

Directions: Answer the questions as you watch episode 3 of *Cosmos: A Spacetime Odyssey*

1. What does Neil deGrasse Tyson use as a metaphor for how we are born into a universe of mystery?
2. What was the advantageous adaptation mentioned that humans have evolved in order to survive?
3. What type of heavenly body was thought by ancient groups to be a message from the gods?
4. What does the word "disaster" come from?
5. What did the Chinese in 1400 BC believe a four-tailed comet would bring?
6. How does a comet get a glowing halo and tail?
7. What major disaster followed the comet of 1664?
8. What is one type of new constellation that Edmond Halley saw in the sky while he was on the island of St. Helena?
9. Who was the head of the Royal Society of London when Halley came home to sell his map of the stars?
10. What does Robert Hooke allegedly look like and why don't we know for sure?
11. Name two things Robert Hooke is famous for discovering.
12. Where did people of all classes gather to debate ideas in the 17th Century in London?
13. Who offered a reward for anyone who could come up with a mathematical formula that explains what force held planets in orbits around the Sun?
14. Why did the man Halley was looking for go into hiding?

15. What type of elixir did Isaac Newton hope to invent using alchemy?
16. Why couldn't the Royal Society of London publish Newton's book?
17. Name three things, besides having a comet named after him, which Halley did for science.
18. How often does Halley's Comet pass by Earth?
19. Who was elected as the head of the Royal Society of London after Hooke's death?
20. What does legend say about why there are no pictures of Hooke?
21. When will Halley's Comet return to pass by Earth next?
22. What is the name of the neighboring galaxy that the Milky Way will merge with in the future?