

## Building the Community – Transport and Logistics

This module gives students examples of how they can have a job building the community.

### Magazine with activities

Warick, Jeffrey and Clayton all drive trucks or heavy machinery. They help their communities with transport and logistics – the complex organisation that makes a community work.

Students will learn:

- how the drivers have learnt to operate large vehicles safely
- using non-verbal communication such as hand signals in directing vehicles
- using counting strategies to check delivery orders
- reading vehicle specifications and calculating capacity to improve efficiency.



### Curriculum Links

PreVET reinforces and authentically contextualises curriculum learning. For detailed mapping, see [m4a-curriculum-mapping.xlsx](#)

#### Australian Curriculum Prior Learning

- English: Receptive mode – Students explain how text structures assist in understanding the text. They analyse and explain literal and implied information from a variety of texts.
- Mathematics: Students solve simple problems involving the four operations using a range of strategies.

#### T-9 Net Diagnostic Continua

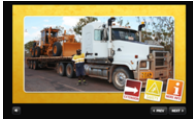


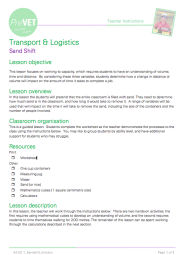
- Reading: Breaking the written code, Making meaning, and Using text.
- Numeracy: Operating & Calculating, Locations & Maps, Shapes & Measurement.

#### Australian Core Skills Framework

- Reading, Oral Communication Levels 1-2
- Numeracy Levels 1-3

# Overview of 4A Transport & Logistics – Activities

See [m4a-transcript-answers.pdf](https://www.4a-transport.com.au/m4a-transcript-answers.pdf) for Activity Answers, [m4a-quiz-answers.pdf](https://www.4a-transport.com.au/m4a-quiz-answers.pdf) for Quiz Answers.

		Overview	Key Vocabulary	Teaching ideas	Related Games	Quiz Questions
A1 Safe Driving and Communication		<p>This activity discusses the importance of safe driving practices with large trucks and using hand signals to direct a colleague driving a grader.</p> <p>Key points:</p> <ul style="list-style-type: none"> <li>- Using spatial awareness to make safe driving decisions</li> <li>- Using non-verbal communication to safely direct a vehicle.</li> </ul>	<p>Direct</p> <p>Left</p> <p>Right</p> <p>Grader</p> <p>Non-verbal</p> <p>Safety</p> <p>Speed</p> <p>Clearance</p> <p>Spatial awareness</p>	<p>The games have several fun ways to extend giving directions into the classroom.</p> <p><u>Direct a Robot: how far?</u> &amp; <u>Direct a Robot: which way?</u> leads into how to play <u>Direct a Robot: Collector</u> and hence these two activities should be completed first, unless there are students who are quicker learners.</p> <p>Students may have friends or relatives who drive large vehicles, they can talk about the importance of safety.</p>	<p>4A.S3.G1 Mirror, mirror</p> <p>4A.S3.G3 Parking Mania</p> <p>4A.S3.A1 Do a Little Dance</p> <p>4A.S3.A2 Flag Semaphore</p> <p>4A.S3.A3- Direct a Robot – Scootle</p> <p>4A.S3.A4 Spatial Awareness Vocabulary</p>	2, 3, 4
A2 Checking Delivery Reports		<p>This activity follows a storeman picking up the community store delivery from the barge and checking the delivery against the order dockets.</p> <p>Key points:</p> <ul style="list-style-type: none"> <li>- Using counting strategies to check orders against delivery dockets</li> </ul>	<p>Delivery</p> <p>Pallets</p> <p>Order List</p> <p>Table</p> <p>Goods</p>	<p><u>Barge Day</u> If a player uses a wild card for example for “4 fuel” then the student who has the “4 fuel” will never be able to play the card unless the cards are put back into the deck. The winner can be the one with the smallest number of cards, if no one can play a card.</p> <p>This game has no specific indicators associated with it as it is aimed at a foundation numeracy level of counting from 1 – 10.</p>	4A.S3.G2 Barge Day	5, 6
A3 Working to Capacity		<p>This activity demonstrates how knowledge of the haul truck's capacity increases efficiency at the McArthur River Mine.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>- Calculating capacity over a period of time</li> <li>- Enhancing work efficiency</li> </ul>	<p>Capacity</p> <p>Efficiency</p> <p>Zinc</p> <p>Digger</p> <p>Cycle</p>	<p>Students could look at the periodic table and find zinc and other elements that are mined in Australia.</p> <p>Look at regeneration projects in mines – e.g. the MacArthur River mine.</p>		7, 8, 9, 10
Lesson – Sand Shift		<p>In this lesson the students will pretend that the entire classroom is filled with sand. They need to determine how much sand is in the classroom, and how long it would take to remove it. A range of variables will be used that will impact on the time it will take to remove the sand, including the size of the containers and the number of people involved.</p>	<p>Volume</p> <p>Capacity</p> <p>Millilitres</p>	<p>This activity can easily be extended by not using the scaffolding worksheet. Present the problem of the sand filling the classroom and they only have a 250ml cup to empty all the sand. How long would it take? This would be best done within small groups and the students would need to have a good understanding of volume, capacity and time.</p>		7, 8, 9, 10