

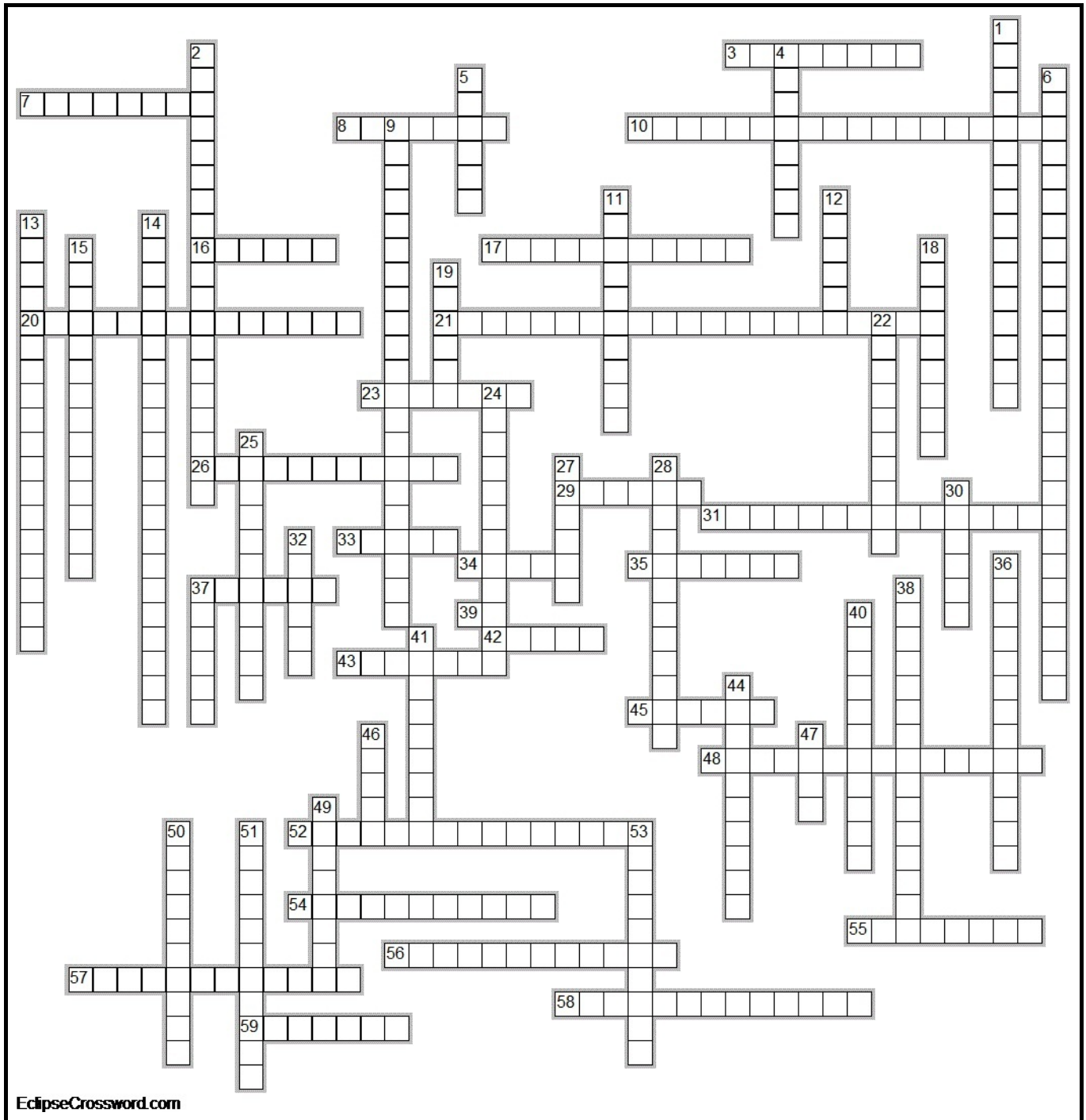
ASTRO CROSSWORD PUZZLE

2014 December 6

Note: Many words pertain to 2014 events, a few to 2015.
The rest are miscellaneous astronomy terms typically related to sky observing.

Clues follow on the next two pages with the number of **letters & spaces** in each word in ().

(Some answers may contain **more than one word**, each word separated by a **space**.)



Across

3. Distorted figure eight path on sky showing Sun's declination and equation of time during year. **(8)**
7. Time when Sun below horizon yet contributes perceptibly to sky glow. **(8)**
8. Prof. Hayward Smith discussed the discovery of this planet at the 2014 September AAC meeting. **(7)**
10. One of Canada's oldest scientific publications published annually. **(18)**
16. Rich Russin discussed winter stories and teachings of this Native American tribe at the 2014 October AAC meeting. **(6)**
17. Among best of year about every January 3. **(11)**
20. One lunation. **(14)**
21. Event of 2014 April 29 in Antarctica but probably witnessed by few if any. **(21)**
23. Name of the wide division between Saturn's A and B rings. **(7)**
26. PBS show formerly hosted by Jack Horkheimer and now co-hosted by James Albury, SFC planetarium director. **(11)**
29. Telescope magnification for an 8-inch (200 mm), f/10 telescope using a 25 mm eyepiece. **(6)**
31. Excessive, misdirected, or obtrusive artificial light. **(15)**
33. Bright star only about 1.5 degrees from the totally eclipsed Moon, 2014 April 15. **(5)**
34. Approximate number of minutes for sunlight to travel one astronomical unit. **(5)**
35. Passage of Europa across Jupiter's disk. **(7)**
37. Popular planet that gave spectacular views in spring and summer 2014 due to its opposition May 10. **(6)**
39. Frequently occulted by Jupiter during 2014. **(2)**
42. Point directly below observer. **(5)**
43. Alpha Ursae Minoris. **(7)**
45. First to land on a comet, 2014 November 12. **(6)**
48. Most easily visible in Gainesville in western evening sky during each late winter and early spring. **(14)**
52. Appeared over several weeks in October looking as large as Jupiter. **(15)**
54. Constellation of the Sun at time of 2014 or 2015 March equinox. **(11)**
55. Famous August meteor shower but compromised in 2014 due to a nearly full moon. **(8)**
56. Focal length in mm of a 200 mm (about 4-inch), f/5 telescope. **(12)**
57. Number of recognized constellations. **(12)**
58. Anti-twilight arch seen shortly after sunset or before sunrise over eastern or western horizons respectively. **(13)**
59. Spacecraft first to orbit a comet, 2014 August. **(7)**

Down

1. Deep sky object visible nearly overhead during early November and December evenings in Gainesville. **(16)**
2. Lunar event that will occur on both 2015 April 4 and 2015 September 28. **(19)**
4. An annual event for Earth typically occurring on or within a few days of every July 4. **(8)**
5. Giovanni Schiaparelli's name for his observed dense network of linear structures on the surface of Mars. **(6)**
6. AAC meeting place once each quarter. **(26)**
9. Event that occurred just before and during sunset in Gainesville, 2014 October 23. **(21)**
11. Lunar event that occurred twice in 2014 on both January and March 30. **(10)**
12. Influential but controversial astronomer, died 98 years ago November 12. **(6)**
13. Great circle on sky passing through celestial poles and observer's overhead point. **(18)**
14. Begins second Sunday in March. **(21)**
15. Annual event held at Kanapaha Botanical Gardens featuring the AAC. **(14)**
18. Common name for the 2014 July, August and September perigean full moons. **(9)**
19. Planet about one degree from the 2014 October 8 totally eclipsed Moon. **(6)**
22. An annual event for Earth occurring on or within a few days of every January 3. **(10)**
24. First spacecraft that will reach this planet, 2015 July 14. **(12)**
25. Terrestrial phenomenon associated with perigean new or full moons. **(11)**
27. Overhead point of sky. **(6)**
28. Popular annual astronomical event held each fall at the Florida Museum of Natural History. **(12)**
30. Japanese for Pleiades. **(6)**
32. 3.26 light years. **(6)**
36. What resulted on Mars due to Comet Siding Spring's approach to this planet 2014 October 19. **(13)**
37. Alpha Canis Majoris. **(6)**
38. Deep sky object next door to the Venus and Jupiter pairing (1/4 degree apart) of 2014 August 18. **(15)**
40. Angular distance on the sky measured north or south of the celestial equator. **(11)**
41. Brightness of a celestial body. **(9)**
44. Popular UF name for bright double star visible during summer and fall evenings in Gainesville. **(10)**
46. Brilliant object mostly unnoticed during 2014 since in the eastern dawn sky. **(5)**
47. Planet that had an unfavorable opposition 2014 April 8 but with a favorable opposition in 2018. **(4)**
49. Discovered Pluto in 1930. **(8)**
50. Angular distance between two celestial bodies as seen from Earth. **(10)**
51. Angular diameter of Moon. **(11)**
53. Boundary between day and night on planet or satellite. **(10)**