LIFESAVING VOLUNTEERS TO THE RESCUE

Level: 5 & 6
Activity: 3

Overview
A successful rescue operation involves a number of different emergency management agencies that all work together to complete a common goal – to save lives. People involved in rescue operations could involve; the Westpac Lifesaver Rescue Helicopter team, lifesavers, paramedics, firefighters and police. In this lesson, students will need to use problem solving skills to work out who would get to their local beach (or another aquatic environment, i.e. public pool, river or lake) fastest in an emergency situation.

Resources
- Computer access for each group
- A copy of the *Map of Victoria* (Appendix A) for each small group

Activity
ENGAGE
Ask students to name the beaches, lakes, swimming pools (public / home) and other aquatic environments they visit most often. List these on the board, grouping them according to type; inland, coastal, pool.

EXPLORE
Group students into small, mixed ability groups, of three or four students. Give each group a copy of the *Map of Victoria* (Appendix A). Give them 10 minutes to add as many aquatic environment locations from the list on the board as they can to the map. The challenge is to get them as close as possible to their actual location.

EXPLAIN
Give groups access to a computer so they can check their map. Ask them to use a different colour to make any changes that are needed. Discuss:
- How close were you?
- How many of these locations have you been to?
- Who has been to one of these in the past month?
- How many times a week/month/year do you visit an aquatic environment such as these?
- Have you ever witnessed an emergency while you were there? If so, who was involved?

ELABORATE
Each group needs to choose one of these aquatic locations. Ask them to imagine that there is an emergency at that location. Their challenge is to work out who will arrive to help first. In order to do this, they will need to:
- Calculate distances to the Westpac Lifesaver Rescue Helicopter headquarters, the nearest police station, ambulance depot and lifeguard patrol area if applicable.
- Think about the mode of transport each of these services is likely to use and find out its average speed.

EVALUATE
Ask groups to report back to the class with their findings. Discuss:
- What was the fastest predicted response time?
- Which locations had the slowest predicted response times?
- How might this affect your planning if you were to visit one of these locations?
- Which locations would be the safest to visit?
- What recommendations would you make to someone visiting an aquatic location in Victoria?

Victorian Curriculum
Foundation–10

Level 5		
MATHEMATICS	Number and Algebra: Place value	Use efficient mental and written strategies and apply appropriate digital technologies to solve problems (VCMNA185)
		Use estimation and rounding to check the reasonableness of answers to calculations(VCMNA182)
Level 6		
MATHEMATICS	Number and Algebra: Place value	Select and apply efficient mental and written strategies and appropriate digital technologies to solve problems involving all four operations with whole numbers and make estimates for these computations (VCMNA209)
	Measurement and Geometry: Using units of measurement	Solve problems involving the comparison of lengths and areas using appropriate units (VCMMG224)

Sample Report Comments
{Name} works well within a small group, contributing ideas articulately and carefully considering the suggestions of others.

{Name} calculates the time taken for a vehicle, moving at a constant speed, to travel a given distance. {He/She} applied this understanding to solve real-world problems involving response times of emergency services.

References
University of Melbourne, 2001. *Basic Outline Maps. Available at:* https://library.unimelb.edu.au/collections/map_collection/map_collection_outline_maps [Accessed 17 April 2018].

Appendix A

Map of Victoria, Australia