

Lesson Nine:	What treasures are found in Oman?		
Aim:	To explore the mineral treasures of Oman using Google Earth		
NC Links:	Interpret a range of sources of geographical information, including maps, diagrams, globes, aerial photographs and Geographical Information Systems (GIS); Describe and understand key aspects of physical geography...; human geography including...the distribution of natural resources including... minerals		
Scottish NC Es and Os:	SOC 3-13a, SOC3-14a, LIT 3-28a		
Key Vocabulary:	minerals extraction satellite	latitude enhanced	longitude resolution
Resources:	Learning Outcomes:		
PowerPoint: What treasures are found in Oman? Oman Minerals Enhanced Satellite Image Oman Treasures Article Treasure Hunt Clues Map of Oman Minerals	<ul style="list-style-type: none"> • To understand that a variety of natural mineral resources can create wealth • To use GIS as a way to explore resource extraction sites and infrastructure • To observe the difference in landscapes within Oman and between Oman and the UK • To use basic global navigation techniques including latitude and longitude and satellite coordinates 		
Lesson Introduction:			
<p>This lesson uses Google Earth to find ‘hidden treasures’ in Oman. These are existing or potential mining sites and a future port for the main mineral export commodities. It may be worthwhile to spend time prior to the lesson on the basic techniques of navigation and using the ruler function in Google Earth and, if needed, degrees and minutes of longitude and latitude.</p> <p>While this lesson is based on Google Earth, the clues could be used to simply place the sites on a blank map using a latitude and longitude grid.</p>			
Starter: (10 mins)			
<p>Slide 2: Landsat Imagery Students can watch the video on Landsat Imagery. With the use of <i>Oman Minerals Enhanced Satellite Image</i>, students can discuss why colours are ‘enhanced’ and not natural as well as what physical processes are at work to create this landscape.</p> <p>Slide 3: Mineral Issues Discuss the key questions with students to get them thinking about the mineral extraction process and its value.</p>			
Main Activities (40 mins)			

Slide 4: The Oman Treasure Hunt

[Oman Treasures Article](#) may be useful as an introduction to the Oman Treasure Hunt. Using Google Earth, students need to find the location of the mineral (or the port) using the clues provided on [Treasure Hunt Clues](#). They should take a screenshot or draw a sketch map for proof of discovery. They can then research the use of that mineral or port and one interesting fact about it. The resource site should then be recorded on [Map of Oman Minerals](#), with the creation of a symbol key.

At the end of the activity, students can report back to the rest of the class on where each resource was found; the key physical and human features of the site; why the resource needs to be mined or why the port is important.

Reflection: (10 mins)**Slide 5: Time for Reflection**

Students can reflect on each of the questions listed.

Additional Lines of Enquiry:

- Research the relative open market value of mineral resources
- Use the 'National Centre for Statistics and Information Year Book 2017' to find data on the value of Oman's mineral wealth
- Research the location of other mineral extraction sites in Oman

Bibliography:

Oman Minerals Enhanced Satellite Image from Satellite Imaging Corporation
Oman Mineral Map from author
Oman Treasures Article from Gulf Times (Oman) Accessed 23rd January 2018