



# Bushfire Safety



## Cross-curricular Lesson Ideas

Below you will find a selection of bushfire safety-themed, curriculum-linked lesson ideas written for students in the primary years. These can be adapted to suit lower or higher year levels.

### Learning outcomes

Using this curriculum material will assist students in achieving the following learning outcomes:

- Students will learn how bushfires start and about their behaviour.
- Students will explore bushfire safety and preparation.
- Students will learn how bushfires affect people and the environment.

### English

- Invite someone from your local bushfire service to speak to the class about ways to prepare for bushfire season.
- Students to complete the '**Bushfire Safety KWL Chart**' to find out what they **Know**, what they **Want** to know and what they have **Learned** (KWL).
- Students to create a 'bushfire word wall' with new and interesting terms (such as vegetation, topography, ignite, smoulder, etc.). Add definitions for each term.
- Students to make an advertisement (print, TV or radio) that reminds people to keep their yards clean and tidy and/or of the dangers of having vegetation close to their house or shed.
- Students to complete the '**Bushfire Safety Acrostic Poem**'.
- Students to write a piece of communication to remind families of their school bushfire plan. It could be in the form of a newsletter, information brochure, school website update or parent information book.
- Students to read the information then answer the questions on the '**Understanding Bushfires**' activity sheet.
- Students to complete the '**Bushfire Safety Crossword**'. There are two levels so you can choose the one that is appropriate for your students.
- Students to invite a guest speaker to discuss his/her experiences with bushfire. The speaker's stories should reflect the social and cultural group to which he/she belongs.
- Students to read, view or listen to Aboriginal stories (relating to fire or bushfire) that identify the natural features of a place.



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- Students to create a bushfire safety message board using pictures only. How can this be used to promote key bushfire messages to people who may not be able to read?

## Mathematics

- Students to complete the '**Coordinate Drawing**' activity sheet.
- Radiant heat can be the most dangerous aspect of a bushfire. It can cause death in people up to 200 metres away. Use a measuring wheel, or big steps to mark an approximate distance of 100 metres, then 200 metres in various places around the school.
- Every day, for two weeks, students to collect local weather data (including temperature, humidity, rainfall, wind speed etc.) from the Bureau of Meteorology website ([www.bom.gov.au](http://www.bom.gov.au)) and use this to predict what the next Fire Danger Rating might be.
- Items such as grass, leaves, bark and twigs, which are less than six millimetres in diameter (or about the size of your finger) are sometimes referred to as 'fine fuels'. They can catch fire easily and burn quickly when dry. Students to collect items from an area of the school grounds and use a ruler to determine whether or not they are fine fuels.
- Students to learn about how topography can affect the speed of a fire by completing the '**Fire Speed**' activity sheet.

## Science

- As a class, walk around the school and identify 'fuel' for a fire, or bushfire hazards that may need to be managed and how to manage them.
- Radiant heat can cause major problems to property and people in a bushfire situation. Have students share experiences of when they have felt radiant heat (e.g. standing next to a stove or radiator, sitting around a campfire or bonfire, etc.). Students to consider how they can protect themselves from radiant heat by completing the '**Protect Yourself**' activity sheet.
- Many Australian plant communities are adapted to fire in the landscape. Students to find examples of Australian plants and what characteristics help them survive or regrow after fire.
- Students to research what a fire needs to start and stay alight. Consider the three key elements (fuel, heat and oxygen) and how fire can be extinguished by removing one element.
- Students to name and classify the plants around the school grounds. Research to find out if these plants are appropriate for a bushfire prone area (your school may or may not be in a bushfire area). Plants that are more suited to bushfire prone areas are those with high water and salt content and low oil.
- Students investigate how bushfire might affect animals and their habitats.



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- Students investigate how Aboriginal people manage and protect hunting grounds and water supply in Australia.
- Fire is a natural part of the landscape. The CSIRO describes fire as an 'ecological process that determines the composition of our flora and fauna' ([www.csiro.au](http://www.csiro.au)). Students to investigate how fire contributes to the environment.

## Humanities and Social Sciences

### History

- Students to find an example of fires starting from sparks and/or embers in Australia. Students to read about it and discuss how it could have been prevented.
- Students to choose a bushfire in Australian history and undertake a research project to find out more about it.
- Invite people from the local Aboriginal or Torres Strait Islander communities to come and speak to the students about the importance of country and place and how these evolve and remain over time.

### Geography

- Students to discuss how the seasons and weather conditions may increase or decrease the chance of a bushfire.
- Students to investigate the seasons used by the local Aboriginal or Torres Strait Islander people. Compare these to the four-season calendar or wet/dry calendar and make connections to weather patterns.
- Students to research and then mark high-risk bushfire areas on the '**Australian Bushfire Areas**' activity sheet.
- Students to research the environmental impacts of bushfires.
- Topography can have a big effect on the behaviour of bushfires. Students to review their local area and characterise its layout and topography. How might these affect a bushfire in your area?
- Students to investigate the ways Aboriginal and Torres Strait Islander people are connected to country or place and the significance of bushfire for them. How do they look after the land and care for special places?



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- Students to investigate how knowledge and practice shared among Aboriginal and Torres Strait Islander people are linked to sustainable use of resources and environments (land management practices, mosaic burning of hunting grounds, using fire to regenerate plants, etc.)

### Civics and Citizenship

- Students to research which fire safety agencies and support services are available in their community. Find out if they are a volunteer or paid emergency service organisation. Interview someone from one of these organisations.
- Students to discuss the benefits of volunteering in the community. Find out how people can get involved as a volunteer with the local fire services.
- Students to investigate fire prevention laws and legislation.

### The Arts

- Students to paint a mural, illustrating the effects bushfires have on the environment and/or people and communities.
- Students to create a collage about bushfires using pictures and headlines from magazines and newspapers.
- Students to use music, images and/or dance to create a visual story about fire or a bushfire event.

### Technologies

- Students to investigate the apps, websites and other programs that are used to keep people informed before, during and after bushfire events. How do they help people to be prepared, stay safe and recover from the events?
- Students to brainstorm a list of equipment that is needed to keep a yard tidy.
- Students to brainstorm a list of equipment that they think is essential in a bushfire emergency.
- Students to look at the properties of materials used for fire-retardant, heat-resistant clothing, then design a piece of clothing ideal to wear during a bushfire event.
- Students to design and make a prototype of a 'fire-safe' home. Consider fire shelters, watering devices, construction materials etc. Refer to the '**Fire Safe Home**' fact sheet for further information.



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- Students to investigate how fire warning systems work e.g. websites, text messaging services, radio updates.

## Health and Physical Education

- As a class (or whole school) practise the school's bushfire emergency procedure. Involve parents/carers if possible.
- During bushfire season, student monitors to check the Fire Danger Rating and warnings each day. Create a 'Fire Danger Meter' (as per your state or territory fire agency) to display in the classroom.
- Students to brainstorm dangerous activities that should not be undertaken on high-risk bushfire days. Check your answers by visiting your state or territory fire agency website.
- Students to create an inventory of dangerous items/areas around their home that need addressing before bushfire season.
- Students to brainstorm what they might need to take with them if they have to leave their home in an emergency situation. Consider the difference between 'needs' and 'wants'. Students to complete the '**My Emergency Kit**' activity sheet.
- In order to be prepared and safe during bushfire season, people must have access to information and advice. Students to consider how the key fire safety messages can be promoted to those people who cannot see or hear. Design a program targeted at one of these groups.

## Languages

- Students to identify the various cultures and/or language groups in their school and use this information to determine in which languages fire safety information should be provided.