

Quiz 01: Introduction to Stellarium

Answer each of the following questions using your clicker. You must respond using your clicker; papers will not be marked by hand.

You may use your lab notebook and a calculator. Each question is worth **3 points**, and there is no partial credit. When you have completed the quiz, please continue to Quiz 02.

61. When you observed the star **Polaris**, its **azimuth** was closest to
 A) **0°** B) 35° C) 90° D) 180° E) 270°
62. Does changing the telescope mount from **azimuthal** to **equatorial** change the location of the object you are observing?
 A) Yes. Changing the mount puts the star or planet in a completely different part of the sky.
 B) **No. Changing the mount has no effect on the actual position of the object being observed.**
63. When you observed on 07/06/16 at 9:00PM (21:00), the **Az/Alt** coordinates for the star **Arcturus** were **closest** to:
 A) Az = 14h15m38.5s Alt = +19°10'20.3" C) **Az = 208°36'15.7"** **Alt = +72°09'49.5"**
 B) Az = +19°10'20.3" Alt = 14h15m38.5s D) Az = +72°09'49.5" Alt = 208°36'15.7"
64. **Arcturus** is located at (choose the **closest** match):
 A) **RA = 14h15m38.5s DE = +19°10'20.3"** C) RA = 208°36'15.7" DE = +72°09'49.5"
 B) RA = +19°10'20.3" DE = 14h15m38.5s D) RA = +72°09'49.5" DE = 208°36'15.7"
65. On 01/06/17 at 21:00, **Arcturus** will have
 A) the same RA and DE, and the same Az/Alt coordinates. C) different RA and DE, but the same Az/Alt coordinates.
 B) **the same RA and DE, but different Az/Alt coordinates.** D) different RA and DE, and different Az/Alt coordinates.
66. **True** or **false**: From our location in Arkansas, the star Arcturus will not be visible above the horizon ($ALT > 0^\circ$) during the winter at 21:00.
67. When you changed your location to **Mars**, where in the sky did **Arcturus** appear?
 A) Exactly the same place as on Earth. Same Az/Alt coordinates, same RA/DE coordinates.
 B) Mars is far enough away from Earth that Arcturus's RA/DE coordinates changed significantly. Since Mars is still in the solar system, though, the Az/Alt remained the same.
 C) **The RA/DE of Arcturus remains constant, but compared to the Earth, its position in the Mars sky was very different (Az/Alt changes).**
 D) Trick question! Arcturus cannot be viewed from the planet Mars.
68. True or **false**: Because Conway is located in the N hemisphere, the sun always rises N of E, and sets N of W.
69. On which day does the sun rise farthest to the south?
 A) 03/21 only. D) 06/21 and 12/21 both.
 B) 03/21 and 09/21 both. E) **12/21 only.**
 C) 06/21 only. F) Never; the sun *always* rises with Az = 90°.
70. On which day does the sun set at an azimuth of 270°?
 A) 03/21 only. D) 06/21 and 12/21 both.
 B) **03/21 and 09/21 both.** E) 12/21 only.
 C) 06/21 only. F) Every day; the sun *always* sets with Az = 270°.

Please do not click SUBMIT until you have completed Quiz 02 as well!