

In-class activity 6

Assemble Your Group

1. Find your assigned group members, and sign in below.

Team member: _____ Team member: _____

Team member: _____ Team member: _____

Planet-Hunting

2. The figure on the next page shows the current positions today (9/5/2013) of Earth, the sun, and the inner planets (Mercury and Venus), as seen by looking down on the solar system from above, as well as three outer planets (Mars, Jupiter and Saturn). The size of the sun and planets are not drawn to scale.

- (a) Draw a line that connects the center of Earth to the center of the sun (this line should help you determine where an observer must be on Earth at sunset, midnight, and at sunrise). Then draw a line that connects the center of Earth to the center of Mercury, and repeat, drawing separate lines that connect Earth to each of the rest of the planets.
- (b) Complete the following table, using the letters (A)-(D) listed below to indicate where each planet would be visible in the sky for an observer in San Luis Obispo, CA, at sunset, midnight, and sunrise.

- A. Planet will be low over the E horizon.
 B. Planet will be somewhere (high) up in the sky.
 C. Planet will be low over the W horizon.
 D. Planet will not be visible anywhere in the sky.

	Location in sky at sunset	Location in sky at midnight	Location in sky at sunrise
Mercury	(C)		(D)
Venus		(D)	
Mars		(D)	
Jupiter			(A) or (B)
Saturn	(B) or (C)		