prairie plants?” If students need extra guidance ask them specific questions such as: What are the needs of plants? Do all plants have the same needs? What are the parts of plants? Where do plants get their food? How do those parts help the plants (what is the function or job of roots, flowers, leaves, etc.)? Record their answers on the board under the column labeled “know.”
3. Explain that in a few minutes they will be going outside to find and explore a very special prairie plant. They will be writing and drawing about their prairie plant. Ask if students have questions about prairie plants. Guide students to ask a question that they can find an answer to by looking outside. Provide one or two examples: I wonder if...I will be able to see the roots of the prairie plant? I wonder how tall the prairie plant is? How many leaves will the prairie plant have? Call on students who have questions. Record a few questions on the board under the column labeled “Wonder.”



4. Explain to the students that they are now almost ready to go outside and explore their prairie plant. Pass out clip-boards, paper (nature journals) and colored pencils to each student.
5. Explain to the students that they should use numbers, words, and pictures to describe their plant. They should do it as detailed as possible. They will need to label all the parts of the plants. Tell students that they should be trying to answer some of the questions they have while they are outside too.
6. Tell students that in a few minutes they will be split up into small groups with their adult chaperone or teacher. Make eye contact with the adult chaperons and teachers. Explain to them that they will each get a small group of students. When the class gets outside, they should take their group to a spot on the prairie. They should choose just one plant and everyone in the group should journal about their special plant. When journaling, everyone should be quiet, so that each naturalist can think about their questions and concentrate on their drawing. However, the adult leaders are welcome to ask their fellow naturalists questions about their plant or help their naturalists look for details on their plant.
7. Divide students into groups. Have all the groups form a single file line to get ready to head outside. Make sure that the students have all of their materials. Remind students that naturalists are happy outside, explorers, adventurers, respectful, and quiet. They ask questions, use words, numbers and pictures, and share their discoveries.



8. When outside direct adult chaperones where you would like them to sit and journal. Make sure that groups are fairly close to one another. Sit in the middle of all the groups- so that they can hear you fairly easily. Have all the students sit down and begin journaling. While journaling, quietly talk to the entire class and ask them questions. Tell students that they should not answer out-loud but think about the questions in their head and then write them down on their paper if they want. Ask questions like: How many colors do you see on their plants? Describe the leaves, are they smooth or rough and what shape are the leaves? What about the plant's roots & flowers? Use some of the "I wonder" questions that the students had in the classroom too. How do the young plants look similar and different from the parent plant?
9. After about 10 minutes, ask students and adult chaperons to line up to head back inside. Instruct students that while they are walking to go back inside, they should think about the discoveries they made and get ready to share them with the other naturalists.
10. Once inside, walk around the room and look at the students' journal entries. Ask students what discoveries they made about prairie plants today. What did they learn by looking closely at prairie plants? See if students can answer their wonder questions. Record their answers under the column "Learn" on the board. If students need further prompting, ask students- What was special about your plant? What did your plant look like? How do the young plants look similar and different from the parent plant?
11. At the end of the lesson, explain to students that today they discovered how magical plants can truly be if they just look closely at them. Tell students that if they like change, then they should study plants. Everyday a plant changes- whether they bloom a flower, grow taller, change to brown in the fall, or gain seeds- there are endless discoveries to be made about prairie plants. They do not have to come to Neal Smith NWR to track these changes either; they can do it in their very own yard, at school, or anywhere outside. Explain that the world needs more naturalists who will stop to examine the beauty of plants.



4/6/16

Teachers-Going-Green.com

Meet a Prairie Plant/ Science & Literacy

This lesson is a part of Project Bluestem at Neal Smith National Wildlife Refuge

REFLECTION/JOURNAL PROMPT:

Date
Time
Weather
Location

My Prairie Plant

Parts of Plants

By: Caden

- My plant has yellow petals.
- The stem has three green leaves.
- The stem is round and brown.
- The leaves feel warm and dry.
- It has no smell.
- It is as tall as my knee.

The young plant does not have a flower and the leaves are smaller.
The young plant is shorter.



4/6/16

Teachers-Going-Green.com

Meet a Prairie Plant/ Science & Literacy

This lesson is a part of Project Bluestem at Neal Smith National Wildlife Refuge

How to greet and meet *Prairie Plants*

It's *the prairie plant you want to meet* when-

+*Your heart pounds*

+*You feel amazed*

+*You want to spend time admiring it*

Get to know *Plants* (everyday):

- *How many colors can you find?*
- *How do the leaves feel?*
- *What is the shape of the leaf? The plant?*
- *Are the roots visible? Why or why not?*
- *Does it have a flower? A seed?*
- *How does the plant smell?*

You'll never be bored

