

Dear Teacher,

Thank you for investing time to help your students prepare for wildfire. Here in Marin, wildfires are a very real and growing threat. This program, *READY*, *SET*, *GO!*, was created by FIRESafe Marin with the support of the Marin Wildfire Prevention Authority to help students and their families learn about wildfires and the steps to take to mitigate risks and get out of harm's way.

READY, SET, GO! is an interactive learning resource targeted to 5th grade students. It includes short videos and student activities. It was created using a Google add-on app called Pear Deck that allows a teacher to share a slideshow while students work independently. If possible, teach this program as a class conversation (online or in-person):

- 1. show a video clip;
- 2. allow students a few minutes to work through the associated activities; and then
- 3. use the students' responses as the basis for a short class discussion.

The full lesson is intended to take less than an hour, but there are many opportunities to extend discussions and activities. Note: The program can also be distributed online for students to work independently or with their families from home.

We have included an important homework assignment for students to share what they learn with their families. Through this dialogue, parents or caregivers will be encouraged to sign up for emergency warnings at Alertmarin.org, pack a Go Bag, and make a family evacuation plan. Please download and print the *READY*, *SET*, *GO!* flyer for students to take home or share the link with your students.

This Teacher's Guide walks you through the *READY*, *SET*, *GO!* slide deck, underscoring information introduced in the videos, offering rationale for the various activities and providing a glossary of terms to review with your students.

After you have finished the lesson, please fill out the short Teacher Survey to let us know how it went.

Stay safe and informed!

Rich Shortall

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Executive Coordinator

FIRESafe Marin







Teacher's Guide to READY, SET, GO! Slide Deck

Getting started: Open Pear Deck app

Once you have opened the READY, SET, GO! slide deck, you will need to open (or get) the Pear Deck app by clicking on the "Google Add-ons" in the top menu bar and choosing Pear Deck. A menu of tools will appear to the right of the slides. Click on "Start Lesson" in the upper right corner and follow the prompts to share the presentation with your students. If you need help with this, please go to https://www.peardeck.com/how-to-handbook or ask your school administrator for support.

Slide Notes

1. Video: Introduction (time 3:20)

Introduces the main ideas of the program: California wildfires are growing in numbers, scale and ferocity. To keep safe, we need to:

- Understand wildfire
- Get ready prepare ahead of time
- Get set be prepared to evacuate on Red Flag Warning Days
- Go! know how to evacuate safely

Note: The images of large wildfires in the video are scary. This is a real danger that we need to acknowledge — and so is the urgency for action. As you teach this lesson, emphasize that learning the basics of fire preparedness can keep us safe.

2. Activity: Tell about your experience

This exercise is intended to encourage students to connect with the subject. A short discussion about school closures due to air quality, recent Red Flag Days, and direct and indirect experiences with fire or evacuations can help students recognize the relevance and urgency of wildfire preparation.

3. Video: Understanding Wildfires (time 3:24)

This video gives students a few core concepts to understand our wildfire conditions today.

- Fire is a natural part of our ecology.
- Topography, weather and fuel affect wildfires.
- Heat causes fire to go uphill and wind blows it through valleys.
- Embers are the main cause of home ignitions.
- Due to climate change, "fire season" is hotter, dryer and longer.

4. Activity: Wildfire Fire Triangle

The Fire Triangle (heat + oxygen + fuel) is commonly taught to explain combustion as a chemical reaction.

Students are asked to recall that the Wildfire Triangle shows that topography, fuel and weather all contribute to wildfire. A discussion about Marin's landscape, the different kinds of fuel that burn in wildfires (trees, vegetation, and human-made structures), and how climate change is altering our weather patterns will provide context for students to understand the current conditions that are driving large scale wildfires today.







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5. Activity: Ember showers

Students recall that ember showers are blowing bits of burning bark, leaves and sticks. Knowing how ember showers spread fire is a prerequisite understanding for home fire safety measures.

6. Activity: The relationship of climate change to fire seasons

This activity asks students to interpret an infographic to understand the correlation between the rise in average temperatures in California to the rise in the number of acres burned.

The information presented is intentionally simplified to make the graphic easily understood. You may want to have a larger class discussion about other contributing factors such as changing weather patterns and droughts that are also related to climate change.

7. Video: Ready (time 2:27)

Getting ready means being alert and prepared by signing up for Alert Marin to receive fire warnings, packing a "Go Bag" and reviewing an evacuation checklist. It also means clearing flammable items and fuel from your yard and fire proofing your home. Note: directions for signing up for Alert Marin is included in the Homework assignment.

8. Activity: What goes in your Go Bag?

This activity helps your students think through what they will bring and what to leave behind if they have to evacuate. It's important to do this before an emergency so that necessary things are

not forgotten. Encourage them to pack and keep a Go Bag ready at home during the fire season.

9. Activity: Firesafe your home

After students identify 3 things around the house in the picture, ask them if there are things they can do at their own home to make it safer from fire. This is intended to encourage action.

10. Video: Get Set (time 1:34)

Getting "set" means being prepared to evacuate on Red Flag Days. This means laying out protective clothes, having your Go Bag ready and getting your pets ready to go.

11. Activity: find things you need to evacuate

This is to get students thinking about what they will grab on their way out the door if they need to evacuate quickly. Thinking this through, finding important items and having your cell phone charged ahead of time will really help if you receive an evacuation order.

12. Video: Go! (time: 1:37)

This video provides a simple explanation of what to do in the event of a wildfire evacuation: 1) grab essential items; 2) follow the evacuation checklist; 3) get in your car and head downhill to safety.

Staying calm is an important factor in evacuating safely. Reviewing the steps with your students will help them prepare mentally for such an emergency.







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13. Activity: Dress for evacuation

Drawing protective clothes on a figure will undoubtedly produce funny pictures and can be fun for students. It will also give them a chance to review the fire safety recommendations to wear: long sleeves, long pants, boots, a hat, face covering, goggles and gloves.

Conclude the lesson by reviewing the front and back of the flyer. Come up with a plan for how your students will share this information with their families and how they will report back to you that they have done so. Use any incentives you feel appropriate to encourage this dialogue and follow through.

14. Activity: Safest route to evacuate

Fire tends to travel uphill and the wind blows it through valleys. So, the safest route is downhill to the flats. This is sometimes called the valley floor. Remind your students that staying in their cars is usually the safest place until they get out of harm's way.

15. Activity: What are the two most important things you learned?

This is an opportunity for the students to review what they remember and their collective answers can be the basis for a good wrap up and segue to the homework assignment.

16. Homework: Share the flyer with your family

The homework piece is a critical part of this emergency preparation program! Fire safety requires the whole family's participation.







Glossary of Fire Terms

(listed in order introduced in videos)

Climate Change

Describes a change in the average conditions such as temperature and rainfall in a region over a long period of time.

Natural Ecology

All components of an environment that interact as a system. Wildfire is part of the natural ecology.

Fuel

Combustible material. Includes grass, leaves, trees, shrubs, buildings, anything that can burn.

Forest Debris

Fallen branches, needles, leaves and other organic material.

Fire Triangle

Shows that oxygen + heat + fuel is needed for fire.



Wildfire Triangle

Shows that topography + weather + fuel affect wildfire behavior



Topography

Forms and features of the landscape, such as hills, valleys, and flatlands.

Embers

Small pieces of burning bark, leaves, and sticks carried in the smoke and wind from wildfires, often starting new, small fires called "spot fires" or igniting homes and buildings.

Spot fires

A fire ignited beyond a main fire, usually by sparks or flying embers.

Drought

Periods in which precipitation and moisture is below normal.

Fire season

Periods of the year during which wildfires are likely to occur.

Red Flag Warning

Weather alert issued by meteorologists on hot, dry windy days — conditions that may result in extreme fire behavior and creating fires that firefighters may not be able to control.