



PROJECT
FIRESTORM

STUDENT OVERVIEW



YOUR COMMUNITY NEEDS YOU!

Project Firestorm is a five-level mission to battle bush fires and protect the community. In tackling this mission you'll join forces with five elite Firestormers:

M-POWER, MAVRIC, REZ-Q, SONAR & ROBOTICA

Each Firestormer possesses the specific skills to take command of one of the five levels. They'll explain your duties, and help you out with ideas and information along the way.





YOUR CRITICAL MISSION

Level 1 Gather intelligence about bush fires

Level 2 Work out ways to prevent and respond to them

Level 3 Identify problems and come up with solutions

Level 4 Build prototypes for those solutions

Level 5 Prepare your own bush fire plans

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LEVEL 1 GET SMART



Level 1

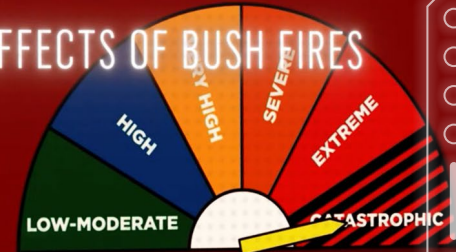
GET SMART

With videos, reports, news stories and maps, gather intelligence about:

- What causes bush fires?
- How can people prepare for them?
- What are ways of preventing them?
- How should you respond to a bush fire?
- What happens afterwards?



CAUSES AND EFFECTS OF BUSH FIRES





Level 1

GET SMART

Levelmaster:
M-Power AKA Emma

- Passions:**
- Making positive connections
 - Building effective teams

- Key skills:**
- Leadership
 - Logic and empathy

M-Power is a natural born leader - with the charisma to pull a team of Firestormers together and motivate them to explore deep into the problems of bush fires.



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Level 1

GET SMART

See bush fires for real

- What ways are they being tackled
- Who's fighting them
- How quickly do they spread?
- What equipment is being used?



“Remember you’re better together team. Collaboration is the key to good investigative work.”

M-POWER





Level 1

GET SMART

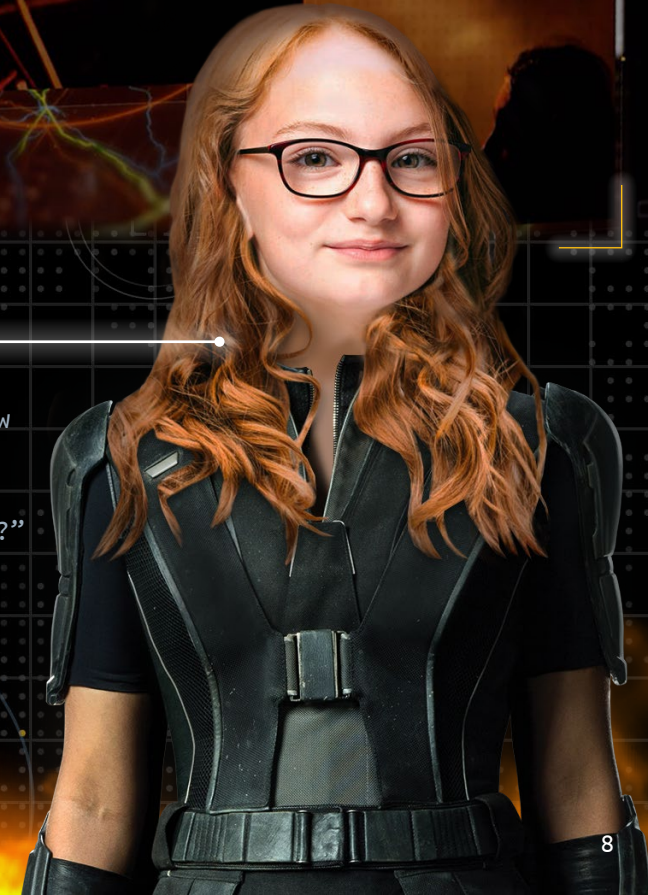
Think about the effects of bush fires

- Who is impacted?
- How are they coping
- What damage has been done?
- How has nature been affected?



“Empathy is a critical life skill. If you don’t really know what’s going through the minds of bush fire victims, how can you think of ways to help them?”

M-POWER

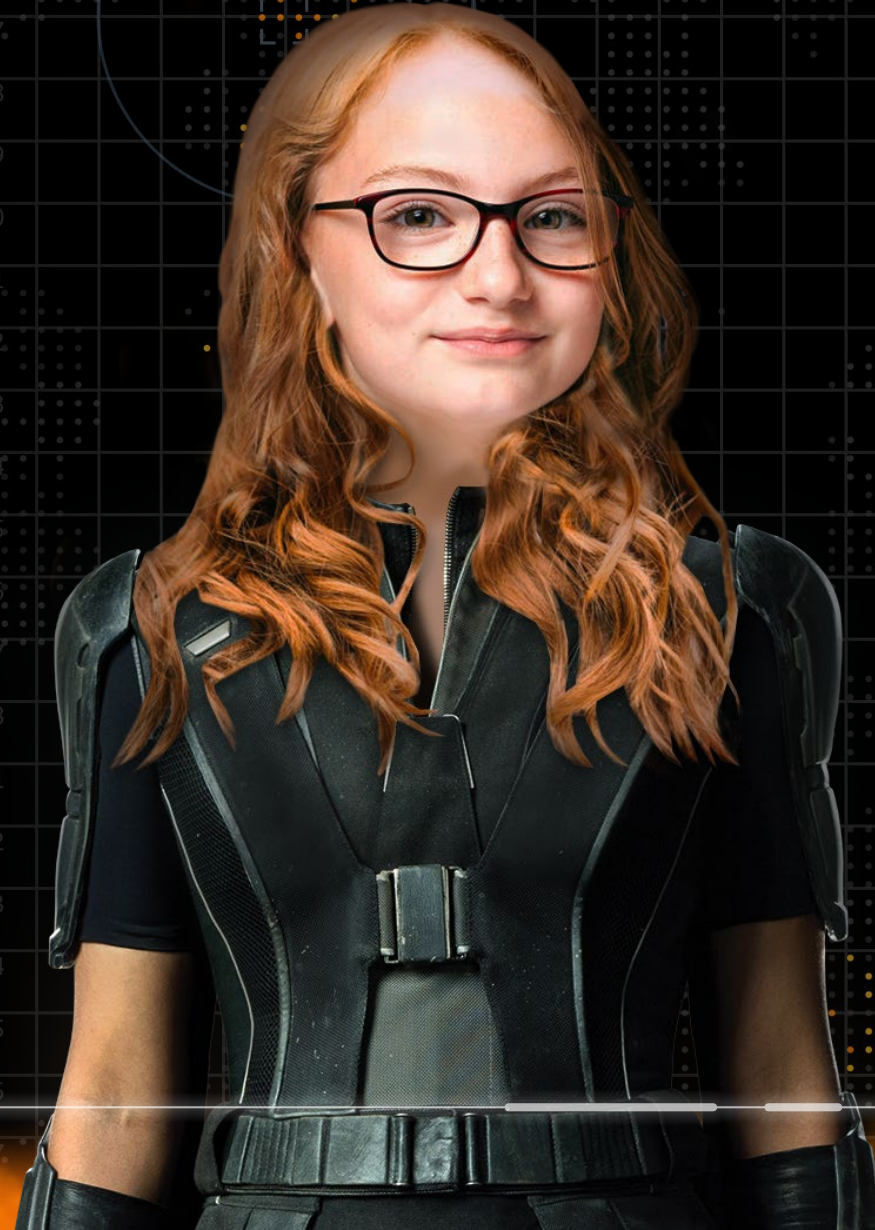




MORE ABOUT M-POWER

When she's not building innovative apps and video chatting with her friends, M-Power connects with the broader community by moderating online forums to discuss new ways to prepare, prevent, respond and recover from bushfires.

She encourages collaboration and ideas from all over Australia, creating partnerships with local businesses, who then donate particular items, services and skills needed to assist local bushfire victims.





LEVEL 2 SPOT A PROBLEM



Level 2

SPOT A PROBLEM

Work together to discuss the issues facing communities and think about what needs to be done.

CAN YOU STOP BUSH FIRES SPREADING?





Level 2

SPOT A PROBLEM

Levelmaster:

Mavric AKA Mitchell

Passions:

- Aerodynamics
- Aerial firefighting

Key skills:

- Dexterity and vision
- Drone piloting

Mavric has amazing vision and nothing escapes his eagle eyes. So he's just the Firestormer you need in your team when there's some intense spotting of problems to be done.





Level 2

SPOT A PROBLEM

There are any number of issues associated with bush fires, such as the need to:

- Stop fires happening in the first place
- Stop fires from spreading
- Make sure everyone is well prepared
- Let people know a fire's coming
- Keep firefighters safer
- Tackle fires in inaccessible areas
- Help people who can't help themselves
- Rebuild fire-ravaged communities



“Open up your eyes - and your mind - to the challenges that have to be overcome. Next you have to consider solutions.”

MAVRIC

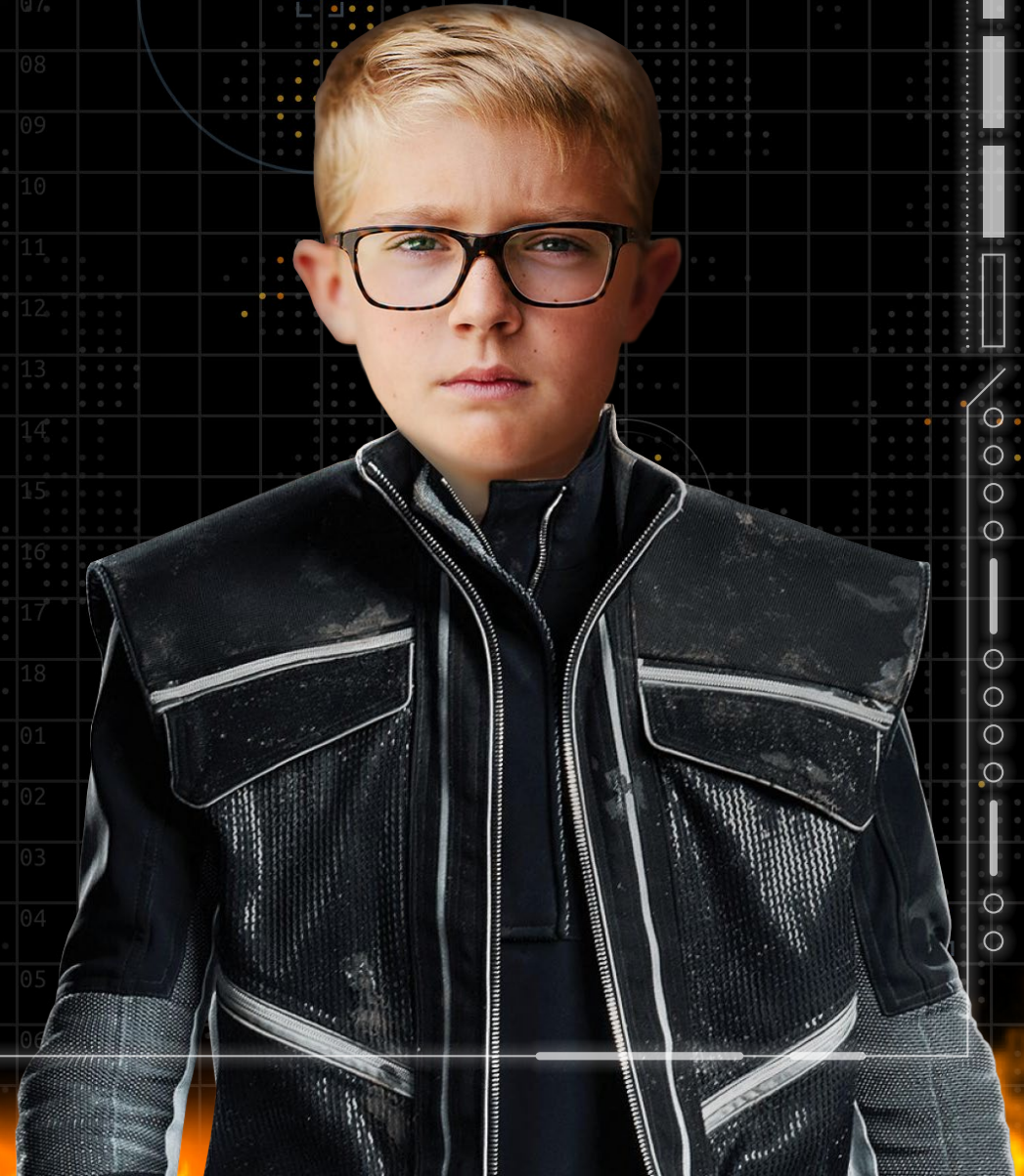




MORE ABOUT MAVRIC

At home Mavric studies aerodynamics and plays a mean game of Fortnite, but in his other life he fights fires from the air, piloting highly intelligent aerial surveillance drones such as his DJI Mavic 2 Pro Drone.

Once a fire is spotted, he unleashes his fleet of firestorm bombers, to extinguish the fire and eliminate the threat.





LEVEL 3
CONSIDER SOLUTIONS



Level 3

CONSIDER SOLUTIONS

Work through all the problems you've identified and start considering solutions to them.





Level 3

CONSIDER SOLUTIONS

Levelmaster:

Rez-Q AKA Jarli

Passions:

- Australian flora and fauna
- Respecting cultural traditions

Key skills:

- Balancing the need for fire with its risks
- Capturing and analysing environmental data

Rez-Q is a highly skilled indigenous ranger who knows fire is extremely important to the biodiversity of the environment but it can also be dangerous when not respected or managed correctly.





Level 3

CONSIDER SOLUTIONS

In your Firestormer group, consider the problems associated with bush fires one by one and chat about potential solutions.

- Throw around lots of ideas for tackling the challenge
- Let your imagination run wild
- Come up with a short list of the best ideas
- Vote to choose the one to develop into a working solution



“Wisdom comes from listening to those around you and respecting the fact that every person has a part to play, and a worthy voice to be heard.”

REZ-Q





MORE ABOUT REZ-Q

Rez-Q recognises that fire is an important symbol and practical tool in Aboriginal culture and that not all burning is bad. It is not only carried out or prevented to help animals and plants, but also to assist in growing food and medicine, as well as being used for cultural reasons such as for corroborees.

He acknowledges that each 'mob' as well as 'Elders', will have their own ways of looking after, and talking on behalf of, their specific piece of country; and that there are separate women's and men's areas.

"Explore solutions from every angle thinking about past, present and future."

REZ-Q





LEVEL 4
MAKE IT HAPPEN



Level 4

MAKE IT HAPPEN

Together, try to bring your idea to life doing things such as:

- Build a scale model of your idea
- Make the idea into a working prototype
- Explain an idea in a multimedia presentation



BRING YOUR AWESOME IDEA TO LIFE!



Level 4

MAKE IT HAPPEN

Levelmaster:

Sonar AKA Zhang

Passions:

- High-tech equipment
- Caring for the environment

Key skills:

- Smart device inventor
- Perception and observation

Sonar is a gadget guru and a prototype professional, so he's just the Firestormer you need to help bring your ideas to life.





Level 4

MAKE IT HAPPEN

For inspiration, the ideas that one group of Firestormers came up with included:

- Clever ways to automatically detect fires
- Using new technology to fight fires
- Protecting entire towns from approaching bush fires
- Better protection for firefighters and their equipment
- Systems for helping the victims of bushfires
- Ways to raise money for the NSW Rural Fire Service



“Remember firestormers, the strength of the idea is the thing that really matters. Get that right and your genius will shine through, however good or bad your modelling skills are.”

SONAR





MORE ABOUT SONAR

For Sonar, a good night in is one spent studying complex algorithms or doodling ideas for inventions in his school books. But he can also be found building hi-tech prototypes of equipment that will help volunteer firefighters be alert and safe.

His latest invention is a GPS based wearable device that alerts volunteers and directs them to a bush fire location. Once they are there, the technology monitors their location, heart rate and temperature, and sends vital information to Firestorm HQ.





LEVEL 5
TEST AND SHARE IT



Level 5

TEST AND SHARE IT

Make sure your brilliant idea works and tweak it if you have to. When you're ready, you'll share your awesome idea with the NSW Rural Fire Service.

LOADING IMPROVEMENTS





Level 5

TEST AND SHARE IT

Levelmaster:

Robotica AKA Georgia

Passions:

- Robotics and Cybernetics
- All things mechanical

Key skills:

- Manual dexterity
- Vision and creativity

Robotica has a toolbelt that would put even the most seasoned tradie to shame, and she knows how to use it. So she's just the person to help put the finishing touches to your ideas - and overcome any glitches.





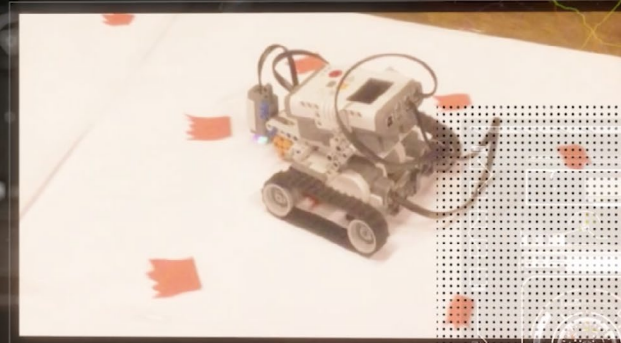
Level 5

TEST AND SHARE IT

How you submit your idea to the NSW Rural Fire Service will depend on its nature, but it could be:

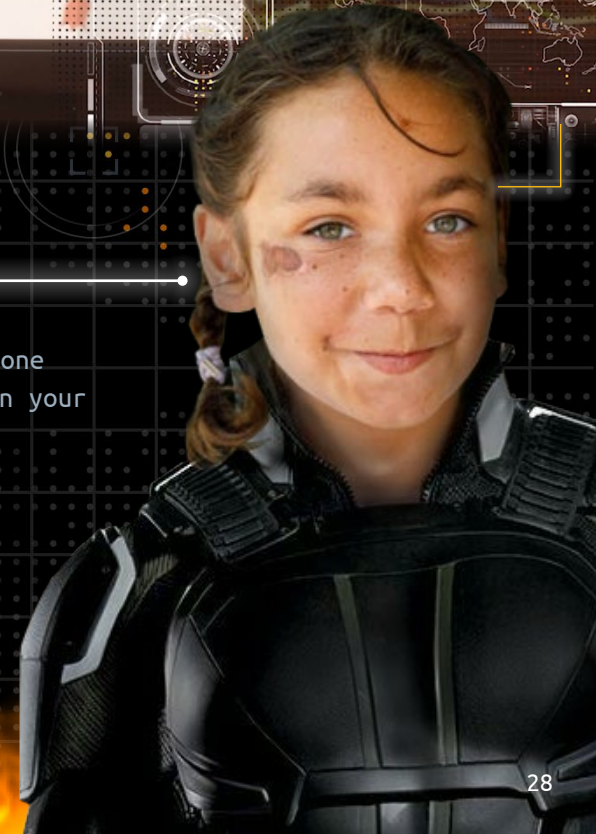
- Pictures and/or a video
- A presentation like this one
- An actual model or prototype

TELL US YOUR IDEAS



“The NSW Rural Fire Service Commissioner might even choose one to test for real, which will win your school a Commissioner’s Award!”

ROBOTICA





MORE ABOUT ROBOTICA

Robotica loves immersing herself in a good book on artificial intelligence or tinkering on a project in her workshop. But her greatest achievement is inventing an army of firestorm robots that can withstand temperatures of up to 1000 degrees celsius.

This battalion of firestorm fighters can target the centre of any blaze releasing state of the art fire retardant that extinguishes the danger from within.





GOOD LUCK WITH YOUR MISSION

You've met the team, you've been given your mission briefing,
and you know what you have to do.



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GO FOR IT FIRESTORMERS!

