pump information into a DNA strand.

Conclusion

Professor Dawkins' simulation has no relevance to the real world.

References

1. Dawkins, R., 1986. *The Blind Watchmaker*, Penguin Books, London.
2. From the binomial probability distribution for two possible outcomes (success or failure) with inherent probability p, the probability of obtaining x successes out of n attempts is given by (for an excellent derivation, see: Box, G.E.P., Hunter, W.G., and Hunter, J.S., (1978). *Statistics for Experimenters: An Introduction to Design, Data Analysis, and Model Building,* Wiley, New York, p. 124):

$$\frac{n!}{(x!)(n-x)!}p^x(1-p)^{n-x}$$

For p=l/27 with n=28 independent trials, the probability of getting exactly 1 success is:

$$\frac{28!}{(1!)(28-1)!}(1/27)^1(26/27)^{28-1} = 0.374$$

And the probability of getting exactly 2 successes is:

$$\frac{28!}{(2!)(28-2)!}(1/27)^2(26/27)^{28-2} = 0.194$$

3. The probability of *not* obtaining a desired character (x = 0) after m trials of 28 attempts is the same as the probability that m x 28 rings will fail to match the target letter. For m = 2 iterations the probability of not obtaining a desired letter is:

$$\frac{56!}{(0!)(56-0)!}(1/27)^0(26/27)^{56-0} = 0.121$$

For m = 10 iterations we find:

$$\frac{280!}{(0!)(280-0)!}(1/27)^0(26/27)^{280-0} = 2.57X10^{-5}$$

4. See Lester, L., 1998. *Genetics: No Friend of Evolution.* Creation, 20(2):20-22.
5. Maynard Smith, J., 1989. *Evolutionary Genetics,* Oxford University Press, New York, p.61.

Royal J. Truman has degrees in chemistry and computer science, a Ph.D. in organic chemistry and an M.B.A. His speciality is in organic chemistry, statistical analysis and modelling. He speaks Spanish, French and German and is currently employed by BASF AG in Germany.

Quotes

Primeval soup: failed paradigm

'Although at the beginning the paradigm was worth consideration, now the entire effort in the primeval soup paradigm is self-deception on the ideology of its champions. ...

' The history of science shows that a paradigm, once it has achieved the status of acceptance (and is incorporated in textbooks) and regardless of its failures, is declared invalid only when a new paradigm is available to replace it. Nevertheless, in order to make progress in science, it is necessary to clear the decks, so to speak, of failed paradigms. This must be done even if this leaves the decks entirely clear and no paradigms survive. It is a characteristic of the true believer in religion, philosophy and ideology that he must have a set of beliefs, come what may (Hoffer, 1951). Belief in a primeval soup on the grounds that no other paradigm is available is an example of the logical fallacy of the false alternative. In science it is a virtue to acknowledge ignorance. This has been universally the case in the history of science as Kuhn (1970) has discussed in detail. There is no reason that this should be different in the research on the origin of life.'

Yockey, H.P., 1992 (a non-creationist). *Information Theory and Molecular Biology,* Cambridge University Press, UK, p. 336.