



MINERALS  
EDUCATION  
VICTORIA

# Treasures from the Earth

## ACTIVITY MATRIX : TEACHER EDITION

	Verbal / Linguistic	Logical / Mathematical	Visual / Spatial	Body / Kinesthetic	Musical / Rhythmical	Interpersonal	Intrapersonal	Naturalist
<b>Remembering</b>  <b>1 POINT</b>	1. Brainstorm words relating to mining: ABC of minerals/resources/equipment  <b>Ref: Activity 1</b>  <i>Communication</i> <i>Economics</i> <i>Geography</i>	2. Construct a table which lists 4 mining companies in Australia and the resources they mine  <b>Ref: Activity 10</b>  <i>Economics</i> <i>ICT</i>	3. On a map of Australia, locate where different minerals are found.  <b>Ref: Activity 3</b>  <i>Geography</i>	4. Identify the difference between rocks and minerals.  <b>Ref: Activity 12</b>  <i>Communication</i> <i>Science</i>	5. List 6 interesting facts about music and dancing on the goldfields.  <b>Ref: www.sbs.Com.au/gold</b>  <i>History</i> <i>ICT</i>	6. List 10 things people would never make out of gold.  <b>Ref: Rock files website (see Appendix)</b>  <i>Thinking</i>	7. Make a quiz of 10 fascinating facts about minerals in Australia.  <b>Ref: Rock files website (see Appendix)</b>  <i>Geography</i> <i>ICT</i>	8. Observe a variety of rocks. Distinguish features of different rocks.  <b>Ref: Rock files website (see Appendix)</b>  <i>Science</i>
<b>Understanding</b>  <b>1 POINT</b>	9. Create a concept map to summarise the uses/properties of gold.  <b>Ref: Rock files website (see Appendix)</b>  <i>Thinking</i> <i>Science</i> <i>Economics</i>	10. Cut and paste a flow chart which illustrates how resources are mined and the landscape altered.  <b>Ref: Activity 10</b>  <i>Geography</i>	11. Create a timeline of gold discovery in Australia.  <b>Ref: Activity 11</b>  <i>History</i>	12. Play the 'body' timeline game to create a timeline of significant gold events in Victoria.  <b>Ref: Activity 12</b>  <i>Interpersonal</i> <i>History</i>	13. Retell an event from your topic using a recorded tape and sound effects. eg. Life on the goldfields in the 1850s.  <b>Ref: Activity 14</b>  <i>Interpersonal</i> <i>History</i>	14. Play the game 'Minerals Pictionary' to revise vocabulary associated with mining and the minerals industry.  <b>Ref: Activity 14</b>  <i>Interpersonal</i>	15. If you could make one part of your body from gold, what would it be? Justify your choice / anticipate problems.  <b>Ref: Activity 14</b>  <i>Thinking</i>	16. Complete a data and picture chart of three different rocks.  <b>Ref: Rock files website (see Appendix)</b>  <i>Science</i>

**NOTE: In some cases, student activity sheets have been prepared e.g. Activity 1. In other cases, you may choose to devise your own.**

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<p><b>Applying</b></p> <p><b>2 POINTS</b></p>	<p>17. Make a word search which includes at least 20 different rocks and minerals.</p> <p><b>Ref:</b> Rock files website (see Appendix)</p> <p><i>English</i></p>	<p>18. Collect data regarding the price of a resource / commodity OR a mining company. Prepare a graph to show how the price of the resource or company changes over a week.</p> <p><i>Economics ICT</i></p>	<p>19. On a map of Australia, label places where gold has been mined or is being mined today.</p> <p><b>Ref: Activity 19</b></p> <p><i>History Geography</i></p>	<p>20. Make a model to show the layers of the Earth.</p> <p><b>Ref: Activity 20a Activity 20b</b></p> <p><i>Science Design, C.T.</i></p>	<p>21. Using metal instruments perform a piece of music individually or in a group.</p> <p><i>Interpersonal Communication</i></p>	<p>22. Play the game “Where will I find Australian Minerals” to consolidate knowledge of the location of minerals.</p> <p><b>Ref: Activity 22</b></p> <p><i>Interpersonal Geography</i></p>	<p>23. Describe a significant event that occurred on the goldfields as if you were there at the time.</p> <p><i>History</i></p>	<p>24. Create a flow chart about the formation of different types of rocks.</p> <p><b>Ref: Activity 24</b></p> <p><i>Science</i></p>
<p><b>Analysing</b></p> <p><b>2 POINTS</b></p>	<p>25. Consider how one mining company digs and repairs the land.</p> <p><b>Ref: Activity 25</b></p> <p><i>Geography</i></p>	<p>26. Create a mind map on the characteristics / properties of any mineral mined in Australia.</p> <p><b>Ref: Rock files website (see Appendix)</b></p> <p><i>Science Thinking</i></p>	<p>27. Create a venn diagram comparing two different metals.</p> <p><b>Ref: Activity 27 and Rock files website (see Appendix)</b></p> <p><i>Mathematics</i></p>	<p>28. Choose 10 items made from metal and play charades to name each item.</p> <p><i>Communication</i></p>	<p>29. Write and perform an advertising jingle / rap composition to highlight one mineral you have learnt about.</p> <p><i>English Communication</i></p>	<p>30. Identify the positive and negative effects of mining on people in ‘resource towns’.</p> <p><b>Ref: Activity 30</b></p> <p><i>Interpersonal Geography Civics and citizenship Communication</i></p>	<p>31. Predict what questions would need to be asked prior to action if a precious resource was found under your school.</p> <p><i>Civics and citizenship Communication</i></p>	<p>32. Collect and display 10 different rocks found in your area. Label and describe each specimen.</p> <p><i>Science Geography Communication</i></p>

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<p><b>Evaluating</b></p> <p><b>3 POINTS</b></p>	<p>33. Complete a PMI on gold mining in a gold town that you have learnt about.</p> <p><i>Geography Economics Civics and citizenship</i></p>	<p>34. Write a report which considers the options to mining coal in Victoria.</p> <p><i>Geography Economics Thinking</i></p>	<p>35. Choose an item from the kitchen or a piece of sporting equipment – what metal/s is/are used in its production and why.</p> <p><b>Ref:</b> Rock files website (see Appendix)</p> <p><i>Economics</i></p>	<p>36. Build a working model of equipment used to extract resources from the ground.</p> <p><i>Design, C.T. Science</i></p>	<p>37. Evaluate the use of a metal in a musical instrument e.g. steel in a steel string guitar.</p> <p><i>Design, C.T. Thinking</i></p>	<p>38. Evaluate the use of a disused quarry using deBono’s thinking hats.</p> <p><b>Ref: Activity 38</b></p> <p><i>Interpersonal Thinking History Economics Geography Communication</i></p>	<p>39. Outline the contribution an Australian geologist or mineralogist or metallurgist has made in their field of work.</p> <p><b>Ref:</b> www.csiro.au/ Csiro/channel/ Ich3c,,.html www.ga.gov.au</p> <p><i>ICT Science</i></p>	<p>40. Visit a local garden supplier. Evaluate the uses of stones, slate, marble, granite in and around the home.</p> <p><i>Economics Science</i></p>
<p><b>Creating</b></p> <p><b>3 POINTS</b></p>	<p>41. Create a brochure which describes the work of people who work in mining e.g. geologist, metallurgist, mining engineer, miner.</p> <p><b>Ref:</b> minerals.org.au/careers www.qrccareers.org.au</p> <p><i>Economics ICT Science</i></p>	<p>42. Design a slogan or bumper sticker for any mineral.</p> <p><b>Ref:</b> Rock files website (see Appendix)</p> <p><i>Communication Design, C.T.</i></p>	<p>43. Build a working model of a device that was used inn the goldrush days.</p> <p><i>Science Communication</i></p>	<p>44. Use magazines, your own drawings, digital photos to make a collage of lots of products made from rocks in the kitchen, bathroom, laundry, garage,bedroom.</p> <p><b>Ref:</b> Rock files website (see Appendix)</p> <p><i>Communication ICT</i></p>	<p>45. Create your own musical instrument using at least two different metals.</p> <p><i>Design, C.T.</i></p>	<p>46. Create an advertising brochure or power point which explains your choice to turn a disused quarry into a .....</p> <p><i>Civics and citizenship History Economics Geography Communication ICT</i></p>	<p>47. Create a poster on any topic with <b>GOLD</b> in its title e.g. <b>GOLD</b> teeth, <b>GOLD</b> medals</p> <p><i>Communication History Science</i></p>	<p>48. Create a wire sculpture / nail pattern or painted stone.</p> <p><i>Design, C.T.</i></p>