



John Cena

PLAYINGWITHFIRE

In Theatres November 8!

When straight-laced fire superintendent Jake Carson (JoÚ Cena) and his elite team of expert firefighters (Keegan-Michael Key, JoÚ Leguizamo and Tyler Mane) come to the rescue of three siblings (Brianna Hildebrand, Christian

Convery and Finley Rose Slater) in the path of an encroaching wildfire, they quickly realize that no amount of training could prepare them

for their most challenging job yet – babysitters. Unable to locate the children's parents, the firefighters have their lives, jobs and even

their fire depot turned upside down and quickly learn that kids – much like fires –are wild and unpredictable.

NATIONAL WILDLIFE FEDERATION IS TEAMING UP WITH PARAMOUNT PICTURES AND WALDEN MEDIA TO ENGAGE COMMUNITIES IN CONSERVATION SERVICE PROJECTS AND TO PLANT TREES FOR WILDLIFE™!



HEY KIDS, PARENTS AND EDUCATORS! As the film's education partner, NWF is providing a list of fun activities to help you learn about trees and projects you can do to save trees and wildlife.

Playing with Fire takes place in a beautiful forest. When you think of forests, you think of trees. But forests are complex communities with lots of trees and include soil, water, plants, and wildlife that make up the forest ecosystem. You know forests provide homes for wildlife. Trees have "tremendous" benefits for people too.

In the story, you meet an elite group of firefighters called smoke jumpers. These U.S. Forest Service smokejumpers are first responders who provide expertise and quick attack on wildland fires. So we have included tips for talking to kids about wildfire disasters; and simple actions anyone can do to restore our climate and to help nature recover.

For Educators: The activities are easily adapted for formal and non-formal settings for grades 3-5, with extensions for younger and older students. Your students will build new knowledge of trees and forests, define personal attitudes and values about the environment, and explore "green" jobs and careers.

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CREDITS:

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TREE-MENDOUS FUN!

Playing with Fire takes place in a beautiful forest. When you think of forests, you think of trees. But forests are complex communities with lots of trees and include soil, water, plants, and wildlife that make up the forest ecosystem. You know forests provide homes for wildlife

Did you know forests also produce lots of oxygen and absorb and store carbon? So maintaining forests is essential to combat climate change.

FUN FACTS TREES MAKE LIFE BETTER!

BETTER TEMPERATURES

Shade trees lower air temperatures during hot summers. And trees that lose their leaves in winter let the sun shine through to warm nearby buildings.

CLEANER WATER

Tree roots hold soil in place. This reduces the amount of soil washing into streams and rivers during rainstorms.

MORE BREATHABLE AIR

Trees are sometimes called "the lungs of the Earth" because their leaves take in carbon dioxide from the air and replace it with oxygen. An acre of trees produces enough oxygen for 18 people to breathe every day. Also, by taking in carbon dioxide as well as other gases, trees help us fight pollution and global warming.

HAPPIER

Scientists say that being near trees helps people feel happier and more relaxed. Also, kids have an easier time focusing on schoolwork after spending time outside with trees!

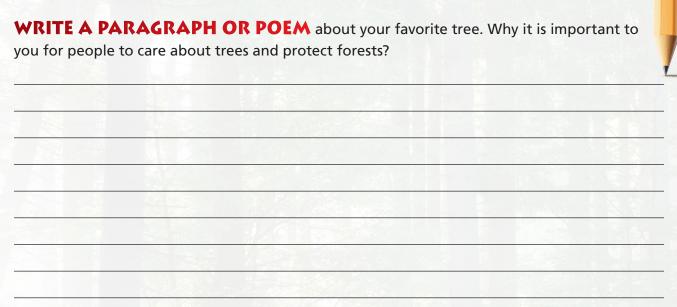
CLOSER COMMUNITIES

When people get together to plant and care for trees, communities grow stronger. Planting projects give people the chance to meet and become friends. Plus, helping trees grow is fun for everyone.

HOW CAN YOU SHOW YOUR "TREE APPRECIATION"?

GO OUTSIDE AND HAVE SOME FUN WITH TREES!

WHY ARE TREES IMPORTANT TO YOU?



Submit your paragraph to **enter our contest** and you could win a free advance screening of **Playing with Fire**.

Provide the name of your teacher or club leader for a chance to win \$500 worth of trees for your group to plant.

Go to www.nwf.org/PlayingwithFire to enter the contest now.

MORE FUN FACTS ABOUT TREES

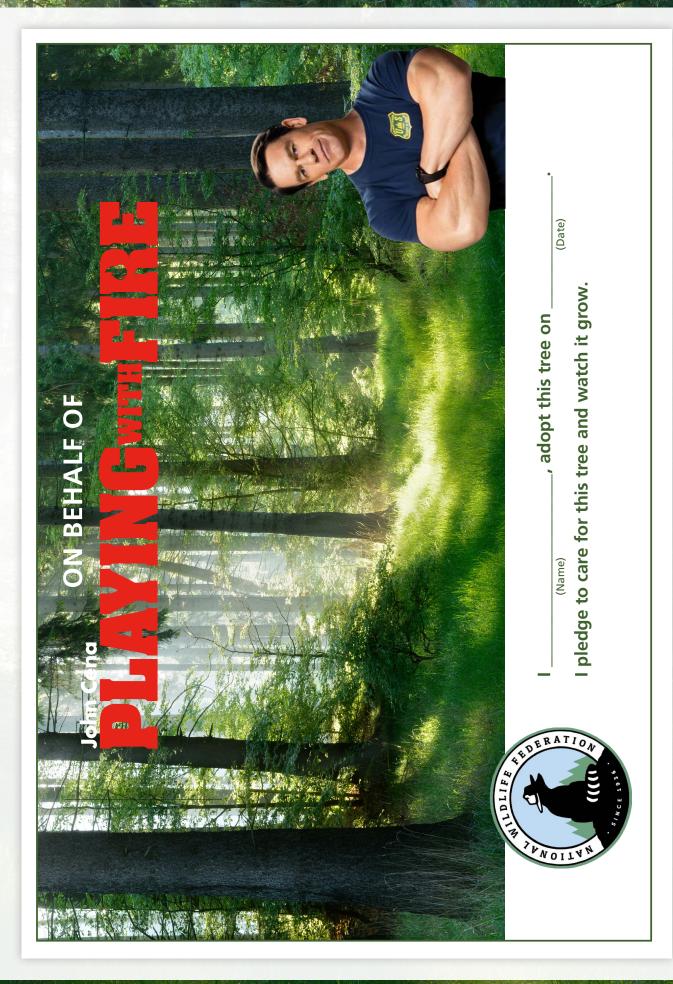
- ♠ Trees are among the oldest living things on the planet.
- Forests provide a home to roughly 80 percent of the world's land-based biodiversity.
- A square kilometer of forest can house more than 1,000 species.
- Forests reduce air pollution and greenhouse gases. One average-size tree (30 feet tall) can store hundreds of pounds of CO2 over its lifetime.
- Forests produce oxygen. It takes seven to eight trees to produce the oxygen a human needs to breathe for a year.
- The net cooling impact of one healthy tree is the equivalent of 10 room-size AC units operating 20 hours a day.

ADOPT A TREE

WHAT YOU DO

- Find and select a special tree in your backyard or a nearby park or forest.
- Make an adoption tag for your tree: Print and complete the adoption card provided. To help the card last longer, place the tag in a reusable bag or folder. Then poke a hole through a corner of card and loop a piece of string through the hole and loosely tie it onto a branch or around the trunk of your adopted tree.





MY ADOPTED TREE

TYPE OF TREE _____ LOCATION ____

DATE	OBSERVATIONS

KEEP A TREE DIARY OR BLOG

Choose a special tree that's growing in your yard, school grounds or that you can easy walk to on a regular basis. It could be your "Adopted Tree." Any kind of tree will do -- large or small, tall or short, Evergreen or deciduous (that means the tree looses it's leaves in winter).

Use a tree guide or app to find out what kind of tree it is. (You can also ask an adult and look it up together to learn as much about your tree as possible.)

FOR A WHOLE YEAR keep an eye on your tree and write a diary or blog about everything that you observe.

WHAT YOU DO

Use an existing notebook or make your own using the next page. You can also keep a blog and upload photos of your tree with each visit.

- start your diary/blog by writing down the date and a complete description of your tree.
- Draw or sketch your tree.
- Describe the bark pattern.
- Measure the size of its trunk.
- Count the number of branches.
- Look for wildlife. If you don't see any animals, can you find signs of wildlife such as nests, woodpecker holes or partially eaten leaves or nuts?
- Collect fallen leaves, nuts, and/or seeds to put it in your diary. You can trace their shapes or make a rubbing of the leaves. (See *Go on a Leaf Patrol*.)
- Try to visit your special tree at least once a week over the next year and make notes and drawings about it during each visit. (If you don't know what kind of tree it is, ask an adult and look it up together to learn as much about your tree as possible.)
- Long before the year is out you'll realize just how busy the life of a tree can be.
- **Bonus:** Your tree diary/blog will make a tree-rific classroom presentation, special project for extra credit or a science report.

Draw or sketch your tree and add any special features (knots, branches, leaves) or animals (insects, birds, small mammals) that you see and briefly describe your observations. MY TREE DIARY Date

GO ON A LEAF PATROL

Collect fallen leaves from every kind of tree you see. You can do this by looking for leaves at home, at school in a park or anywhere you find them as long as it is safe. You will be amazed to see how many different kinds of leaves you find and how many types of trees there are.

If you want to know the names of the trees your leaves fell from, look online or use a tree guide to help you identify your leaves.

WHAT YOU DO

- You can make your leaf collection permanent by pressing the leaves flat between two pieces of paper and placing a book or anything heavy on top. Once the leaves are flat and dry, use glue or tape to put them on paper in a notebook. You can also take photos of your leaves to put in your notebook or post online.
- You can draw or trace your leaf or make leaf rubbings by simply placing the leaf under a piece of paper and rubbing it with a crayon or pencil.
- Below is an example of what you could include in your notebook and keep your Leaf Collection.

LEAF	COLOR
	SHAPE
	SIZE
	ANY SIGNS OF WILDLIFE? (BITE MARKS, SPOTS, ETC)
	DESCRIBE THE TREE IT CAME FROM

EXPLORE A TREE

WHAT YOU DO

- Stand in a group of trees with a partner (family member, sibling or firend).
- One person wears a blindfold and spins around a few times before being led to a tree by the other. (Make sure the tree doesn't have thorns or poison ivy growing on it!)
- The blindfolded player touches the tree, feeling the shape, size, and texture of the trunk, branches, and leaves or needles.
- Then your partner leads you back to where started from and removes the blindfold.
- Which tree was it?
- Players switch roles and play the game again using a different tree.

BE ATREE! (TREE CHARADES) WHAT YOU DO

- With your family or some friends find a group of trees.
- Take turns trying to look like one of the trees, without telling the others which tree. Use arms and fingers like branches. Legs can stick together, twist, or stretch apart to mimic a trunk. Players could even make faces to show the tree's "personality."
- The player being the tree can't talk while the others guess which tree.



HOW ARE TOADS AND FROGS DIFFERENT?

In the movie, Dr. Amy Hicks is a wildlife biologist, who is studying frogs in the forest ecosysytems and lives near the fire station.

Scientists say there isn't a clear distinction between frogs and toad. Toads are really a classification of frogs. So tecÚically toads are a type of frog. Both are amphibians and they are similar in many ways, but they are also different in a few ways.



HERE'S HOW THEY ARE DIFFERENT:

- Generally, frogs live in wet areas or near water. Toads on the other hand, get out on land a little more and find their way into gardens and yards.
- Toads have lumpy skin around their eardrums and legs due to glands that contains a foul-smelling poison to discourage predators from eating them.
- Frogs also usually have moist smooth skin, while toads have dry bumpier (warty) skin.
- Toads have shorter hind legs than frogs.

MAKE A LIST OF HOW FROGS AND TOADS ARE THE SAME:

 1.
 1.

 2.
 2.

 3.
 3.

 4.
 4.

 5.
 5.

 6.
 6.

 7.
 7.

DID YOU KNOW?

SMOKEJUMPERS ARE A NATIONAL RESOURCE. They travel all over the country to provide training for experienced firefighters and leadership for quick initial attack on wildland fires.

When they are not training others or fighting fires, smokejumpers lend their expertise and work on natural resource management and conservation projects such as: brush piling, construction and maintenance of facilities and trails, running weather management stations, or helping to study and control bark beetle

infestations and other threats to healthy forests.

- Smokejumping was first proposed in 1934 by the U.S. Forest Service as a means to quickly provide initial attack on forest fires.
- The first fire jump was made in 1940 on Idaho's Nez Perce National Forest.
- The first woman, Deanne Shulman, became a smokejumper in 1981.

WHAT YOU DO

Ask someone from a local organization such as, an arborist, urban forester, or state department of natural resources to give a presentation about trees and forests in your community.

Look online and/or have a discussion about all of the jobs related to taking care of trees and maintaining healthy forests.

Make a list of all the jobs you discover and featured in the movie that protect trees, forests, water, wildlife and people.

7. _____

9.

10.

Start your online research here:

https://www.fs.fed.us/science-tecÚology/fire/smokejumpers/mccall/faq

