Chapter 5.6, “Evolution as Science”

Quick Quiz

36. c

Chapter 6.3, “The Evolution of Life” to end”

Would You Believe It?

27. Not only would I not believe it, I would point out it would be impossible. Dinosaurs did not come along until ~225 million years ago, fully 525 million years later than this time. Reminds me of the “scientific” creationist proponents; they make many claims not just dubious, but even impossible. The intellectual gulf between them and scientists, educators and educated people generally is breath-taking.

29. I would not believe it for two reasons. First, a crater that size would have been discovered centuries ago, unless in a remote area, in which case it most certainly would have been discovered in the 20th century.

30. I could believe this, tho at 3 km, it is so large that it would be a low probability event, so would definitely want independent confirmation. I would hold off judgement until I hear the details.

31. I would not believe this, because, although the fossil record is not complete, we have not to this date discovered any fossils that resemble modern gorillas. Not until 5-7 million years ago (off the top of my head) do we see any fossils leading up to, and including, gorillas.

Quick Quiz

38. c
39. a
40. c
41. a
42. a

Quantitative Problems

52. With a 40-year doubling time, the year 2200 is 5 doubling times away and the human population will be its current population doubled 5 times. We can do it in our head (6 billion, then 12 billion, then...), but we can more methodically solve for it with the following multiplication: $6 \times 10^9 \times 2^5 = 192$ billion. Obviously something’s going to have to give during this very century. Strains due to rising populations on the environment and human society are already notable. This is NOW, during OUR lifetime. Either the birth rate declines or the death rate increases or, more likely, some combination of the two. Who wants to raise the death rate? But powerful conservative religious forces oppose anything to lowering the birth rate. So nature raises the death rate. Go figure. Wake up to this! We can surely respond better to evolutionary pressures than bacteria in a petri dish! Overpopulation is the most dangerous, pervasive, and underlying problem of the 21st century. You may have heard that said of global warming, but it is just a greater example of the high population of human beings. Increasing the population will increase global warming—and every major problem mankind faces. Oh, and 400 years beyond 2200? Dividing by 40 years @ doubling yields 10 more doublings → 200 trillion!!!