



## Disaster Response - Teacher's Notes

This section of the resource is designed to provide teachers with some ideas for projects or open-ended investigations for students. As with all PALMS resources teachers should pick and adapt activities to suit their situation and students.

In a natural disaster situation such as cyclones, earthquakes, floods or bushfires, people may have to evacuate their homes without much notice. As a result of these disasters, they may not be able to return to their homes for a long period of time or their home and belongings may be destroyed. Local councils and governments will have policies and procedures in place and have one or more buildings nominated as evacuation centres where people who have had to evacuate could stay.

### Project Idea 1 - Disasters around the world

One idea for a research project is for students to consider how prepared people in some countries would be for natural disasters. For example, would Australians be prepared for a strong earthquake or tsunami in the same way that Japanese people would?

### Project Idea 2 - What should be in an emergency kit?

Students could come up with a list of essential items for a kit that people in disaster prone areas should have available at all times. This could be tailored to specific threats or just kept very general.

Students should be encouraged to consider factors such as shelf-life of food and other items, the volume, weight and transportability of the kit (this could be done as a maths activity, calculating volumes of different shapes). They should also consider how long the kit will assist people for. The Queensland government website is a good resource for suggestions for emergency kit contents: <https://www.qld.gov.au/emergency/dealing-disasters/emergency-kit>

Students may also want to look at emergency plans for their school or a





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bushfire plan for their home. There is some good information available on the Department of Fire and Emergency Services website:

<https://www.dfes.wa.gov.au/safetyinformation/fire/bushfire/Pages/allpublications.aspx>

This project will assist students in making judgements about what they consider essential items for survival.



### Project Idea 3 - Emergency shelter design

The design of a shelter to be used in an emergency situation is dependent on many factors such as:

- Climate and weather of the area affected
- Terrain of the area the shelter will be put, including soil stability
- Accessibility of the area



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- Skills and tools available for delivery and/or construction
- Cost of materials used
- Expected lifespan of shelter
- Number of shelters needed and whether they can be joined together
- Protection from continuing threat of natural disaster (e.g. aftershocks or floods)
- Size that the shelter is when not in use (storage requirements)

Students could be given a completely unscaffolded project brief or be asked to design for one particular country or disaster type.

If your school has a 3D printer available, you could get students to design models of their shelters using a computer then print them. There is broad scope to make models (including full scale ones!) from many other materials also.



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### Project Idea 4 – Disaster response donations

If you were to put together a kit to donate to a person who has been affected by a natural disaster, what should it include? This project could include considering the following questions:

- What will people actually need in the week after a disaster if they have been evacuated and unable to return home? What will they need a month later?
- Is there different kits for adults and children / families and single people / young and old people / females and males?
- Could the kits be prepared and stored for a long time? (e.g. shelf life of food)
- Do any of the items in the kit need special preparation?
- How would this kit be packaged?
- How will the kit be transported to the people in need? (e.g. could it be air-dropped into a flooded area cut off from transport by road or rail)
- Do any of the items have instructions required that may need to be translated?

Issues that can affect areas struck by natural disasters that students may like to consider include:

- Being isolated for extended periods of time - roads, railways and airports may flooded or damaged (how will the kits be delivered?)
- Communication such as phone lines damaged (mobile or satellite phones could be included)
- Access to clean water for drinking and sanitation (water purification equipment could be included)
- Disease outbreak (disease prevention equipment such as masks and gloves could be included)







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- Dealing with people injured in the disaster (medical supplies could be included)
- Lack of electricity and cooking facilities (any food included should require little preparation and ideally no cooking)

Increasingly, charity organisations ask for donations of money rather than goods and the reasons for this may be something you could discuss with your class (see this article on this subject

<https://www.devex.com/news/thanks-but-no-thanks-unwanted-goods-flood-disaster-struck-developing-countries-89458>)



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