

Theories

Name:

Date:

The Voyage of Mars in the Ancient Night Sky

Goal: Map the position of Mars as it would have appeared to Ptolemy in 156 A.D. and understand how his earth-centered model of the universe explained the planet's movement.

- You will work in small groups. You will **be assigned one of the two data tables** found below. On the map of the Egyptian night sky, **plot** the position of Mars for the dates in **your assigned table**. Label each point with the date of the observation.
- When all of your points are labeled, with both the month and the day, **connect** them chronologically with a line.
- Then, **discuss** with the other students in your group:
 - How does Mars appear to move?
 - Can you explain the movement using the model of an Earth-centered universe?

Mars Path Table 1

Date	Azimuth	Altitude
February 1, 156 A.D.	240	12
February 3, 156 A.D.	238	13
February 6, 156 A.D.	237	14
February 10, 156 A.D.	235	15
February 13, 156 A.D.	233	17
February 17, 156 A.D.	231	18
February 21, 156 A.D.	229	19
February 23, 156 A.D.	227	20
February 27, 156 A.D.	226	21
March 1, 156 A.D.	224	22
March 4, 156 A.D.	222	23
March 9, 156 A.D.	220	24
March 13, 156 A.D.	217	26

Mars Path Table 2

Date	Azimuth	Altitude
April 27, 156 A.D.	230	13
May 5, 156 A.D.	227	15
May 17, 156 A.D.	225	17
May 17, 156 A.D.	222	18
June 6, 156 A.D.	221	19
June 26, 156 A.D.	220	18
June 29, 156 A.D.	223	13
July 25, 156 A.D.	226	12
August 4, 156 A.D.	225	14
August 24, 156 A.D.	221	21
August 28, 156 A.D.	219	23
September 4, 156 A.D.	218	25
September 7, 156 A.D.	217	25

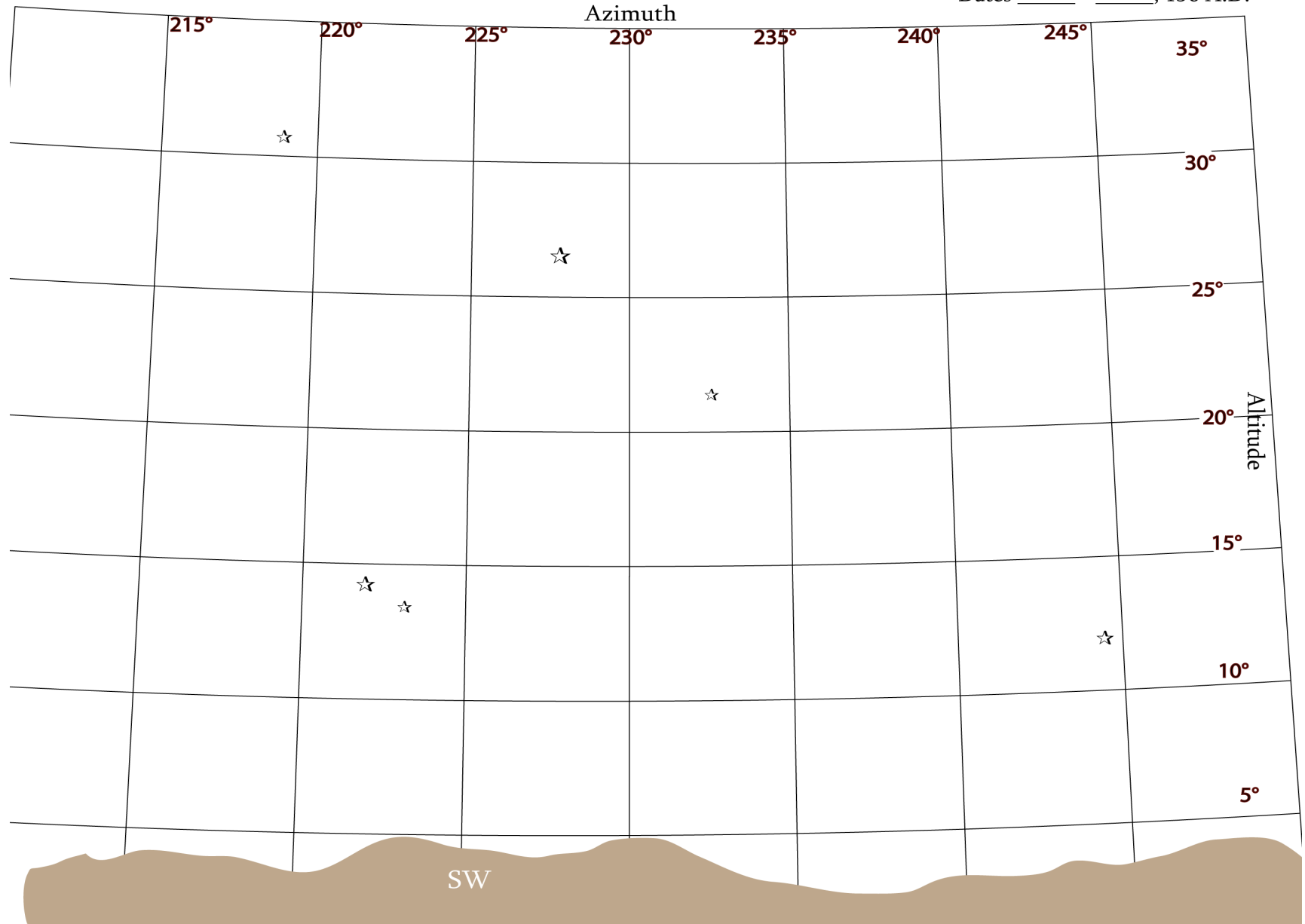
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Alexandria, Egypt night sky

Dates _____ - _____, 156 A.D.



Student Handout