Post-show Activities
Teacher Instructions

The following optional activities are designed to be implemented after your roadshow visit. You may choose to use one, none or all of the activities. They can also be used as standalone tasks. Feel free to modify and adapt them to suit your students.

Activity 1: Reflection and Goal Setting

Have students return to their STEM skill self assessment from the pre-show activities. If they didn't complete this pre-show, they can do it now!

Have students answer the following questions:

1. Why are STEM skills important?
2. Which STEM skill do you think is the most important and why?
3. Identify one job that would benefit from the top skill you identified in your self-assessment.
4. From your self-assessment, what 3 STEM Skills would you like to improve?
5. For each of the STEM skills you chose to improve, identify ***how*** you will work to improve this skill. What subjects allow you to practice these skills at school? How could you work on them at home?

Activity 2: Refining your Defence Industry Team

Return to the 'Design Your Defence Industry Team' activity from the pre-show activities (complete it now if they haven't).

Ask students to refine their team and make **at least one change** to it and justify why.

For each role in their refined team, students identify:

- What qualifications or training is needed (TAFE, University, apprenticeship)
- Any subjects in school that help prepare for it
- One real-life organisation or employer where that role exists

Depending on how long you have to spend on the task, you could also choose to complete one of the following further tasks:

- Students share their team design via a presentation or poster
- Create a recruitment ad for one of the roles in their team

Activity 3: Defence Industry Occupation Flashcards

For double sided cards: Print and cut along the solid black lines and fold along the dotted line to create cards with an occupation on one side and the description on the other. You could laminate the cards so they can be used multiple times.

For separate occupation and description cards: Print and cut along solid and dotted lines so that you have a group of occupation cards and a group of descriptions. You could laminate the cards so they can be used multiple times.

These cards can be used in a range of ways to support your students learning about Defence Industry careers. They can be good starter activities for a lesson, getting students moving, interacting and thinking about careers. You could then ask students to research the pathway or required education/training for a card they finished with, or one they are most interested in.

Example ways to use these cards (full instructions on the next page):

- Quiz-Quiz-Trade: students quiz each other on occupations then exchange with other students.
- Student match-up: students match descriptions to the cards.
- Think-Pair-Share: students work with each other to propose how two occupations can work together.
- Card Sort: students match occupation and description cards.

Activity 3: Defence Industry Occupation Flashcards

For double sided cards:

Quiz-Quiz-Trade (Kagan, 2009)

1. Each student gets one card.
2. Students walk around the room and pair up. The two students quiz each other on the occupations on their cards, providing hints and the answer as required.
3. Students exchange cards and repeat with a different student.
4. Continue until the teacher signals to stop.
5. Students return to their seats.

Think-Pair-Share (Kagan, 2009)

1. Each student receives a card. They think about what kind of projects the occupation could work on (e.g. an electrician could work on the electrical circuits on a submarine, a ship or an army base).
2. Students pair up and discuss their ideas and propose how the two occupations could work together (e.g. an electrician and a data analyst could work together to determine the best way to wire up a ship for optimal efficiency).
3. Choose students to share with the class.

For separate occupation and description cards.

Student Match-up

Students match the occupations to the descriptions using one of the following formats:

1. Give each student an occupation card. Put the descriptions up around the room using blue-tac and tell students to find the correct description.
2. Give half the class occupations and half descriptions and have them match up (make sure you use the right number of cards and their matching descriptions).

Card Sort

Use multiple sets of separate occupation and description cards.

1. Provide a subset of cards to each student (or pair of students).
2. Instruct students to match up the occupation and description cards.
3. Make it a race for a competitive element.

Post-show Activities
Flash Cards

Activity 3: Defence Industry Occupation Flashcards

Project Manager	Plans and organises large projects, making sure everything runs on time and budget.
Mechanical Engineer	Designs and builds machines like engines, vehicles, or robots.
Software Developer	Writes computer code to make programs, apps, or control systems work.
Systems Engineer	Makes sure all parts of a system (hardware, software, electronics) work together.
Electrical Engineer	Designs and manages electrical systems used in ships, vehicles, and equipment.
Cybersecurity Specialist	Protects systems from hackers and digital threats.
Communication Technician	Installs and repairs radios, antennas, and communication systems.
Drone Technician	Builds and repairs drones used for scouting or search-and-rescue missions.
Fashion/Textile Technician	Helps create and test uniforms for comfort and safety.
Camouflage Pattern Designer	Designs fabric prints that help uniforms blend into different environments.
Marine Electrician	Works on electrical systems in ships and submarines.
Welder	Joins metal parts together to build or repair equipment, ships, or vehicles.
Fabricator	Cuts and shapes metal to build frames or parts for machinery.
Fitter and Turner	Installs and fixes mechanical parts and equipment.
3D Printing Technician	Uses 3D printers to make parts or models for testing and development.
Biomedical Engineer	Designs medical equipment and systems for use in the field.

Post-show Activities Flash Cards

Activity 3: Defence Industry Occupation Flashcards

Field Medic	Gives basic medical help to injured people in tough environments.
Telecommunications Technician	Sets up networks and systems for teams to communicate.
ICT Support Technician	Fixes computer problems and keeps IT systems working in field environments.
Vehicle Mechanic	Maintains and repairs trucks, tanks, and other vehicles.
Clothing Production Worker	Assembles clothing using sewing machines and technical fabrics.
Structural Engineer	Checks buildings, bridges, and platforms to make sure they are strong and safe.
Environmental Scientist	Studies the land and weather to help choose materials or plan missions.
UX/UI Designer	Designs the interface of digital products to make them easy to navigate.
Logistics Planner	Organises how people, supplies, and equipment move from place to place.
Cold Chain Technician	Keeps vaccines and medical supplies at the right temperature in the field.
Robot Assembler	Builds robots by putting together parts and systems.
Power Generator Technician	Sets up and maintains portable power systems for remote operations.
Data Analyst	Looks at information and trends to help make better decisions.
Instructional Designer	Creates training videos, booklets, and simulations that help staff learn new skills
Multimedia Specialist	Designs animations, graphics, and video content to explain ideas or support training.
Virtual Reality (VR) Designer	Creates virtual environments to help people train/explore dangerous places safely.