



Prairie Curriculum

PRAIRIE WEEK – DAY 3

“Grasses of the Prairie”

TEACHER’S GUIDE
Kindergarten – 4th Grade

Time needed: 30 – 45 minutes
Materials needed: Paper, pencil, crayons, colored pencils

Background: Today we’ll learn about the grasses of the prairie – how they rule!

Slide 1 **Grasses of the Prairie. They RULE!!!**

Slide 2 **Grasses rule the prairie...**

QUESTION: Why do you think grasses rule the prairie?

Slide 3 **Roots!**

- The roots of the grasses – called “fibrous roots” – act like a sponge
- They are very dense in the first 12” of soil and can quickly absorb water when it rains
- These spongy roots can stop the water from going deeper into the soil

Slide 4 **Grass roots can keep water away from other plants**

- Grasses can out-compete other plants by quickly and efficiently absorbing the water before it can go to other plants
- Trees, especially, have a very difficult time living on a prairie when the grasses keep the water away from them.

DRAW what you think the roots of the prairie grasses look like under the soil.

- Slide 5 **Grasses have a super-power!**
- Grasses can pretend to be dead if the weather is very and dry – they turn yellow.
 - But, once it rains again, the grasses start growing, and they can grow really fast!

- Slide 6 **Grasses store food and water underground.**
- Grasses can survive very bad conditions
 - Hot
 - Dry
 - Cold
 - Fire
 - They can use their underground food and water to survive (go into “dormancy”) and begin to grow again when conditions improve.

- Slide 7 **In the tallgrass prairie, there are two seasons for grasses:**
- Cool-season grasses
 - Warm-season grasses

QUESTION: What months do you think the cool-season grasses grow?
How about the warm-season grasses?

- Slide 8 **The cool-season grasses begin growing in early spring – during the month of March.**

This is when the prairie is bright green!

- Slide 9 **Grasses grow for a couple of months**
- At the end of their season of growth, they make seeds at the very tops of the stems.
 - These are called “seed heads”
 - Different kinds of grasses have different shapes and sizes of seed heads.

- Slide 10 **When the cool-season grasses are done growing and have made their seeds, they begin to turn from green to gold.**

This is when the prairie turns yellowish-green

TEACHER HELP: the prairie turns from bright green (May) to yellowish-green in July. This signals the transition between the cool-season plants and the warm-season plants. There is another transition in the color of the prairie after the first freeze of autumn – which usually occurs at the end of October or first couple weeks of November. This is when all of the above-ground vegetation dies and the prairie turns golden. The prairie will remain this color until the next spring when it is burned and the new growth comes up a lush green color.

Slide 11 **The warm-season grasses begin growing in early summer and can get very tall in July.**

Slide 12 **The tallgrasses sometimes don't get very tall...**

QUESTION: What do you think determines whether the tallgrasses get tall, or not?

Slide 13 **RAIN!**

The more rain the prairie gets in July, the taller the warm-season grasses get.

Slide 14 **Next – let's learn some of the different grasses...**

We use three things to help us identify them

- 1. Whether they are cool-season or warm-season grasses**
- 2. How tall they are**
- 3. What their seed head looks like**

Slide 15 **Big Bluestem**

- Is the tallest warm-season – it can get over 9' tall!**
- It has a seed head that looks like a "W"**
- Because Wild Turkey feet look like a "W", this grass is often called "Turkey Foot"**

Slide 16 **Indiangrass**

- It's seed head looks like a golden feather
- We see a LOT of Indiangrass in September and October
- It gets over 7' tall

Slide 17 **Switchgrass**

- This grass is also tall – often over 7' tall
- Its seed head is really distinctive – it looks like exploding fireworks

Slide 18 **Little Bluestem**

- This grass is shorter than the others
- It can still get over 5' tall
- This is the state grass of Kansas
- It's seed head looks like curly eyelashes

Slide 19 **Can you remember the names of these grasses?**

1. **Big Bluestem**
2. **Indiangrass**
3. **Switchgrass**
4. **Little Bluestem**

Slide 20 **We hope you get a chance to go outside on the prairie in the autumn to find these grasses!**

Slide 21 **Next - is Fire on the Prairie!**