

Universe Video Questions: *Alien Galaxies*

Name: _____ Period: _____ Date: _____

1. How old is the Universe?
2. How many stars are in galaxies? How many galaxies are in the Universe?
3. How is looking at galaxies just like time travel?
4. What is an elliptical galaxy?
5. What is a spiral galaxy?
6. What is an irregular galaxy?
7. What is an active galaxy? What do they have at their centers?
8. What is a quasar?
9. What is the gravitational singularity known as the Big Bang?
10. How long after the Big Bang did galaxies form?
11. Why is it so hard to see the center of our galaxy?
12. How big is our Milky Way?
13. What kind of galaxy is our Milky Way?
14. How far are we (in light years) from the center of our galaxy? How long does it take our solar system to go around once?
15. What is so special about the Andromeda Galaxy? What will happen to the Milky Way when it collides with Andromeda?
16. How does the speed of more distant galaxies compare to the speed of galaxies closer to us?

17. What is the local group of galaxies?
18. How are the large and small Magellanic Clouds interacting with our very own Milky Way Galaxy?
19. How do the stars in the large and small Magellanic Clouds differ from the stars in our Milky Way?
20. What is known to be at the center of most galaxies?
21. What is dark matter? How can we detect it?
22. What is the best evidence for the existence of dark matter?
23. What is dark energy and how does it explain the expansion of the Universe?
24. How does the decrease of gravity among galaxies as they move away from each other cause an increase in the rate of expansion of galaxies?
25. How can telescopes such as the Galaxy Evolution Explorer (GALEX) and the upcoming James Webb Space Telescope give astronomers the ability to discover more about alien galaxies and our Universe?