The Forbidden Planet

1. (a) At the beginning of the film, how fast is the spaceship traveling? (b) The crew members appear to be somehow buffered by devices emitting green light beams as they pass from faster-than-light speed to slower-than-light speed. Is this possible according to the Special Theory of Relativity? Explain.

2. The spaceship is said to "arrange it's own eclipse" of the sun. What does this mean?

3. What kind of a star is Altair?

4. Which of Altair's planets does the ship orbit?

5. (a) The commander tells the crew that the gravity of Altair IV is 0.897 that of Earth's gravity. How much would someone who weighs 200 lbs on Earth weigh on Altair IV? (b) The commander then instructs the crew members to adjust their equipment accordingly. This suggests that each crew member can alter gravity in some way. Is this possible without a merry-go-round? Why?

6. Name a sign of civilization that may be seen from space:

7. The oxygen level on Altair IV is said to be 4. If this were four times the oxygen level on the surface of the surface of the Earth, could humans survive in it? Why?

8. Robby says, "Oxygen promotes ____________________________"?

9. What would be needed to make a body decompose on another planet?

10. The film depicts several animals from Earth. Since the Krells' last visit to Earth was over 200,000


years ago, what did the ancestors of the deer and tiger look like? Is it likely that these animals would have evolved on an alien planet exactly as they evolved on Earth?

11. How does Robby respond when he is told to do something that may hurt someone?

12. Dr. Morbius is Philologist, which is an expert in _____________________.

13. What does Dr. Morbius say killed the rest of the people on the planet?

14. Why can't the people hear Alta's whistle?

15. What part of the ship was removed to allow the crew to communicate with the home base?

16. What force or energy was used to move the cook?

17. What takes Robby a week when making star sapphires?

18. The planet used to be the home of the _____________________.

19. What is special about the molecules of the Krell door?

20. (a) When Robby delivers lead shielding to the rescue expedition, it is stated that this lead is lighter than ordinary lead. Is the film correct about this? Why?

(b) What isotope of lead was delivered and what is the correct isotope number of ordinary lead?

(c) From a textbook or the web, what does the work isotope mean?

21. When Morbius describes the properties of Krell metal, he says that the molecules are more dense than those of earthly steel but are made up of different molecules. What does he mean by dense? (Look it up in the textbook).

22. What did the shock of the Krell machine apparently increase in Dr. Morbius?

23. (a) Approximately how many dials do you see on the wall of the Krell laboratory?

(b) What is the total output power of the last dial in term of the units on the first dial?

(c) Is the “10 raised almost literally to the power infinity” stated in the video correct in dealing with the total power output depicted in the Krell laboratory? Why?

24. How big is the great Krell machine described by Morbius? (In cubic miles).

25. How far below the surface are the thermonuclear reactors that power the Krell machine?

26. Are the thermonuclear reactors inside or outside of the great Krell machine?

27. (a) Morbius cautions his visitors not to look directly into the thermonuclear furnace. How, then, do they view it?

(b) Is this, in fact, a safe way to look inside a thermonuclear furnace? If not, why?

28. When the monster attacks the rescue expedition, the video shows a number of energy dials lighting up in the Krell laboratory. Where is the energy going?

29. (a) Why are the weapons of the rescue expedition ineffective against the monster? (Note that the
3 billion volts must refer to the internal working of the machine generating the beams, since the neutrons in a neutron beam are uncharged electrically.

(b) How do the gunners know where the "thing" is?
(c) When did the creature disappear?
(d) Morbius subconsciously knows that the rescue expedition is in danger from the creature. Consciously, he does not know he is responsible. However, when the creature again attacks the rescue expedition, why is it created outside their defense circle rather that within it?

30. What is the I'd?

31. As the creature heats up the metal door, what color change occurs with the metal?

32. When Commander Adams throws the switch, what kind of reaction does he start in the Krell furnace which cannot be reversed?

33. What happened to the planet?

34. (a) At the end of the film, how long does it take the rescue expedition to travel 100 million miles away from Altair IV?
(b) How long would it take light to travel that distance? (c = 186,000 miles/sec).

35. Where does Robby get the energy to convert into matter and also to power himself?

36. In your opinion, is it possible that the most powerful 9200 thermonuclear explosions detonated should destroy an entire planet that is approximately the same size and density as the earth? (Remember, the earth's mantle is fueled by nuclear fusion). Explain.

37. In attempting to contact Earth for instructions, one of the crew states that they have to short-circuit the continuum of a five or six parsec level.
(a) Since a parsec equals the distance that light travels in 3.26 years, how many miles is this?
(b) Do you think a short circuit of the continuum is possible? Explain.