

Name _____

Period: _____

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Journey to the Edge of the Universe Video Notes
<https://www.youtube.com/watch?v=bVQpwxgMQCg>

1. How far away is the edge of space from the surface of the Earth?
2. How many astronauts have walked on the surface of the moon?
3. How far away from Earth is the moon?
4. Why are Neil Armstrong footprints still seen on the moon?
5. Venus is _____ million miles from Earth.
6. Venus is also known as the morning star and the _____.
7. What is the composition of the clouds covering Venus?
8. How hot is surface of Venus?
9. What effect causes Venus' extreme temperatures?
10. How cold does Mercury get at night?
11. How hot does Mercury get in the daytime?
12. Why hasn't Mercury been pulled into the Sun?
13. Mercury is the core remains of _____.
14. If the sun burned out how long would it take to know it on Earth?
15. How hot is the surface of the sun?
16. What is a sunspot?
17. What will happen when the sun's fuel is spent?
18. What causes the tail of a comet?
19. Where do comets come from?
20. Mars is a giant _____.
21. What does Mars need to protect us from the Sun's ultraviolet rays?
22. In what state is Mars' water?
23. Life is a _____.
24. What is the name of the volcano that is three times higher than Mt. Everest?
25. Rover Opportunity found that the plains of Mars are dried _____.
26. What proves that Mars is alive?
27. How long ago was the 'moment of creation'?

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28. What lies just beyond Mars?
29. How can we tell that the planets were formed 4.6 billion years ago?
30. Jupiter's gravity pulls the _____ apart.
31. Jupiter is mostly made from _____.
32. How fast do winds on Jupiter blow?
33. What is Jupiter's great red spot?
34. How old is the great red spot?
35. What causes the auroras on Jupiter's moons?
36. What gives it its colors?
37. Jupiter's gravity could cause _____ on Europa, melting the ice below its surface.
38. Saturn is so light it could _____ on water.
39. The Cassini probe picks up radio signals from Saturn's _____.
40. Saturn's rings are the remnants of a _____.
41. Which of Saturn's moons has an atmosphere?
42. The oceans of Titan are made of liquid _____.
43. Why is there no life on Titan?
44. At 700 million miles from Earth, _____ contact is lost.
45. Uranus' ring orientation makes it appear that Uranus had been _____ off its axis.
46. Neptune is covered in _____ gas.
47. Neptune has a storm that is larger than Earth with wind speeds of _____.
48. Triton is a _____ moon orbiting Neptune.
49. Triton orbits Neptune in the _____ direction of the planet's spin.
50. Eventually Triton will be _____ by Neptune.
51. The most distant thing ever seen that orbits the sun is _____ discovered in 2003.
52. Sedna's orbit takes _____ years to complete.
53. _____ gave us close up views of the gas giants and showed us their moons.
54. Stephen Hawking thought it was a _____ to identify Earth's location on Voyager I.
55. Located 25 trillion miles from Earth, our nearest solar system is _____.
56. Alpha Centauri contains _____ stars.

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57. When miles become meaningless measurements are taken in ___light years___
58. Light travels at ____ trillion miles per year.
59. The star Epsilon Eridani is located just ____ light years from Earth
60. Star Gliese 581 is located _____ light years from Earth
61. Comets are _____ and _____.
62. The atmosphere of Bellerophon is being _____ by its nearby star.
63. How can we prove that extra-solar planets exist?
64. What TV show would you be able to watch 65 light years from Earth?
65. The twin stars of Algol are also known as _____.
66. More than 100 light years away, its' as if _____ never existed.
67. The brightest and biggest star seen so far is _____.
68. Orion's dark cloud is located _____ light years from Earth.
69. What is happening inside Orion's dark cloud?
70. Vast, glowing clouds of gas where stars are born are known as _____.
71. The brightly colored clouds left behind from the explosion of a sun contain the building _____ of life on Earth.
72. The ghost of a star is a _____.
73. A teaspoon of matter from a White Dwarf would weigh _____.
74. When will our sun become a White Dwarf?
75. The Crab Nebula is the result of a _____.
76. Gravity squeezed the giant star's core into a _____.
77. The pulsar is _____ across.
78. One pinhead of a pulsars matter could weigh hundreds or millions of _____.
79. There is _____ radiation in a pulsar than in the sun.
80. A black hole is the remains of _____.
81. A black hole is _____ than a pulsar.
82. Light can not escape a black hole. Why?
83. The most violent star death is called a _____.
84. During a hypernova; when the core collapses it becomes a _____.

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85. How much longer will it take for the message sent in the 1970's to reach the great cluster?
86. How many civilizations may exist in the Milky Way galaxy?
87. Dark matter could make up more than _____ of all mater in the universe.
88. Why is it thought that dark matter exists?
89. The Andromeda galaxy is _____ million light years away.
90. What could cause a galaxy to explode?
91. How far away is the edge of the universe?
92. The deadliest thing in the universe is a _____.
93. What is at the center of a quasar?
94. At the edge of the universe, galaxies resemble primitive _____ in a huge
_____.
95. How long ago was the universe formed?
96. Everything that has ever happened follows from the moment of the _____.
97. The light from the big bang is spreading out and can be heard as
_____.