

Lesson One:	Why is the climate of Oman so hot and dry?			
Aim:	To understand how a variety of atmospheric processes are linked to the climate of Oman			
Specification Links:	GCSE Geography AQA 8035: 3.1.1.3 global atmospheric circulation model; 3.1.2.3 physical characteristics of a hot desert			
	GCSE Geography CIE 0460:  2.5 characteristics of a hot desert; factors influencing climate  GCSE Geography Edexcel A:  2.1 features of the global atmospheric circulation model; 2.7 characteristics of arid environments; vulnerability to drought; 3.1 role of climate in influencing the distribution of ecosystems  GCSE Geography Edexcel B:  1.1 global atmospheric circulation model; 7.1 distribution and characteristics of major biomes  GCSE Geography Eduqas A:  5.2.2 factors that create variations in weather and climate; 5.3.1 distribution of biomes  GCSE Geography Eduqas B:  2.3.2 global atmospheric circulation model; 3.1.1 relationship between climate and biomes; 3.4.1 vulnerability to desertification  GCSE Geography OCR A J383:  2.1.2 distinct distributions and characteristics of ecosystems; 2.3.4 global atmospheric circulation model			
	GCSE Geography OCR B J384 1.1a global atmospheric circu	ography OCR B J384: al atmospheric circulation model; 4.1a global distribution of hot deserts		
Key Vocabulary:	Al Hajar mountain range Dhofar ecosystem albedo effect collision plate boundary	The Empty Quarter global atmospheric circulation model biome	Salalah monsoon (Khareef) intertropical convergence zone	
Resources:		Learning Outcomes:		
PowerPoint: Why is the climate of Oman Riddle me this sheet Climate of Oman worksheet Reasons for Oman's climate worksheet GACM question Atlas		<ul> <li>To know what the global atmospheric circulation model (GACM) is</li> <li>To understand how the GACM and other factors affect Oman</li> <li>To be able to draw a climate graph</li> <li>To be able to describe a location at varying scales</li> </ul>		
Lesson Introduction:				

This lesson is designed to give students a broad understanding of the climate of Oman and its different regions. It focusses on atmospheric processes and in particular on the global atmospheric circulation model. Students will gain an understanding of this model and be able to apply it to the Arab Peninsula.

### Starter: (5 mins)

Prior to the students entering the room, set up their tables with all the resources to ignite interest in the lesson.

#### Slide 1: Riddle me this

Ask students to try and decrypt the riddle using the atlas to help them.

### **Main Activities (45 mins)**

#### Slide 4-8: Where is Oman?

Students should complete task one on the Climate of Oman worksheet using language of different scales. Students can correct their work once feedback is given.

#### Slide 9-12: The Al Hajar mountains

Teachers can highlight the link between the Al Hajar mountain range to the Zagros mountains in Iran using the prompt questions.

## Slide 13-14: The climate in Oman

Continuing on the Climate of Oman worksheet, students can firstly complete a climate graph for Muscat and then draw a complete climate graph for Salalah.

### Slide 15-19: Why is Oman hot and dry?

Using Reasons for Oman's climate worksheet, students should complete the diagrams and text boxes using the information on the slides to help. Students can then summarise the main ideas in a final paragraph.

#### Slide 20-26: The Global Atmospheric Circulation Model

Teachers can explain the model by talking through the slides. Students can attempt to answer GACM question as a summary of the learning.

# Reflection: (10 mins)

#### Slide 27: True or False

Students should attempt the true or false quiz.

# **Extension & AS/A Level progression:**

• Research what the Khareef is and how it is possible.

### **Bibliography:**

World map from <a href="www.outline-world-map.com">www.outline-world-map.com</a> Climate statistics from <a href="www.climate-data.org">www.climate-data.org</a>