

WILDLAND FIRE MISCONCEPTION

True or False?



Grade Level: 4-12

Alaska State Content Standards: LE2

Subject: Language

Skills: Application

Duration: 1/2 class period

Group Size: Individual

Setting: Indoors

Vocabulary: Prescribed burn

OBJECTIVE

Students will misconceptions about wildland fires in Alaska.

TEACHING STRATEGY

Students determine if statements about wildland fires are true or false.

MATERIALS

- True or False, Forest Fire Misconceptions Student Worksheet.

TEACHER BACKGROUND

True or False, Forest Fire Misconceptions Answer Sheet.

PROCEDURE

Brainstorm some of the beliefs students may have about wildland

fires (such as "fires should never be allowed to burn" or "prescribed burns always start larger forest fires.")

1. Give each student a copy of the student worksheet, True or False, Forest Fire Misconceptions. Have them read the statements and mark them as true or false.
2. Use the answer sheet to discuss their answers.

EVALUATION

Have students choose one animal in their drawing and write a story about the effects of a fire from the animal's point of view.

TRUE OR FALSE, WILDLAND FIRE MISCONCEPTIONS

Circle true or false for each forest fire statement listed below.

1. Some wildland fires in Alaska are allowed to burn naturally without any attempt to contain, extinguish, or diminish them. **T or F**
2. Wildland fires kill all of the wildlife in the forest. **T or F**
3. Forest fires in Alaska, once started, burn everything growing in the forest. **T or F**
4. Wildland fires in Alaska create vegetation mosaics. **T or F**
5. Lightning is the most common cause of wildland fires in Alaska's interior. **T or F**
6. In an act of fairness, Alaska manages all wildland fires the same throughout the state. **T or F**
7. Prescribed burns always start as larger, out of control fires. **T or F**
8. All wildland fires are detrimental to wildlife. **T or F**
9. All wildland fires are detrimental to plants and trees. **T or F**
10. Wildland fires are part of a healthy ecosystem. **T or F**
11. One large burn is better than frequent small burns. **T or F**
12. Wildfires are fought to save the forest. **T or F**
13. If you pour water on your campfire and the smoke stops coming out, then the fire is completely extinguished. **T or F**

TRUE OR FALSE, WILDLAND FIRE MISCONCEPTIONS ANSWER SHEET

Circle true or false for each forest fire statement listed below.

1. *Some wildland fires in Alaska are allowed to burn naturally without any attempt to contain, extinguish, or diminish them.* **T**

In the Alaska Interagency Wildland Fire Management Plan there are four (4) fire management options:

- 1) Critical Management Option is the highest priority given to suppression action when there is a threat to human life, inhabited property, designated physical developments, and structural resources designated as National Historic Landmarks.
- 2) Full Management Option protects cultural and historical sites, uninhabited private property, and natural resources.
- 3) Modified Management Option intends to provide a higher level of protection when fire danger or risks are high, and a lower level of protection when fire danger risks are low. It balances acres burned with suppression costs to accomplish land and resource management objectives.
- 4) Limited Management Option is for areas where the cost of suppression may exceed the value of the resources being protected. Suppressing the fire may have negative effects on the resources, or suppressing the fire may have negative effects on the fire dependent ecosystem.

(From the US Government Printing Office: 2000-573-278/21012 Region 8)

2. *Forest fires kill all of the wildlife in the forest.* **F**

Most of the wildlife living in the area will move out of the area or seek underground shelter until the fire passes. Very little wildlife is lost due to fires.

3. *Wildland fires in Alaska, once started, burn everything growing in the forest.* **F**
There are 3 different kind of fires: 1) **canopy fires** which burn in the tree tops, 2) **ground fires** which burn under the organic layer of the ground, and 3) **surface fires** which burn on the surface of the ground. These fires can be of low intensity or high intensity. Only high intensity fires burn most everything in the area of the fire.

4. *Wildland fires in Alaska create vegetation mosaics.* **T**
Wildland fires rarely burn in the same way or same intensity or totally sweep and entire area. They often skip around, leaving tracks of untouched forest in between burn. Throughout a forested area you may find a variety of successional stages from meadows to shrubs to mature stands.

5. *Lightning is the most common cause of wildland fires in Alaska's interior.* **F**

In a typical year, lightning strikes cause about half (200) as many fires as those caused by humans (400).

6. *To be fair, Alaska manages all wildland fires the same throughout the state.* **F**
(See answer explanation to #1.)

7. *Prescribed burns always start as large, out-of-control fires.* **F**
The purpose of a prescribed burn is to start a low intensity, small fire that will minimize the forest fuel. When done frequently, it can minimize the chance for high intensity fires.

8. *All wildland fires are detrimental to wildlife.* **F**
Wildland fires create a vegetation mosaic that is beneficial to many animals.

9. *All wildland fires are detrimental to plants and trees.* **F**
There are many species of plants and trees that need fire in order to reproduce. Some fires can be beneficial to plants by providing more sunlight to sun-loving species. Fire also releases nutrients and warms the soil, making plant growth more successful.

10. *Wildland fires are part of a healthy ecosystem.* **T**
Wildland fires are needed to create plant diversity and animal diversity. Fires release nutrients, warm the soil, and encourage regeneration of certain species.

11. *One large burn is better than frequent small burns.* **F**
Smaller, lower intensity fires are better for a forest than a large, high intensity burn. A small fire will burn out the excess fuel, warm the soil, and create plant diversity.

12. *Wildfires are fought to save the forest.* **F**
Forests do not need to be “saved” from fire as fire is a natural part of the forest. Wildland fires are fought to protect human life, human property, or natural resources deemed valuable.

13. *If you pour water on your campfire and find no visible smoke, then the fire is completely extinguished.* **F**
While smoke may not be visible, the campfire can be burning underground in a **ground fire** sometimes as far as a foot or more under the surface. Pour soil on the campfire along with water and stir. You will know the campfire is out when the area around it is cool to the touch.