

TOPIC 2 – SMOKE ALARMS

Teachers should print this sheet and make it available to each student group allocated to this topic. *Two groups maximum per Topic



Learning Intentions

- Students will understand the importance of having working smoke alarms in their homes.
- Students will work with their families to ensure they have sufficient smoke alarms in their homes.
- Students will work with their families to ensure they maintain the smoke alarms in their homes.
- Students will have an increased understanding of the building safety features in the school and other public buildings.

Essential Questions

1. Why do fire services encourage people to be prepared for emergencies eg a fire in their home?
2. Why is it important for each household to have working smoke alarms?
3. What are the potential implications for not having working smoke alarms in our homes?
4. What are the installation requirements for smoke alarms in Victoria?
5. What advice do the Victorian fire services provide for the maintenance of smoke alarms?
6. What are the fire safety features of schools and other public buildings?

Key Understandings

- A working smoke alarm will wake you if there is smoke in your home
- There must be a smoke alarm on every floor of every home
- The Victorian fire services' advice is to have a smoke alarm in every bedroom, living area & hall
- Smoke alarms should be tested monthly
- If a smoke alarm has a 9volt battery it should be replaced every year
- Smoke alarms should be cleaned every year
- Smoke alarms should be replaced every ten years
- The Victorian fire services' advice is to have smoke alarms with 10 year batteries
- The Victorian fire services' advice is to have all your smoke alarms interconnected.

Key Skills

Students will be able to:

- Assess if their home has sufficient and correctly located smoke alarms
- Change the battery of a 9 volt battery powered smoke alarm.
- Assist their families in how and when to test, clean and replace household smoke alarms.

Success Criteria – Rubric

I will be successful if I:

- Demonstrate my understanding of residential smoke alarms and/or fire safety equipment in large buildings by the completion and presentation of a group research project.
- Listen and participate when my classmates present their group projects to my class.
- Actively listen, participate and engage with the firefighters during their visit.
- Use the Victorian website references as assigned below.

	Excellent	Good	Developing
Presentation	Work was well presented and easy to understand. The presentation engaged the audience.	Most of the work was well presented and easy to understand. Most of the presentation engaged the audience.	Most of the work was not well presented or hard to understand. Some of the presentation engaged the audience.
Content	All Information was accurate, showed excellent use of listed resources and was written in the student's own words.	Most information was accurate, showed good use of listed references and was mostly written in the student's own words.	Some of the information was inaccurate or incomplete, there was little use of listed references and/or it was not written in the student's own words.
Creativity	The presentation was creative and unique. The visual and/or audible presentation showed that the learner had a lot of pride in his/her work.	The presentation had some elements of creativity. The visual and/or audible presentation showed that the learner had some pride in his/her work.	The presentation had only a few elements of creativity. The visual and/or audible presentation showed that the learner had little pride in his/her work.
Organisation	Information was organised in a clear, logical way. Information followed the project guidelines.	Most information was organised in a clear, logical way. It followed most of the project guidelines for organisation.	The information was not always logically sequenced. Some of the project guidelines for organisation were missing.

TOPIC 2 – SMOKE ALARMS

Each group should choose one of the following activities to display their research into the Key Understandings.



A) Posters

Design and create a series of 3-5 large posters to explain to people the regulations and advice regarding smoke alarms in Victoria. The posters should be at least A2 size.

Include topics from the following:

- Purpose of smoke alarms
- Positioning regulations and advice
- Maintenance – batteries, testing and cleaning
- Types of smoke alarms
- Special features eg hush button

Make the posters colourful, uncluttered and meaningful. Display them in your classroom and provide a short summary of poster content to firefighters.

References: FRV [smoke-alarms](#)
CFA [plan-prepare/smoke-alarms](#)
VBA [consumers-safety-guides/smoke-alarms](#)
CSIRO [Fire-safety/Smoke-detectors](#)

B) Research Report

Choose your own project design or method to display your research into smoke alarms that are linked to a smart phone.

How do they work?
What are some of the special features?
Are they better than the smoke alarms in your home? How?
Are they safer? Why?
What are the limitations of a smart smoke alarm?

Provide a short summary of your project to firefighters. Presentations should be rehearsed before the firefighters' visit.

References: There are different brands on the market.

- [Nest Protect](#)
- [Onelink.FirstAlert](#)
- [X-sense Wi Fi Smoke Alarm](#)

C) Slide Presentation

Design a PowerPoint or Google Slide presentation of at least 8 slides about smoke alarms. The presentation should explain to people the regulations and advice regarding smoke alarms in Victoria.

Include slides about the following:

- Purpose of smoke alarms
- Positioning regulations and advice
- Maintenance – batteries, testing and cleaning
- Types of smoke alarms
- Special features eg hush button

Use a photo from a home on each slide.
Rehearse your presentation. Avoid reading text straight off the slides. Use your own words when explaining.

References: FRV [smoke-alarms](#)
CFA [plan-prepare/smoke-alarms](#)
VBA [consumers-safety-guides/smoke-alarms](#)
CSIRO [Fire-safety/Smoke-detectors](#)

D) Write a Script / Record a Video

Write a script and then record a video of you or someone you live with maintaining your smoke alarms.

This should include:

- testing a smoke alarm
- cleaning a smoke alarm
- changing a 9volt battery in a smoke alarm
- an adult installing a new battery powered smoke alarm

Include voice over to explain what is happening and why you need to do it. Consider ways to make the voice over appealing to the audience eg a conversation between two or more family members. Include the sound of the smoke alarm activating.

Give a short verbal introduction to your video before you present it to firefighters.

References: FRV [smoke-alarms](#)
CFA [plan-prepare/smoke-alarms](#)

E) Inspection Report

Ask the school office for a map of your school buildings and grounds. Walk around the school and mark in locations of all fire safety equipment and features on your map. This may include:

- emergency lighting
- emergency exit signs
- portable or fixed siren or alarm
- EWIS
- Fire Alarm Panel
- fire blankets
- smoke alarms/detectors
- fire extinguishers
- fire hose reels
- emergency procedures/ plans/maps
- emergency assembly areas
- sprinkler system

Take photos of each of the equipment / features.

Write a short description of each and how it makes teachers and students safer.

Create a presentation using your descriptions, map and photos. Provide a short summary of your project to firefighters. Presentations should be rehearsed before the firefighters' visit.

F) TV Commercial

Write a script and then record or role play a TV advertisement for a Smoke Alarm as part of a pack designed for people who are deaf or hard of hearing.

Your TV ad should:

- be exactly 30 seconds long
- display the special features of the smoke alarm and why it is included in a pack
- include a demonstration of the smoke alarm (you may need to create a model)
- be aimed at the people who you want to buy the smoke alarm. (use mainly visual rather than auditory messages)
- consider learning and using some AUSLAN signing: [Auslan](#)
- highlight how to purchase the smoke alarm

Rehearse before recording or performing. Give a short verbal introduction before you present to firefighters.

References: Expression Australia [smoke-alarm](#)