

Mini-Lesson: “Why is it so hard for firefighters to put out wildfires?”

VIDEO TRANSCRIPT

VIDEO 1

Hi, it's Doug! You can see today, it's a sunny day here in California where I live. But just last week, it wasn't so sunny. The sky was filled with smoke. It turns out there were wildfires burning all over the state.

Someone named Najé has a question about wildfires. Let's give him a call now.

[Video Call]

- Hi, Doug!
- Hi, Najé!
- I have a question for you. Why is it so hard for firefighters to put out wildfires?
- That's a great question.

Check out this fire in someone's kitchen. With a fire this size, it's easy to put out just using a fire extinguisher. Or if a fire gets bigger, like this one, firefighters have to use a hose. But some fires aren't so easy to put out. Fires like these sometimes take weeks or even months before they're stopped.

When a fire gets out of control like this and burns for miles and miles, that's a wildfire. You can imagine, seeing a fire like this, there's just no way that using a fire extinguisher would work.

Even using a hose isn't going to be enough to put out a fire this size. So what would you do if you had to put out a wildfire?

VIDEO 2

There's no hose or fire extinguisher big enough to put out most wildfires. And to make things harder, it's not like in a city where you can just get water from the nearest fire hydrant. Wildfires usually happen in places where there's not a lot of water around. Firefighters sometimes try dropping water using a helicopter. But even so, when a wildfire gets this big, firefighters just can't put it all out at once.

So when a wildfire is burning out of control, firefighters do something really surprising. They actually stop trying to put it out. You see, firefighters know that every fire has a secret weakness, something that it can't live without. It's fuel—the stuff that it burns. The fuel for a wildfire comes from plants, especially dead trees, dry grass, or dry leaves. Firefighters know that fires can't keep going if they don't have enough fuel. So instead of trying to put out a wildfire, they try to steal its fuel. Once a fire burns up all of its fuel, it can't keep going.

But how can they steal the fire's fuel? Well, there are a couple of ways. One way is that firefighters dig up dirt in lines around the wildfire to get rid of all the fuel that it could burn. They call this a “fire line” or a “fire break”, a place where there's no fuel. So a fire can't cross over to burn the next area.

But there's one other way firefighters steal a fire's fuel, and this one, at first, might sound like a terrible idea when you hear it. Firefighters sometimes start fires themselves. They do this in a

small area. By starting a small fire that they can control, they burn away all the dead plants and leaves that a big fire, like a wildfire, would use as its fuel. You see, once a wildfire reaches this area, it won't have any fuel to keep burning, and it will burn out.

So, in summary, firefighters can't put out a huge wildfire all at once. Instead, they steal the wildfire's fuel so that it can't spread any further and eventually burns out on its own. Firefighters are pretty amazing people, especially since they put themselves in danger to protect us and our homes.

That's all for this week's question. Thanks, Najé, for asking it!