

Designed for:

Year 8 Science

Sub-strand(s):

Earth and Space Science

Content Descriptors:

Sedimentary, igneous and metamorphic rocks contain minerals and are formed by processes that occur within Earth over a variety of timescales ([ACSSU153](#))

Context:

Rocks form the basis of the minerals and energy sector. Ores are rocks that contain metals or valuable minerals that can be mined and made into millions of objects used every day, along with energy for powering homes, businesses and vehicles. Minerals are naturally occurring, inorganic solids. They are the ingredients of rocks.

Intent:

The following resources may be used as a mini-unit on the topic indicated above with some additional scaffolding, structure and differentiation for each individual classroom, or can be used as stand-alone resources to assist with providing the minerals and energy context within the designated content descriptors.

Resource Types:

This pack of resources links to:

- Worksheets
- Fact Sheets
- Student activities
- Interactives

About Oresome Resources:

The Oresome Resources website is a collaborative educational initiative supported by the minerals and energy industry in Australia. These resources have been developed by teachers for teachers to provide syllabus support to the key learning areas of Science, Maths, Technologies and Humanities and Social Sciences.

Each of the resources are free to use by teachers and students to assist in meeting the learning objectives and achievement of students within their studies.



Teacher Information

Resource	Name	Link	Description	Other Notes
Teacher Information				
1.	Rocks and Minerals	https://www.oresomerresources.com/resource/rocks-and-minerals-powerpoint/	A PowerPoint presentation that provides an overview of the different ways that rocks are formed (igneous, metamorphic and sedimentary) and defines what minerals are, as well as providing examples of commonly found minerals.	
2.	Identifying Minerals	https://www.oresomerresources.com/resource/identifying-minerals/	This worksheet outlines the main properties used to identify minerals and lists the properties of 10 common minerals.	
3.	Mineral Mines in Queensland	https://www.oresomerresources.com/resource/significant-queensland-mineral-mines-fact-sheet/	A list of the locations of mines in Queensland and the minerals that they produce.	Students can use the list to identify their closest mine/s. Students can create a map of mineral mines in Queensland using this table.
4.	Formation of Igneous Rocks	https://www.oresomerresources.com/resource/formation-of-igneous-rocks-fact-sheet/	Provides a summary of the processes involved in the formation of igneous rocks.	
5.	Formation of Sedimentary Rocks	https://www.oresomerresources.com/resource/sedimentary-rocks-fact-sheet/	Outlines the formation of Sedimentary rocks.	Students can use the information on pages 1 and 2 to answer the questions contained on page 3 of the document.

6.	Formation of Metamorphic Rocks	https://www.oresomeresources.com/resource/formation-of-metamorphic-rocks-fact-sheet/	Provides a succinct explanation of the processes involved in the formation of metamorphic rocks.	
7.	Rock Identification	https://www.oresomeresources.com/resource/rock-identification-key/	A key and a chart that can be used to identify different rocks. A good way to show students the difference between the two identification tools.	Students can find rocks in their yard or neighbourhood and use these tools to identify the rocks.
8.	The Rock Cycle	https://www.oresomeresources.com/resource/the-rock-cycle-fact-sheet/	A brief explanation of the rock cycle accompanied by a diagram.	
9.	Rocks and Minerals	https://www.oresomeresources.com/resource/rocks-and-minerals-fact-sheet/	Describes how rocks are made up of combinations of minerals and outlines the physical properties that are used to identify minerals.	Students can use the information on pages 1 and 2 to answer the questions contained on page 3 of the document.

Student Activities

Minerals Downunder (Interactive)	https://www.oresomerresources.com/interactive/minerals-downunder-interactive/	Provides an overview of mineral formation, exploration and extraction.	A self-paced activity in which students can learn about how minerals are formed right through to how minerals are processed.
Minerals Word Search	https://www.oresomerresources.com/resource/minerals-word-search/	A word search that contains a list of rocks and minerals that are found in Australia.	
Rocky Recipes	https://www.oresomerresources.com/resource/rocky-recipes-resource-9-science-rocks/	Cooking activities that allow students to model the processes of rock formation.	
Rock Cycle Flow Chart	https://www.oresomerresources.com/resource/rock-cycle-flow-chart/	Using their knowledge of the rock cycle, students use the provided arrows and pictures to create a flow chart of the rock cycle.	
Rock Star - Assignment	https://www.oresomerresources.com/resource/rock-star-assignment/	Students use their knowledge of the rock cycle and the processes of rock formation to write a story about how rocks are formed.	