



Litter scavenger hunt information and solutions

Teacher Information

To complete this activity students can work in pairs or small groups and can complete all, or just a few of, the locations.

Students will need to use their mapping skills to track the movement of a piece of litter before identifying the ocean current that would mobilise the litter item in the water. They will also need to determine which states or territories that piece of litter could float past with the help of the current.

Students will need to consider direction: north, south, east, west, north-east, south-east etc. Some locations may not be directly 'north' or 'east', they might be in a 'northerly' or 'easterly' direction, meaning they are located somewhere roughly north or east, for example. These are acceptable answers and this should be explained to the students prior to commencing the task.

Students will need to interpret map scale to determine the distance from one point to another. They should consider rounding to the nearest 5km (e.g. 163km rounds to 165km, 171km rounds to 170km).

Students are to use an online map viewer or a detailed Australian atlas to complete the activities. A hard copy atlas of Australia is recommended for measurements, whereas an online mapping site would be better suited for answering the more specific questions relating to items such as land features.

Note that this activity is designed to enhance the mapping and mathematics skills of your students. The scenarios are not definitive litter movement pathways, but have been designed for illustrative purposes only.



Solutions

Below are the solutions for the scavenger hunt activity. Please note that measurements are approximate only, and students may have slightly different answers. Answers within 10 - 20km of the 'answers' listed below are acceptable.

1. EDWARDSTOWN, SOUTH AUSTRALIA

The litter travels approximately **6km west** of Edwardstown to the beach at Glenelg, SA. The litter eventually floats out into the ocean, where it begins to move in the ocean currents.

Leeuwin Current

Victoria, Tasmania

2. TOOWOOMBA, QUEENSLAND

A piece of litter is dropped in Toowoomba, Queensland. It travels approximately **160km north-east** to Maroochydore, one of the main towns on the Sunshine Coast, Queensland. The litter blows into **Cornmeal** Creek before heading out to sea.

Murphy's Creek, Esk, Somerset Dam, Buderim

Murphy's Creek: 20km approx.

Esk: 60km approx.

Somerset Dam: 85km approx.

Buderim: 150km approx.

East Australian Current

New South Wales, Victoria

3. DONNYBROOK, WESTERN AUSTRALIA

A piece of litter is dropped in Donnybrook, Western Australia. It travels approximately **45km** in a **south-westerly** direction to the coast of Busselton, Western Australia

Vasse Estuary, Vasse River

Leeuwin Current

South Australia, Victoria, Tasmania



4. ARMIDALE, NEW SOUTH WALES

It travels approximately **160km south-east** to Port Macquarie, New South Wales.

Oxley Wild Rivers National Park, Cunnawarra National Park, Willi Willi National Park, Kumbatine National Park.

Hastings River

East Australian Current

Victoria

5. NEWMAN, WESTERN AUSTRALIA

A piece of litter is dropped in Newman, Western Australia. The litter travels approximately **370km** in a **northerly** direction to Port Hedland, Western Australia.

Stingray Creek

Leeuwin Current

South Australia, Victoria, Tasmania

6. LUCINDALE, SOUTH AUSTRALIA

A piece of litter is dropped in Lucindale, South Australia. It travels approximately **50km north-west** to Kingston SE, South Australia.

Maria Creek

Leeuwin Current

Victoria, Tasmania