Overview

Victoria State Emergency Service (SES) has developed an educational game (www.vicses.com.au/stormsafe-game) which depicts a neighbourhood that has just received a severe thunderstorm warning. Players have to identify potential hazards to houses in a neighbourhood, select and fix them up, while earning items for their Home Emergency Kit.

The following lesson plan can be conducted before or after the game has been played and assists in consolidating students’ learning and understanding.

It is suggested that any observations, student work or comments recorded during this lesson be displayed in your classroom, under the heading ‘How to be StormSafe’, for others to see and learn from.

Weather warnings and investigating the Bureau of Meteorology (BOM) website

<table>
<thead>
<tr>
<th>Outline</th>
<th>Materials</th>
<th>Time</th>
<th>Conclusion</th>
</tr>
</thead>
</table>
| To develop an understanding of storms and weather warnings, including where to find thunderstorm and weather warnings and what they mean. | ▪ Access to computers and projector or SmartBoard.  
▪ Worksheet #1: Exploring the Bureau of Meteorology website  
▪ Pencils/textas  
▪ Optional Support material #1: Home Emergency Kit items | 1 hour | Students will have developed their understanding of storms, warnings that are issued, how to find the warnings and what to do to prevent damage during a storm. |

Introduction

1  Begin a discussion on storms. What are storms? What damage can occur during a storm? On the whiteboard make a list of student responses. (The list might include: damage to houses, hail braking windows, wind pushing over trees onto property, flooding in the street.)

2  Ask students if this damage could be expensive and inconvenient. The response should be yes.

3  Follow up with the questions: Would it be beneficial to know when a severe storm was coming? What could you do to be prepared?

Activity

4  Explain to students that the Bureau of Meteorology (BOM) (www.bom.gov.au) is Australia’s national weather, climate and water agency. It provides regular forecasts, warnings and advice for areas across Australia. If you are concerned there is going to be severe weather, you can check the BOM for thunderstorm and weather warnings.

5  Distribute a copy of Worksheet #1 to each student, then on a projector or using a SmartBoard show the Victorian Warnings Summary section of the BOM website: http://www.bom.gov.au/vic/warnings. Then have a look at Victoria’s radar http://www.bom.gov.au/australia/radar/vic_radar_sites_table.shtml. Find a nearby location and click on the radar views. Discuss what you can see on the radar. If it’s a day where there is no rain in the area, have a look at different locations so the students can see rain showing up on the radar. Look at the colour of the rain showing up on the radar – is it light, moderate or heavy?
Have a look at the global section of the website which provides global weather warnings. This part of the website can be found by clicking the word global in the top right section of the website or by using this link: http://www.bom.gov.au/global/?ref=hdr. On the left hand side of this website you can find out more about heavy rain, thunderstorms or other weather information that has been experienced globally.

Give students 20–25 minutes in pairs to explore the BOM website and complete Worksheet #1. As students are working, roam around the room and check answers.

**Conclusion**

Ask students to imagine that they are at home and have just checked the BOM website and found out there is a severe thunderstorm warning for their area. What can they do to ensure their family and belongings remain safe? Write student answers on the whiteboard. You might have to prompt students to think about pets, items outside, family, important belongings, radio, etc.

The following is a list of possible responses:

- Get everyone in the family to stay inside.
- Tie down or put away any loose items in the backyard.
- Listen to the radio for updates and advice.
- Bring pets inside.
- Put important belongings off the ground.

Explain to students that there are things you and your family can do around your home to be prepared for a storm.

These things include:

- Clean gutters, spouting and downpipes regularly to ensure no leaks occur through your roof.
- Trim or remove trees or branches overhanging around your home or powerlines to ensure they don’t snap off during a storm.
- Keep an up-to-date list of emergency phone numbers near the telephone.
- Put together a Home Emergency Kit.

**Extension activity**

As a class, look at the Home Emergency Kit that will help you in the event of an emergency. Look at the items in the kit and discuss why they are necessary to have. Write an information pamphlet on storms, providing definitions, how to be prepared and information about the Home Emergency Kit. Students can be provided copies of **Support material #1** for a detailed explanation of what is in a Home Emergency Kit and why each item is important.
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<th>Locate a weather warning. What is the warning?</th>
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<td>What areas will be affected?</td>
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<td>How will they be affected?</td>
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<th>List three places that are currently experiencing rainfall in Australia. Is the rainfall light, moderate or heavy?</th>
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<th>Find out and write about three weather occurrences that have occurred globally (you can choose from six hours earlier, 12 hours earlier, 18 hours earlier or 24 hours earlier).</th>
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The following guide is to assist you explore the Bureau of Meteorology (BOM) website

Step 1: Visit the BOM's (www.bom.gov.au) homepage and click on ‘VIC’ to access the Victorian weather warnings.

Step 2: This is what the weather warnings page looks like.

Step 3: How to click and view the weather radar (click on the radar icon).
Step 4: Click on Melbourne when you get to the radar images screen.

Step 5: This is what the radar image screen looks like.

Step 6: To view the Global weather and warnings information click ‘Global’.
Step 7: Click on the global severe weather information.

Step 8: This is what the global weather information screen looks like.
1. A battery operated or wind-up radio – to listen for warnings, updates or alerts.

2. A battery operated or wind-up torch – in case of power outages to help you see in the dark.

3. Spare batteries to fit radio and torch.

4. A first aid kit – to assist with any medical issues that may arise.

5. Rubber gloves and strong leather work or garden gloves – to enable you to pick up/move heavy/sharp items. Rubber gloves prevent liquids touching your skin.

6. Mobile phone and charger – to stay in contact with people if the telephone line goes down.

7. A waterproof bag or container – to keep valuables dry and safe. Valuables may include important papers, photographs, etc.

8. A good supply of everyone’s medicines and prescriptions – in case you have to leave your house then you won’t waste time finding these important items.

9. Strong shoes or boots – so you can walk safely around if there is damage.

10. A copy of your Home Emergency Plan – every house should have a plan of what to do in an emergency.

11. Special needs – if someone in your house has special needs, such as a walking stick, or babies milk it’s important to have these in case you have to leave quickly.

12. Non-perishable food and drinking water for every person and pets to last for 3 days – in case there is damage and you are unable to leave your house for a period of time.