

UE Final Review Booklet Key

1. It allowed them to predict the seasons so they could prepare for the winter and know when their growing seasons would be.
2. geocentric → Earth centered model
heliocentric → Sun centered model
3. a) distance from the Earth to the Sun ~150 million km
b) very large distances (much more than 1 AU), more like light years distances ~9.5 trillion km
4. The nebula cloud need to begin condensing and spinning and pulling in more gases in order to begin the fusion reaction (a protostar)
5. The star has run out of hydrogen so it now begins fusing other elements
6. Inner (Terrestrial)
 - rocky
 - smaller
 - warmer
 - no rings
 - only few moons if anyOuter (Jovian)
 - gaseous
 - larger
 - cooler
 - ring systems
 - several moons
7. Comets look like a dirty snowball (rocky with frozen gases)
8. You are not sure of the dangers that await on arrival.
9. Three main components are: structure, payload, fuel storage. See text pg. 412
10. An ion drive is a very efficient fuel source.
11. Two purposes are: permanent lab, command post for building and launching rockets.
12. Muscles weaken due to microgravity.
13. – feel confined, trapped, claustrophobic, lonely, depressed, etc.
14. – heating, cooling system

- oxygen
 - waste removal
 - water
15. due to sound waves traveling in straight lines since earth is circular we bounce signals off of satellites.
 16. refracting – 2 lenses
reflecting uses mirrors.
 17. see text p. 437
 18. no light/air pollution
no clouds/humidity/weather to interfere
 19. gamma rays
 20. – light does not interfere
- weather does not interfere
- not distorted by clouds/pollution/atmosphere
 21. – lining up several telescopes and using them to view the same image. It increases resolution.
 22. – telescopes can only see so far and little detail. Probes can land and take close pictures, bring back samples, etc.
 23. political – who owns the resources
environmental – don't want to pollute the asteroid, destroy its resources
ethical – why should we use up someone else's resources? What if other creatures live there and we are taking resources away from them?
 24. – Stonehenge, pyramids etc. were influenced by celestial observations.
 25. It provided evidence of the heliocentric model. They also realized orbits are more elliptical.
 26. The distance between stars and galaxies is so immense that using smaller units would be unrealistic.
 27. The light takes many years to reach us.
 28. Cool and bright.
 29. –cloud of dust (nebula) begins swirling
- most (90%) accumulates in the center

- the remaining forms planets

30. see #6
31. meteoroid – in space
meteor – coming through atmosphere
meteorite – leftover that lands on earth
32. it would leave our planet
33. use less fuel
34. communication, remote sensing, GPS
35. large, time consuming, expensive to build
36. political – who owns space
ethical – is it right or wrong to spend \$ on space when we should here
environmental – space junk, using up space resources
37. a) between 12100 – 12756
b) rock, maybe some water
c) Liquid hydrogen – not solid
d) 0.91 – 1 (1= earth) so similar or slightly less than earth
e) x would be smaller
f) y because it is an other planet
g) hydrogen, helium
h) no, it is an inner planet