# Junior Wildland Firefighter Activity Book







# How to become a Junior Wildland Firefighter:

Complete all the activities in the booklet. Ask an adult for help if needed.	Boise, Idana
Sign the certificate and promise to share wildfire prevention messages with your friends and family!	00,10
Ask your parents or guardians to email us at BLM_FA_NIFC_Comments@blm.gov to earn a sticker!	Ann Respect Inteller

## Fire's role in nature

Fire is a natural and important part of nature. It has helped shape forests and other wild areas for a long time and is important for many plants and animals to survive. Fire helps keep nature healthy by cleaning up dead branches and leaves, providing nutrients for new plants to grow, and getting rid of weeds and harmful insects. After a fire, new plants grow quickly and provide food for animals.

The health of nature depends on how often and where fires happen. Many places need fires to burn regularly to stay balanced. In some places, firefighters may light a fire to benefit the landscape and reduce risk of wildfires. This carefully planned fire is called a prescribed burn. Plants and animals that live where fires occur have special ways to live with fire, called adaptations. For example, some trees need fire to open their cones and spread their seeds, these are called serotinous. Other trees have very thick bark that protects them from the heat of a fire.

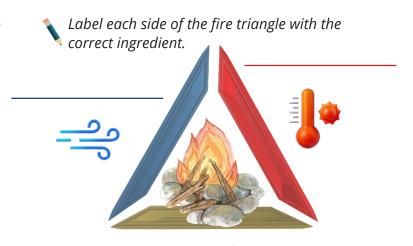


# Fire ingredients

Fire is a chemical reaction. Three ingredients are needed for a fire to exist:

- 1. Fuel is anything that will burn.
- 2. Heat is needed to get the fire going.
- 3. Oxygen is in the air all around us.

These three ingredients fuel, heat and oxygen are called the fire triangle. When fuel, heat and oxygen combine, a fire can start.



## What is fuel?

Fuel is anything that can catch fire!
The amount of moisture inside plants
determines how easily they can burn. Fuel
can be categorized by types of plants and
where they are found on the landscape.

Ladder fuels are live or dead plants that allow the fire to climb to higher levels of shrubs and trees.



Circle which types of fuel you see where you live. You may circle more than one.









## Fire science

Fire scientists understand how fire has shaped our historical landscapes and how to use fire to restore and maintain habitats and historical sites (like battlefields). They are experts in protecting sensitive plants, animals, and natural and cultural resources (old buildings and artifacts) during a wildfire.



Draw a line from the scientists to what they study.



Study where water comes from, where it goes and how it moves through rivers, lakes and the ground.



Study animals in their natural homes, what they eat and how they behave.



Study fire's effects on historic and prehistoric sites and artifacts and advises on how to protect sites in the event of a fire.



Study how wildfires affect plants, animals and the environment.

## Fire ecology

Wildfires are a natural part of our world, occurring in ecosystems like forests, grasslands, shrublands and wetlands where plants and animals live together. Fire ecology is the study of how fire affects these places.

Scientists like ecologists, biologists, botanists, and archeologists work hard to understand wildfires. They study how fire can be beneficial for nature and how to protect important resources. Natural resources are



places where animals make their homes, like the forests and grasslands. Cultural resources are treasures from the past, like arrowheads, old coins, and other objects that tell stories about how people lived long ago.

By learning about wildfires, we can appreciate the way they help our world and how we can keep both nature and history safe for the future.

Look at the graphics below. Which ones might benefit from fire? Which ones need to be protected from fire? Write **benefit** or **protect** under each one.













# A message from Smokey

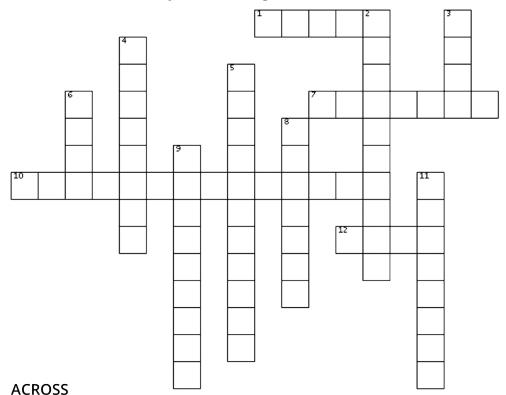


Make sure an adult is present anytime you're around fire. Remember **Smokey's ABCs:** Always **Be** Careful with fire. Smokey wants you to help protect our natural and cultural resources by preventing unwanted human-caused fires. Learn how by visiting <u>SmokeyBear.com</u>.

Smokey Bear image used with the permission of the USDA Forest Service, as provided in 16 USC 580p-1.

## CROSSFIRE!

Test your knowledge of wildfire science!



- 1. Plant that burns easily and spreads fire quickly
- 7. The science of living things and their environments
- 10. A fire lit on purpose to reduce fuel
- 12. Anything that can burn

#### **DOWN**

- 2. Describes cones that only release their seeds when there is heat
- 3. A standing dead tree
- 4. A mark left on a living tree by a past fire
- 5. The ways fire affects a landscape
- 6. Plant that will burn for a long time and produce a lot of heat if it catches on fire
- 8. The natural home of a living thing
- 9. The source of many fires not caused by humans



ANSWER KEY (not in order)

Habitat | Ecology | Lightning | Snag | Wildland | Fuel Prescribed burn | Serotinous | Fire effects | Grass | Tree | Burn scar

# Wildfire prevention story

The best way to fight wildfires is to prevent them from happening.



Fill in the blanks to create your own story and learn about ways to prevent wildfires.

Twas the night before packing the car to go, holiday	_while mom was
Dad was busy checking chains on the	to tow.
The tread-depth and air were checked on the with care,	e object
To prevent flats and limit wildfire-causing sp	arks to flare.
Preparing to for the week,	
The family brought to buil by the creek.	d a campfire dow
A shovel, bucket, and stick were on hand,	
To extinguish any campfire	on the land.
A proper campfire ring or pit built with conci	rete and stone,

Was placed 15 feet away from any dry vegetation shown.







After s'mores were and the flames barely a flicker,			
Dad said, "Off to bed," but mom did bicker.			
"Not yet," she not to repeat,			
"We must check the campfire coals for invisible heat!"			
"Pour lots of water, drown all the embers, and stir,			
Make sure no hissing sounds from the campfire occur."			
Dad reminded, "Once the campfire is cold to the touch,			
It is safe to leave withouttoo much."			
The family was safe and fun,			
Knowing that preventing fires was done.			
The next time you camp about,			
Remember it takes all of us to put fires out!			

Thank a firefighter today,

For protecting our outdoors so we can play!







## Campfire safety

A junior wildland firefighter knows how to be safe with campfires. A grown-up should always be present when your campfire is burning!

- Use a campfire ring or dig a pit away from hanging branches and tall grass.
- Circle the pit with rocks.
- Never leave a campfire unattended.
- Keep a bucket of water and shovel nearby.
- When you're ready to put out the campfire remember to DROWN STIR FEEL REPEAT.
- Drown the fire with water from your bucket, stir the embers, feel for heat with the back of your hand near the embers.
- Repeat the steps until it is COLD.



Can you find what's wrong with this picture?

	Use the campfire safety rules and write
	down what's wrong and unsafe.



Campfires can be fun if you remember the campfire safety rules!

## To burn or not to burn

Circle each item that is safe to burn in a campfire.



Firewood



**Plastic Wrappers** 



Metal



Garbage



**Bottles and Cans** 



Kindling

# Fighting fire is a team sport!

A lot of different people and equipment are needed to fight a wildfire.

Can you match each picture with its description?



FIREFIGHTERS attack the flames or build barriers around flames.

FIRE ENGINES carry firefighters and supplies as far as the road will take them!

PUBLIC INFORMATION OFFICERS keep people informed about the fire.

DISPATCHERS talk to firefighters by radio and order what they need.

AIRCRAFT carries firefighters, water, and supplies where roads do not go!

# Prepare a go bag!

A go bag is a small backpack or suitcase your parents can quickly grab if you need to leave right away due to a wildfire. It's important to be ready to go by building your emergency evacuation kit.

1

Draw a path connecting all the items you need to take if you had to evacuate your house.

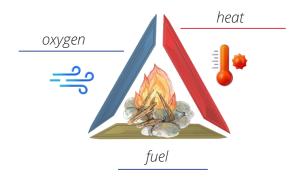


## Answer key:

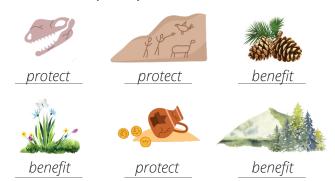
#### FIRE SCIENCE (PAGE 3)

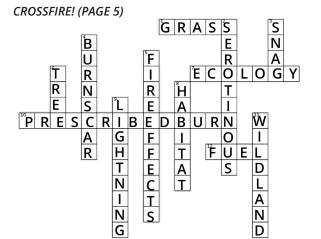
- Fire ecologists study how wildfires affect plants, animals and the environment.
- Fire archeologists study fire's effects on historic and prehistoric sites and artifacts and advises on how to protect sites in the event of a fire.
- Wildlife biologists study animals in their natural homes, what they eat and how they behave.
- Hydrologists study where water comes from, where it goes and how it moves through rivers, lakes and the ground.

#### FIRE INGREDIENTS (PAGE 3)



### FIRE ECOLOGY (PAGE 4)





#### TO BURN OR NOT TO BURN (PAGE 8)

The only things that are safe to burn are kindling and firewood.

#### **CAMPFIRE SAFETY (PAGE 8)**

- There is no stone ring around the campfire to prevent it from burning into nearby grass.
- The campfire is left unattended and people are sleeping nearby.
- The dog could get burned or could catch the stick on fire and start a wildfire!
- There's no water in the bucket to safely put out the campfire.

#### FIREFIGHTING IS A TEAM SPORT (PAGE 9)



### PREPARE A GO BAG! (PAGE 10)

start > pets > birth certificate > first aid supplies and prescriptions > photo album > cell phone > teddy bear or comfort item > cash > ready to go!



# It Takes All of Us National Wildland Firefighter Day - July 2 Show your support and thank a firefighter!



### **National Interagency Fire Center**

3833 S. Development Ave. Boise, Idaho 83705 208-387-5050 www.nifc.gov

