

Designed for: Year 10 Work Studies **Sub-strand(s):**

- Career development & management
- Work skills

Content Descriptors:

This **spatial reasoning** resource encourages students to absorb new and possibly abstract information and apply it appropriately. It is directly related to problem solving and critical thinking, two major components of cognitive aptitude that have been identified as in-demand skills in the resources sector. Spatial reasoning is encountered in technical or trade training courses, or on the job throughout all technical or trade positions. It is included in apprentice aptitude tests as part of the recruitment process.

Context:

This assessment activity could be presented to students during a unit on mathematics or STEM development. Spatial skills may help students mentally picture and think mathematically about numbers and calculation problems. In the resources sector it is used for example when dismantling equipment. Spatial skills allow the tradesperson to picture in their mind what the next step will be in the process, whether that be refurbishing a small pump or disassembling a mining truck.

Intent:

After students have completed more traditional questions, the short assessment activity will enable students to absorb information, including abstract information and problem solve. Problem solving is encountered daily in resources sector technical and trades careers.

This resource examines spatial reasoning skills rather than technical knowledge and is designed as a prequel to apprentice aptitude tests.

The resource may be used as part of a mini-unit on the topic with some additional scaffolding, structure and differentiation for each individual lesson.

This pack of resources links to:

Resource Types:

- Student Worksheet
- Teacher Answer Sheet



Resource	Name	Link	Description
1	Spatial reasoning– Student Worksheet	https://www.oresomerresources.com/resource/spatial-reasoning-aptitude-test-student-sheet/	Spatial reasoning relates to how well someone will be able to absorb new and abstract information and then apply that information appropriately to solve problems. This is a critical skill in technical or trade positions across every sector. In this way, spatial reasoning is related to a student’s problem- solving ability and critical thinking process, two components of cognitive aptitude. Uses include designing buildings and electrical circuits or in daily maintenance jobs.
2	Spatial reasoning Teacher Answer Sheet	https://www.oresomerresources.com/resource/spatial-reasoning-aptitude-test-answer-sheet-for-teachers/	This is the associated teacher answer sheet for the Spatial reasoning – Student Worksheet

