



Lesson Title: Ecosystems and Wildfire

Grade Level: 2nd-5th

Purpose: Teach age appropriate skills for fire and life safety while teaching to statewide learning standards.

Standards:

Next Generation Science Standards

Science

[LS2.C: Ecosystem Dynamics, Functioning, and Resilience](#)

When the environment changes in ways that affect a place's physical characteristics, temperature, or availability of resources, some organisms survive and reproduce, others move to new locations, yet others move into the transformed environment, and some die.

[LS4.D: Biodiversity and Humans](#)

Populations live in a variety of habitats, and change in those habitats affects the organisms living there.

[LS2.C: Ecosystem Dynamics, Functioning, and Resilience](#)

When the environment changes in ways that affect a place's physical characteristics, temperature, or availability of resources, some organisms survive and reproduce, others move to new locations, yet others move into the transformed environment, and some die. (*secondary to 3-LS4-4*)

[LS4.C: Adaptation](#)

For any particular environment, some kinds of organisms survive well, some survive less well, and some cannot survive at all. (3-LS4-3)

Safety:

- Campfire Safety
- Preventing Wildfires

Objectives: The students will demonstrate understanding of:

- Ecosystems
- Forests and Fire
- Grasslands and Fire
- Wildland vs. Structure
- Prevention

Vocabulary:

- **Topography**-the physical features of an area of land.
- **Ecosystem**-an area that is made up of the living and nonliving things that work in relationship with one another.
- **Biotic**-the living things in an area.
- **Abiotic**-the non-living things in an area.
- **Backfire/Back Burn**-the process of using fire to fight fire by eliminating the fuel in the path of a wildfire.

Time: 40-50 minutes for presentation and demonstration.



Instructional Content:

Use this bulleted list to guide you and keep you on track and meeting all objectives for lesson. Everyone has their own style for teaching, the most important thing is the make it fun and engaging for the kids.

• **Warm up Activities: (5-7 Minutes)**

- **Mini KWL:**
 - Ask students to individually make a mini KWL chart about ecosystems and wildfires.
 - K-What do you already know about ecosystems and wildfires?
 - W-What do I want to know about ecosystems and wildfires?
- **Bell Ringer:**
 - Wildland Fire Bell Ringer:
 - Have students complete the Wildland Fire Bell Ringer.
- **Entrance Ticket:**
 - Ask students to try to define: Topography, Biotic, Abiotic, Ecosystem, and Back Burn

• **Video:**

- Follow the link:
 - http://www.snofire7.org/preparedness_education/home_education_lessons/lesson-details.cfm?record_id=10
- Watch Video:
 - Run time: 30:03
- Have students fill out the worksheet as they watch.

• **Closure Activities: (5-7 Minutes)**

- **Wildland Fire Bell Ringer:**
 - Have students complete the exit ticket activity provided below the bell ringer
 - **Exit Ticket:** Look at all three pictures. For each picture, describe at least two abiotic and two biotic elements that make up each type of ecosystem. Describe how fire can change these elements in at least two of these ecosystems.
- **Exit Ticket:**
 - Ask students to use what they learned to add more detail to the definitions they wrote at the beginning of class for the following terms: Topography, Abiotic, Biotic, Ecosystem, and Back Burn
- **Mini KWL:**
 - Ask students to finish the last column for the KWL chart about ecosystems and Wildfire?
 - L-What did you learn?

Homework and Enrichment Activities:

- Wildland Fire Homeschool Lesson Worksheet
- Wildfire Prevention Activity
- Smoky The Bear Worksheet
- Campfire Safety Checklist

Handouts:

- Wildland Fire Bell Ringer
- KWL Chart



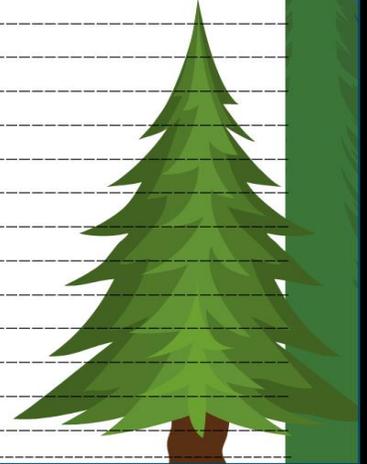
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WILDLAND FIRE BELL RINGER



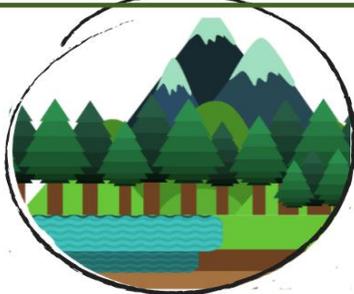
FREE WRITE

Look at all three pictures. Write about the qualities that make each place different. How are the animals, plants, weather, and soil different in each place?



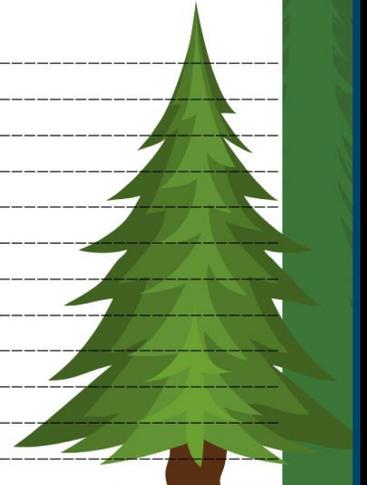
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WILDLAND EXIT TICKET



RESPOND

Look at all three pictures. For each picture, describe at least two abiotic and two biotic elements that make up each type of ecosystem. Describe how fire can change these elements in at least two of these ecosystems.



MINI KWL CHART



NAME OF STUDENT:

SUBJECT:

LESSON:

**WHAT I
KNOW:**

**WHAT I
WANT TO
KNOW:**

**WHAT I
LEARNED:**

