

Bushfire Ed

YEARS FIVE AND SIX



Teacher Resource

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Rationale

The Queensland Bushfire Ed Program is designed for teachers working with students in years 5 and 6 in Queensland schools. The program aims to assist students develop an understanding of the dangers of bushfires, their causes and effects, and to promote student awareness of bushfire safety.

The program engages students in interactive, collaborative learning experiences to promote understanding of:

- » where bushfire prone areas are
- » how bushfires start
- » what can be expected in a bushfire
- » how individuals can manage their own safety

Through a range of tasks and interactive learning opportunities, students will develop their understanding of bushfires leading to two key culminating tasks. First, students design a multimodal information piece of work to warn of the dangers of bushfire; second, they complete a folio of work demonstrating their developing understandings which will inform their information piece. Key learning activities throughout the program are designed to be interactive, collaborative and engaging, and link specifically to core learning outcomes identified in the Australian Curriculum (English and Science) and Queensland Essential Learnings (Health and Physical Education).

Key Unit Question

How do we stay safe in bushfire prone areas?

Focus Questions

- » How do bushfires start?
- » What can be expected in a bushfire?
- » What does a Bushfire Survival Plan look like?
- » How can people manage their own safety?

Culminating tasks

By participating in the learning activities throughout the unit, students develop skills and knowledge which they demonstrate in the two culminating activities of the unit.

1. Student folio
2. Multimodal information text

Curriculum Links – Year Five

Year 5 English

Year 5 Level Description

In years 5 and 6, students communicate with peers and teachers from other classes and schools, community members, and individuals and groups, in a range of face-to-face and online/virtual environments. Students engage with a variety of texts for enjoyment. They listen to, read, view, interpret and evaluate spoken, written and multimodal texts in which the primary purpose is aesthetic, as well as texts designed to inform and persuade. These include various types of media texts, including newspapers, film and digital texts, junior and early adolescent novels, poetry, nonfiction, and dramatic performances.

Informative texts supply technical and content information about a wide range of topics of interest, as well as topics being studied in other areas of the curriculum. Text structures include chapters, headings and subheadings, tables of contents, indexes and glossaries. Language features include complex sentences, unfamiliar technical vocabulary, figurative language, and information presented in various types of graphics.

Students create a range of imaginative, informative and persuasive types of texts including narratives, procedures, performances, reports, reviews, explanations and discussions.

Year 5 Content Descriptions

Language

Language for interaction

- » Understand that patterns of language interaction vary across social contexts and types of texts, and that they help to signal social roles and relationships (ACELA1501).

Literacy

Texts in context

- » Show how ideas and points of view in texts are conveyed through the use of vocabulary, including idiomatic expressions, objective and subjective language, and that these can change according to context (ACELY1698).

Interacting with others

- » Clarify the understanding of content as it unfolds in formal and informal situations, connecting ideas to students' own experiences, and present and justify a point of view (ACELY1699).

Interpreting, analysing, evaluating

- » Use comprehension strategies to analyse information, integrating and linking ideas from a variety of print and digital sources (ACELY1703).

Creating texts

- » Plan, draft and publish imaginative, informative and persuasive print and multimodal texts, choosing text structures, language features, images and sound appropriate to purpose and audience (ACELY1704).
- » Reread and edit a student's own and others' work using agreed criteria for text structures and language features (ACELY1705).

Source: ACARA: Australian Curriculum English:
<http://www.australiancurriculum.edu.au/English/>

Year 5 Science

Year 5 Level Description

Over years 3 to 6, students develop their understanding of a range of systems operating at different time and geographic scales.

In year 5, students are introduced to the cause-and-effect relationships of form and function through an exploration of adaptations of living things.

They explore observable phenomena associated with light and begin to appreciate that phenomena have sets of characteristic behaviours. They broaden their classification of matter to include gases, and begin to see how matter structures the world around them. Students consider Earth as a component within a solar system, and use models for investigating systems at astronomical scales.

Students begin to identify stable and dynamic aspects of systems, and learn how to look for patterns and relationships between components of systems. They develop explanations for the patterns they observe.



Year 5 Content Descriptions

Science Understanding

Chemical sciences

- » Solids, liquids and gases have different observable properties and behave in different ways (ACSSU077).

Science as a human endeavour

Use and influence of science

- » Scientific understandings, discoveries and inventions are used to solve problems that directly affect peoples' lives (ACSHE083).
- » Scientific knowledge is used to inform personal and community decisions (ACSHE217).

Science Inquiry Skills

Questioning and predicting

- » With guidance, pose questions to clarify practical problems or inform a scientific investigation, and predict what the findings of an investigation might be (AC SIS231).

Communicating

- » Communicate ideas, explanations and processes in a variety of ways, including multi-modal texts (AC SIS093).

Source: ACARA: Australian Curriculum Science. <http://www.australiancurriculum.edu.au/Science/>

Health and Physical Education — Essential Learnings by the end of year 5

- » Health is multidimensional and influenced by individual and group actions and environments.
- » Health includes physical, social, emotional and cognitive (relating to thought processes, reasoning and intuition) dimensions.
- » Individual and group action can promote health and wellbeing, including safety.

SOURCE: Queensland Studies Authority (2007) Queensland Curriculum, Assessment and Reporting Framework



Curriculum Links – Year Six

Year 6 English

Year 6 Level Description

In years 5 and 6, students communicate with peers and teachers from other classes and schools, community members, and individuals and groups, in a range of face-to-face and online/virtual environments.

Students engage with a variety of texts for enjoyment. They listen to, read, view, interpret and evaluate spoken, written and multimodal texts in which the primary purpose is aesthetic, as well as texts designed to inform and persuade. These include various types of media texts, including newspapers, film and digital texts, junior and early adolescent novels, poetry, nonfiction and dramatic performances. Students develop their understanding of how texts, including media texts, are influenced by context, purpose and audience.

Informative texts supply technical and content information about a wide range of topics of interest, as well as topics being studied in other areas of the curriculum. Text structures include chapters, headings and subheadings, tables of contents, indexes and glossaries. Language features include complex sentences, unfamiliar technical vocabulary, figurative language, and information presented in various types of graphics.

Students create a range of imaginative, informative and persuasive types of texts such as narratives, procedures, performances, reports, reviews, explanations and discussions.

Year 6 Content Descriptions

Language

Language for interaction

- » Understand that strategies for interaction become more complex and demanding as levels of formality and social distance increase (ACELA1516).

Expressing and developing ideas

- » Identify and explain how analytical images – like figures, tables, diagrams, maps and graphs – contribute to our understanding of verbal information in factual and persuasive texts (ACELA1524).
- » Investigate how vocabulary choices, including evaluative language, can express shades of meaning, feeling and opinion (ACELA1525).
- » Understand how to use banks of known words, word origins, base words, suffixes and prefixes, morphemes, spelling patterns and generalisations to learn and spell new words – for example, technical words and words adopted from other languages (ACELA1526).

Literature

Literature and context

- » Make connections between students' own experiences and those of characters and events represented in texts drawn from different historical, social and cultural contexts (ACELT1613).

Literacy

Interpreting, analysing, evaluating

- » Use comprehension strategies to interpret and analyse information and ideas, and compare content from a variety of textual sources, including media and digital texts (ACELY1713).
- » Analyse how text structures and language features work together to meet the purpose of a text (ACELY1711).

Creating texts

- » Plan, draft and publish imaginative, informative and persuasive texts, choosing and experimenting with text structures, language features, images and digital resources appropriate to purpose and audience (ACELY1714).

Source: ACARA: Australian Curriculum English:
<http://www.australiancurriculum.edu.au/English/>

Year 6 Science

Year 6 Level Description

Over years 3 to 6, students develop their understanding of a range of systems operating at different time and geographic scales. In year 6, students explore how changes can be classified in different ways. They learn about transfer and transformations of electricity, and continue to develop an understanding of energy flows through systems. They link their experiences of electric circuits as a system at one scale to generation of electricity from a variety of sources at another, and begin to see links between these systems. They develop a view of Earth as a dynamic system, in which changes in one aspect of the system impact on others; similarly, they see that the growth and survival of living things are dependent on matter and energy flows within a larger system.

Students begin to see the role of variables in measuring changes, and learn how to look for patterns and relationships between variables. They develop explanations for the patterns they observe, drawing on evidence.

Year 6 Content Descriptions

Science Understanding

Earth and space sciences

- » Sudden geological changes or extreme weather conditions can affect Earth's surface (ACSSU096).

Science as a Human Endeavour

Nature and development of science

- » Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena (ACSHE098).

Use and influence of science

- » Scientific understandings, discoveries and inventions are used to solve problems that directly affect peoples' lives (ACSHE100).
- » Scientific knowledge is used to inform personal and community decisions (ACSHE220).

Science Inquiry Skills

Questioning and predicting

- » With guidance, pose questions to clarify practical problems or inform a scientific investigation, and predict what the findings of an investigation might be (AC SIS232).

Communicating

- » Communicate ideas, explanations and processes in a variety of ways, including multi-modal texts (AC SIS110).

Source: ACARA: Australian Curriculum Science. <http://www.australiancurriculum.edu.au/Science/>

Health and Physical Education – Essential Learnings by the end of year 6

- » Health is multidimensional and influenced by individual and group actions and environments.
- » Health has physical, social, emotional, cognitive and spiritual (relating to beliefs) dimensions that are interrelated.
- » Family, peers and the media influence health behaviours.
- » Individuals, groups and communities act on the advice in health promotion campaigns to promote health and wellbeing, including safety, and contribute to management of health risks.

SOURCE: Queensland Studies Authority (2007) Queensland Curriculum, Assessment and Reporting Framework.



Teacher Reflection

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Bushfire Ed

YEARS FIVE AND SIX

Student Information Sheets

Information Sheet One

Bushfire Prone Areas

What is a bushfire prone area?

There are two area types that are most affected by bushfire:

- » High density housing (usually less than a quarter of a hectare) adjoining vegetation that can catch fire.
- » Rural residential properties (usually greater than a quarter of a hectare) situated amidst or near bushland that can catch fire.

What are some bushfire facts?

As weather patterns change, bushfires may happen more frequently. Bushfire has been around for a long time, and is part of nature. Because bushfires can get big quickly and travel fast, Queensland Fire and Emergency Services can't always get a fire truck to every fire or part of a fire. When situations become too dangerous, the fire service's first obligation is to protect people, including its own firefighters.



Information Sheet Two

Bushfire types

What are the types of bushfires?

In Queensland there are two main types of bushfire:

- » Surface fires are the most common and happen frequently, especially during the bushfire season.
- » Crown fires are the most severe but, luckily, they are not as common in Queensland in as other states.



Crown fire



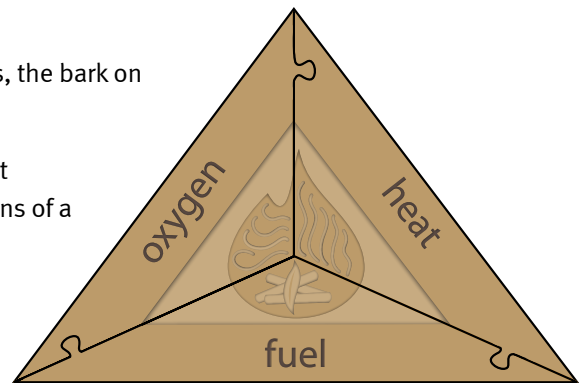
Surface fire

What does a bushfire need?

Like fires in homes, bushfire needs three things:

1. Fuel – something that can burn easily, like dried grass and leaves, the bark on trees, dead branches or even whole dead trees.
2. Heat – something to start the fire. This can be something that just happens in nature, like lightning, or it could be the careless actions of a person.
3. Oxygen – something to keep it going.

Without all of these, the fire either won't start or keep going. Wind also plays a big part in keeping a fire burning and moving.



How does a bushfire arrive?

There are usually three stages to the progress of a bushfire:

- » The first can be when embers arrive, often well before the actual bushfire comes. This is the time to look out for little fires started by the embers.
- » The second is when the actual bushfire arrives. This is the time to take shelter.
- » The third and final stage is after the bushfire has passed. This is the time to check for more ember fires and to put out small fires before they get any bigger. Checking inside the roof and other small places is important.

Information Sheet Three

Causes of bushfire

How do bushfires start?

Nature



Lightning is very powerful electricity that can easily set even reasonably damp trees, bushes, grasslands and leaf litter on fire. Many bushfires are started by this natural cause.

Motorised equipment



Many motors on recreational vehicles can spark a bushfire, particularly if the bush is dry, the weather is hot, there is low humidity, and there is enough wind to help the fire.

Simply falling off your bike and having the hot engine touch the ground can sometimes start a fire.

The mufflers of cars, four-wheel drives and tractors can also start fires in long grass.

Campfires



It is important to make a campfire safe, particularly when the bush is dry:

- » Clear dry dirt or sandy area as a base.
- » Make sure there is nothing that can catch fire in the direction that the wind might take the fire's embers.
- » Surround the fire with rocks, stones or dirt.
- » Always extinguish your campfire with water before leaving it.
- » Have something ready to put the fire out if it gets out of hand. The best is water, but dirt or sand are also options if water isn't available.

Information Sheet Four

Causes of bushfire

It is important to remember that the conditions of the environment, our awareness, and some simple actions can reduce the risk of bushfire.

How do bushfires start?

Barbeques



A barbecue, if not used carefully, is capable of starting a bushfire. This will depend on:

- » its location (e.g. near things that can catch fire easily)
- » the use of wood or charcoal instead of gas (including leftover ashes and their disposal)
- » the direction smoke and embers will travel
- » the use of a barbecue lid to protect it from wind
- » if there is food on the BBQ that can catch fire (e.g. meat fat and cooking oils).

Broken glass



Bushfires can be started by discarded bottles and bits of broken glass that increase (magnify) the sun's light to make enough heat to start something burning.

This can happen particularly when there are dry leaves around, the weather is hot, there is low humidity, and there is enough wind to help the fire.

Simply throwing away a glass bottle in bushland can sometimes start a bushfire.

Deliberate



What begins with a simple thing like a match can greatly affect the environment, people's property, and end with the possible loss of human and animal life.

People who deliberately start bushfires can face criminal charges that result in fines and imprisonment.

If your neighbourhood is being affected by deliberately lit illegal fires, there are three things you can do:

- 1. Remember the time and place where you see fires.**
- 2. Write down the description of people or vehicles leaving fires.**
- 3. Contact Crime Stoppers on 1800 333 000 or your local police.**

Information Sheet Five

Bushfire behaviour

How do bushfires behave?

- » Bushfires generally happen when the drier seasons prevail, such as late winter, spring and early summer.
- » Bushfires generally come from the north and west. Drier air encourages bushfire.
- » Bushfires can often affect properties far in advance of the actual fire.
- » Embers and other hot material get blown well ahead of the flames by winds that are often created by the bushfire.
- » Bushfires can be intense and be unpredictable.
- » They can be:
 - extremely noisy
 - cause the sky to turn black
 - create high winds
 - create very hot, dry conditions.
- » The slope of the land can significantly affect how a bushfire spreads. Fire travelling uphill will move faster than fire travelling downhill.

What happens to houses in a bushfire?

Bushfires can cause houses to burn in one of three ways:

1. The embers from the bushfire start their own fires under or around a home or building (particularly in leaf-filled gutters).
2. The flames from the bushfire can set a house or building alight.
3. The heat from the bushfire is so hot that it causes parts of a house or building to catch fire.

In Queensland, an agreement between the police and the fire service allows properly prepared people to stay in their homes during bushfire in some situations. The decision you make needs to be written into your family's Bushfire Survival Plan.

QFES Bushfire Survival Plan templates can be downloaded at www.ruralfire.qld.gov.au.

You and your family should have a plan so that you all know what to do in case of an approaching bushfire.

Information Sheet Six

Staying Safe from Bushfire

How do you prepare a bushfire survival plan?

When figuring out whether your family should go early, there are some things you need to think through:

- » The worst option is to plan to stay, but then decide to go at the last minute because the conditions have become too bad.
- » You may need to go many hours, or even a day, before a bushfire comes near your home.
- » Many deaths occur during bushfires when people are caught in their cars or out in the open.

What should the plan include?

- » How soon you will leave after you become aware of a bushfire.
- » Where you will go, and how you will get there.
- » The important things you need to take.
- » Telling people that you are leaving.
- » Plans for any animals you may have to make sure they are secure or able to look after themselves.

Reporting bushfire – Triple Zero (000)

When reporting a bushfire, you will be asked for:

- the exact location
- best access to the fire
- the situation – what is occurring
- your details

Don't hang up until the operator does.



Teacher Reflection



Bushfire Ed

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Student Activities

Student Activity Overview

SESSION	KEY QUESTION	ORGANISATION	ACTIVITY
1	What do we know about bushfires?	Whole class	Brainstorm
		Small group	Question time
		Individual	Information grid
2	Where do bushfires occur?	Individual	Habitat selection
		Small group	Case study
		Individual	Fact or fiction
3	What are bushfires?	Individual	Classify
		Small group	Needs analysis
		Individual	Model of a bushfire
4	What causes bushfires?	Individual	Fire hunt
		Pairs	Can you guess?
		Individual	Draw some
5	How do bushfires behave?	Whole class	Picture cues
		Individual	Wordsearch
		Pairs	Investigation
6	What are the dangers of bushfires?	Whole class	Who and how?
		Pair/Share	Home ideas
		Individual	Warning jingle
7	How do you stay safe from bushfires?	Small group	Pack your kit
		Individual	Prepare the home
		Small group	Decisions
8	Who can help when there are bushfires?	Whole class	Who's who?
		Small group	What would you do?
		Individual	000 report
9	Where do we find more information about bushfires?	Individual	In your home
		Whole class	In your community
		Pairs	Webquest
10	What have we learnt about bushfires?	Individual ²⁸	Portfolio
		Pairs ²⁹	Slideshow
		Whole class ³⁰	Reflection

Key Question One: What do we know about bushfires?

ACTIVITY ONE

Brainstorm - What do we know about bushfires?

As a class, come up with as many facts about bushfires as you can.

Write them on the lines below.



ACTIVITY TWO

Question time

With your group, come up with three tricky questions about bushfires.

Then come up with as many ways as you can to find the information to answer the questions.

Question	Source of information	What you found out?



ACTIVITY THREE

Information Grid

As you complete the activities in the unit, fill out the following information grid with the information you find out!

KEY QUESTION	What I learnt	Questions I have
What do we know about bushfires?		
Where do bushfires occur?		
What are bushfires?		
What causes bushfires?		
How do bushfires behave?		
What are the dangers of bushfires?		
How do you stay safe from bushfires?		
Who can help when there are bushfires?		
Where do we find more information about bushfires?		
What have we learnt about bushfires?		

Key Question Two: Where do bushfires occur?

ACTIVITY FOUR

Habitat Selection

There are two area types that are most affected by bushfire:

- » High density housing (usually less than a quarter of a hectare) adjoining vegetation that can catch fire.
- » Rural properties (usually greater than a quarter of a hectare) situated amidst or near bushland that can catch fire.

Choose one of the areas that are most affected by bushfire and draw it below.

Think about areas in your local community that fit this description.



ACTIVITY FIVE

Case studies

Below are five different environments.

1. Number each of the environments in order from least fire-prone area to most fire-prone area.
2. Justify your decision.

	An office block in the middle of the city with office buildings on either side. To the front of the building is a busy road, with continuous traffic for most of the day. On the far side of the road is a park with large evergreen trees. Behind the building is a series of shops selling clothing, shoes and other fashion items.
	An estate full of medium-sized, family homes. There are a number of small park areas in the estate so that children have room to play because the houses take up most of the land on the small blocks. The estate backs onto a bush reserve on two sides and main roads run along the other two sides.
	A number of homes on $\frac{1}{2}$ to 1 hectare blocks, approximately three hours' drive from the city. Homes are in natural bush areas with families choosing them for the calm peaceful lifestyle. The surrounding area is bushland being kept as a natural reserve for birds and small mammals.
	A sparsely populated rural area with little rain fall. There is only a small amount of vegetation and houses are spread out across a wide area with farms in between. There are low farmland areas and grass fields surrounding the homes.
	A seaside block, with a number of units and houses for tourists to spend the summer. A number of residents live in the area all year round, but things really get busy during the warmer months. The buildings face the seafront with more buildings and narrow roads behind. There is a small fish and chip shop nearby and a park area for walking dogs is at the end of the street.

ACTIVITY SIX

Fact or Fiction

Can you identify which is fact and which is fiction?

1. Bushfires happen in winter, spring and early summer.
FACT/FICTION
2. Bushfires don't affect properties far in advance of the actual fire.
FACT/FICTION
3. Embers and other hot material get blown well ahead of the flames by winds often created by the bushfire.
FACT/FICTION
4. Bushfires are very predictable. We always know what they are going to do.
FACT/FICTION
5. Bushfires can be extremely noisy and turn the sky black.
FACT/FICTION
6. The slope of the land can significantly affect how a bushfire spreads. Fire travelling uphill will move faster than fire travelling downhill.
FACT/FICTION
7. As weather patterns change, bushfires may happen more frequently.
FACT/FICTION
8. Bushfire has been around for a long time, and is part of nature.
FACT/FICTION
9. Bushfires travel slowly and remain small most of the time.
FACT/FICTION
10. Queensland Fire and Emergency Services can always get a fire truck to every fire or part of a fire.
FACT/FICTION



Key Question Three: What are bushfires?

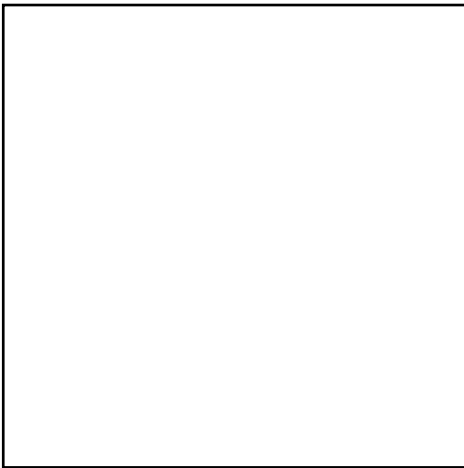
ACTIVITY SEVEN

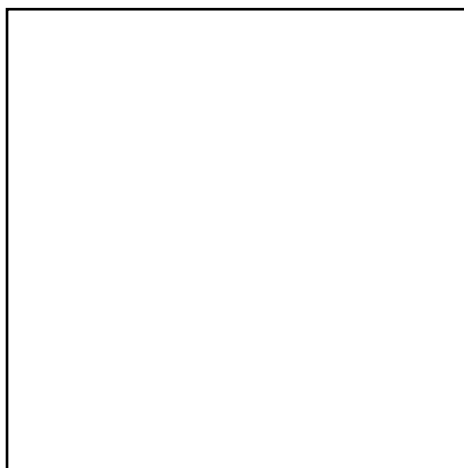
Classification

In Queensland there are two main types of bushfire:

1. Surface fires are the most common, and happen frequently, especially during the bushfire season.
2. Crown fires are the most severe but, luckily, they are not as common in Queensland as in other states.

Based on your own research, draw a picture below of each of the types of fires that occur in Queensland. Then, write a short statement to describe the similarities and differences between the two types of bushfire.



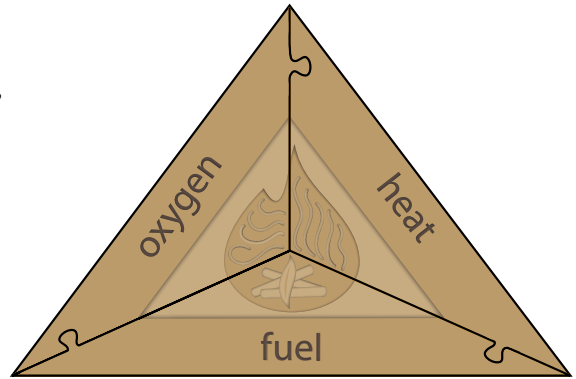


ACTIVITY EIGHT

Needs Analysis

Like fires in homes, bushfires needs three things:

1. Fuel – something that can burn easily like dried grass and leaves, the bark on trees, dead branches or even whole dead trees.
2. Heat – something to start the fire. This can be something that just happens in nature, like lightning, or it could be the careless actions of a person.
3. Oxygen – something to keep it going.



Without all of these, the fire either won't start or keep going.

Wind also plays a big part in keeping a fire going and moving.

In your group, complete the following chart, giving examples of things in each of the environments that a fire would need (e.g. a match to light the fire).

	Fuel	Heat	Oxygen
Home			
School			
Park			
Bushland			
Campground			

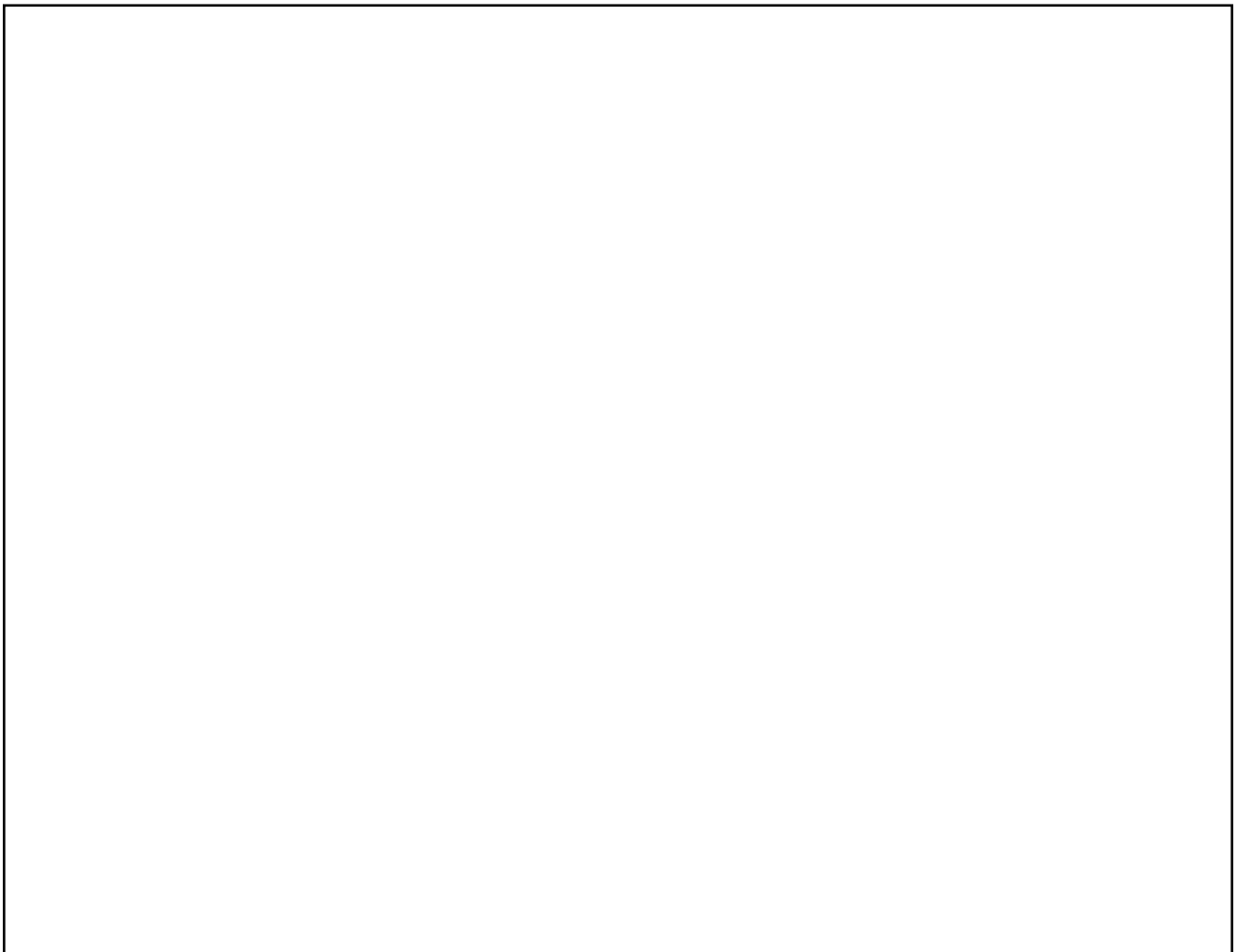
ACTIVITY NINE

Model of a bushfire

There are usually three stages to the progress of a bushfire:

- » The first can be when embers arrive, often well before the actual bushfire comes. This is the time to look out for little fires started by the embers.
- » The second is when the actual bushfire arrives. This is the time to take shelter.
- » The third and final stage is after the bushfire has passed. This is the time to check for more ember fires and to put out small fires before they get any bigger. Checking inside the roof and other small places is important.

Crete or draw a model to represent each stage of a bushfire. Show in your diagram what happens during each stage and the action to take during that stage of a bushfire.



Key Question Four: What causes bushfires?

ACTIVITY TEN

Fire Hunt

Each of the following is a potential cause of bushfire.

Have students 'hunt' for each of the potential causes of bushfire hidden around the classroom or in open space.

<p>NATURE</p> 	<p>CAMPFIRES</p> 	<p>LIGHTNING</p> 
<p>BARBEQUE</p> 	<p>BROKEN GLASS</p> 	<p>MATCH</p> 
<p>MOTORISED EQUIPMENT</p> 	<p>DELIBERATE</p> 	<p>HOT ENGINE</p> 

ACTIVITY ELEVEN

Can you guess?

Working in pairs, try to guess the following words. One person in each pair (person A) gives clues to the words, while the other person (person B) tries to guess what the word is. Then swap roles with person B giving the clues and person A guessing. You cannot use any of the word in the clues you give to the other person.

LIST A

Bushfire

Ember

Bushfire prone area

Broken glass

000

LIST B

BBQ

Firefighter

Surface fire

Nature

Flames

ACTIVITY TWELVE

Draw some

Complete the picture below with some of the ways a bushfire might start.

Draw some of the items, animals and objects that might be in danger (e.g. you might like to draw someone standing at a barbeque).

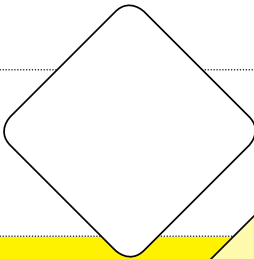
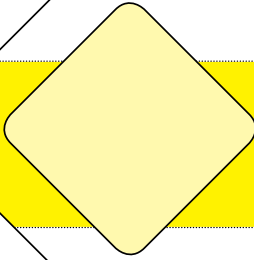
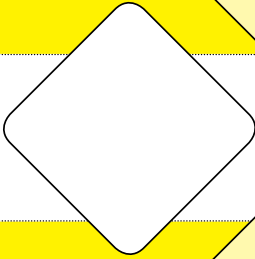
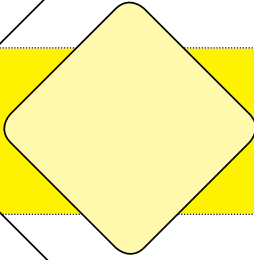
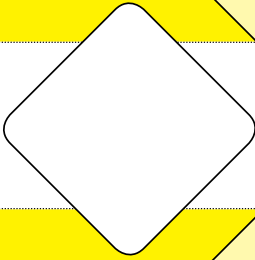
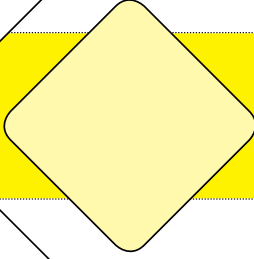
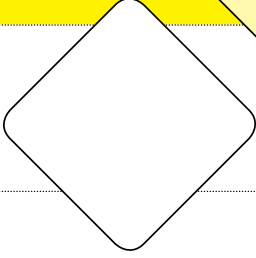


Key Question Five: How do bushfires behave?

ACTIVITY THIRTEEN

Picture cues

Pictures and signs give us clues as to what might be dangerous or where things are found.
Can you create pictures on these signs to let people know about bushfires?

Bushfires happen when its dry	
Bushfires come from the north and west.	
Bushfires can often affect properties far in advance of the actual fire.	
Embers and other hot material get blown by wind.	
Bushfires can be intense and unpredictable.	
They can be extremely noisy	
Bushfires can cause the sky to turn black	

ACTIVITY FOURTEEN

Wordsearch

Find as many bushfire related words in the following wordsearch as you can. Write them on the lines below.

S	O	A	H	G	L	A	S	S	B
E	X	A	I	E	M	A	L	F	U
Y	Y	R	G	E	L	L	T	I	S
M	G	S	H	C	E	I	S	R	H
K	E	O	W	V	U	G	E	E	F
P	N	N	I	H	F	H	W	Y	I
N	G	I	N	O	R	T	H	E	R
U	A	L	D	S	R	E	B	M	E
J	M	T	S	D	R	Y	H	O	T
Q	B	B	U	Y	M	N	R	U	B
A	S	H	M	R	W	O	O	D	B
T	R	I	P	L	E	Z	E	R	O

ACTIVITY FIFTEEN

Investigation

It is too dangerous to get close to a fire to see how it behaves. If you want to find out how a bushfire behaves, there are other ways: look it up on the Internet, find a book about bushfires, or ask someone who has seen one (e.g. a firefighter). See what information you can find to answer the following question.

Does a bushfire travel faster up hill?

Yes No

Justify your answer



Key Question Six: What are the dangers of bushfires?

ACTIVITY SIXTEEN

Who and How?

Bushfires can be dangerous to living things and can cause damage or death.

Make a list of the living things that are in danger from bushfires and how they could stay safe.

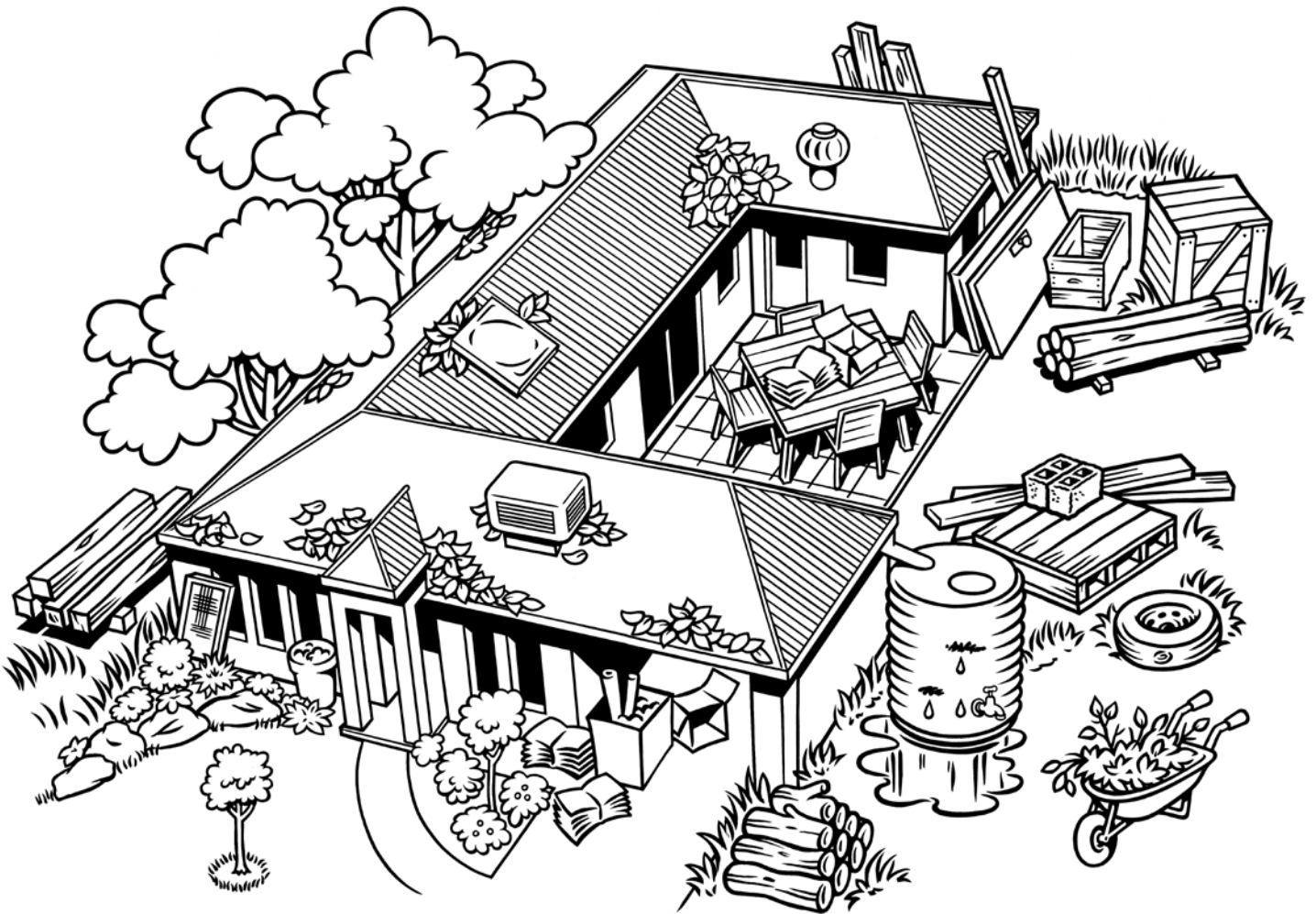
WHO	HOW

ACTIVITY SEVENTEEN

Home ideas

Houses in the path of a bushfire can catch alight in one of three ways:

- » The embers from the bushfire start their own fires under or around a home or building (particularly in leaf-filled gutters).
- » The flames from the bushfire make a house or building catch on fire.
- » The radiant heat from the bushfire is so hot that it causes parts of a house or building to ignite.
- » Label the diagram below showing where the house might be most at risk of catching alight in a bushfire.



ACTIVITY EIGHTEEN

Warning Jingle

You have been asked by a local advertising company to write a jingle to help students remember to stay safe when it comes to bushfires. The advertisers would like you to tell students of the dangers of bushfires and what they should do. Write your jingle below.

Key Question Seven: How do you stay safe from bushfires?

ACTIVITY NINETEEN

Pack your kit

If you have to leave your home because of a bushfire, there are certain things you will want and need to take with you. What will you take in your kit? (Research what emergency services recommend.)

ACTIVITY TWENTY

Prepare the home

Imagine someone is leaving their home because of a bushfire. They want to make sure it is as safe as possible before leaving.

Write a checklist of the things they should remember to do to keep their home safe. (Use the information sheets to help you.)

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____
- 6 _____
- 7 _____
- 8 _____
- 9 _____
- 10 _____

ACTIVITY TWENTY-ONE

Decisions to make

When there are bushfires, people need to decide when to leave their homes and when it is safe to stay. Cut out the tabs at the bottom of the page and put them in the correct columns below:

STAY ONLY IF	IF YOU LEAVE EARLY

Pack a survival kit	Seal gaps	Move furniture away from windows
Listen to the radio or TV for information	Tape windows	Your parents or carers have checked that your property is well prepared
Shut doors and windows	Bring in outdoor furniture	You and your family are physically fit and mentally prepared
You know what your family needs to do to stay and protect you and your home		

Key Question Eight: Who can help when there are bushfire?

ACTIVITY TWENTY-TWO

Who's who?

There are any number of people who can help when you and your home are affected by bushfires.

What do you think the following people could do in a bushfire emergency?

Firefighters	
Ambulance officers	
Police officers	
Nurses	
Doctors	
Local government workers	
Neighbours	

ACTIVITY TWENTY-THREE

What would you do?

In Queensland, an agreement between the police and the fire service allows properly prepared people, in some situations, to stay in their homes during bushfires. The decision you make needs to be written into your family’s Bushfire Survival Plan. QFES Bushfire Survival Plan templates can be downloaded at www.ruralfire.qld.gov.au.

You and your family should have a plan so that everybody knows what to do in case of an approaching bushfire.

The following activity might help you to think about what could go in your family’s plan.

Use the information below to complete the table

The Fire Danger Rating (FDR) is an early indicator of potential danger and should act as your first trigger for action. The higher the rating, the greater the need for you to act. The FDR is an assessment of the potential fire behaviour, the difficulty of suppressing a fire, and the potential impact on the community should a bushfire occur on a given day. A Fire Danger Index (FDI) of ‘low–moderate’ means that fire will burn slowly and that it will be easily controlled, whereas an FDI in excess of ‘catastrophic 100+’ means that fire will burn so fast and so hot that it will be uncontrollable.

Action to take only during a low-moderate FDI bushfire event.	Action to take only during a high FDI bushfire event.	Action to take only during all bushfire events.

ACTIVITY TWENTY-FOUR

Reporting bushfire - Triple Zero (000)

Decorate and cut out the following card to keep at home in case of a bushfire emergency.



**When reporting a bushfire,
you will be asked for these details.**

The exact location: _____

Best access to the fire: _____

The situation – what is occurring: _____

Your details: _____

Key Question Nine: Where do we find more information about bushfires?

ACTIVITY TWENTY-FIVE

More information at home.

Think about ways you might get some more information about bushfires and record them below.

ACTIVITY TWENTY-SIX

Information in our community

There are plenty of places in our local community to get information about bushfires. To the address book below, add the names, addresses and phone numbers of some people who might have some useful bushfire information.

Name	Address	Phone Number

ACTIVITY TWENTY-SEVEN

Design a webquest

Design a webquest for a younger student in the school. Think about which websites might be good for them to visit to get more information about bushfires and what kind of information they should look for there. Give the student a series of instructions to follow. When you are done, have a go at doing the webquest yourself.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Teacher Reflection



Bushfire Ed

YEARS FIVE AND SIX

Student Assessment Opportunities

Key Question Ten: What have we learnt about bushfires?


ACTIVITY TWENTY-EIGHT

Student Portfolio

Complete the following questions.

1. Name three things that can start a bushfire.

2. Draw a picture of a bushfire-prone area and label it.



3. Explain why this is a bushfire-prone area.

4. Describe what happens to homes in a bushfire.

5. List the three things a fire needs to burn, and give an example of each that you would find at home or at school.

6. Describe what action you would take if there was a low–moderate bushfire near your home.



ACTIVITY TWENTY-NINE

Group presentation

With your group, present a 10-minute presentation explaining the dangers of bushfires and the actions you can take. Think about the key questions from the unit and how you can demonstrate your learning around those key questions.

Key Questions

- » How do bushfires start?

- » What can be expected in a bushfire?

- » What does a Bushfire Survival Plan look like?

- » How can people manage their own safety?



ACTIVITY THIRTY
Reflection

What have been the top three things you have learnt about bushfires?

What are the two most interesting pieces of information you discovered?

What is one question you still have?

Teacher Reflection

Years 5 and 6 Bushfire Ed Program

Bushfire Ed

TEACHER RESOURCE

Also available at
www.fire.qld.gov.au/communitysafety/schools/default.asp

