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"
   B) Az = +19°10'20.3" Alt = 14h15m38.5s
   C) Az = 208°36'15.7" Alt = +72°09'49.5"
   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"
   B) RA = +19°10'20.3" DE = 14h15m38.5s
   C) RA = 208°36'15.7" DE = +72°09'49.5"
   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.
   B) the same RA and DE, but different Az/Alt coordinates.
   C) different RA and DE, but the same 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°) 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.
   B) 03/21 and 09/21 both.
   C) 06/21 only.
   D) 06/21 and 12/21 both.
   E) 12/21 only.

70. On which day does the sun set at an azimuth of 270°?
   A) 03/21 only.
   B) 03/21 and 09/21 both.
   C) 06/21 only.
   D) 06/21 and 12/21 both.
   E) 12/21 only.
   F) Every day; the sun always sets with Az = 270°.

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