Minute Essays

Write a paragraph (4-5 sentences) about the key concepts covered in class and the reading today. Summarize the main point or points. Were there issues that were confusing? Interesting? Too complex? Too brief? Cool pictures or ideas? Feel free to add any questions or comments for me – I'll read them the same day as class and get back to you. This is for both of us: so you can focus your ideas, and so I can get feedback as to what works, what doesn't, and the level to which concepts in class are getting communicated.

Not graded individually, but will count toward Participation grade.

Ancient Astronomers Observed, Got to Explain...

- Stars rising in E, setting in W
- Sun rising in E, setting in W
- Moon rising in E, setting in W
- Patterns of stars ('constellations') slowly shifting over a year, then coming back to start
- Position of sun changing: low in winter, high in summer
- Length of days changing
- Some patterns – like Big Dipper – up every night, all year
- Some – like Orion – up in winter, but not in summer

- Moon can be up during day & night, changes shape, rises & sets
- Sun can be up during night only, and rarely changes shape – except when it disappears entirely!
- All the stars look the same – except for a few wandering stars ('planets'), which take circuitous paths thru the sky
- 'Venus' – moves rapidly, always up in evening or morning, but not at night
- 'Saturn', 'Jupiter' – move slowly, can be up at any time of night
- All planets – mostly move in one direction, but sometimes turn around
- Occasionally, long-tailed hairy star ('comet') moves through the sky
- Or, 'shooting stars'!

Motions of the Sky

- Earth goes around (revolves or orbits) Earth every 365 days (year)
- Earth rotates every 24 hours (day)
- Moon goes around Earth every 28 days (month)
- Moon also rotates every 28 days (month)

  Compared with these motions, the motions of the sun and the stars are slow: assume them to be completely, totally motionless in space!

- Rotation: spinning
- Revolution: moving around or orbiting