

Quiz 3

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William Thompson, Lord Kelvin, once bought a parrot from a pet shop but it uttered not a single word, so he returned it and complained to the proprietor. 'Why didn't you tell me you wanted a talker?' asked the proprietor. 'If you had, I would have given you one: naturally to a man like yourself I sold a thinker.'

1. The age of the universe is about:- (a) 5 billion years, (b) 15 billion years, (c) 50 billion years.
2. Two stars orbiting about a common centre of mass is called:- (a) a black hole, (b) a shooting star, (c) a binary star system.
3. The energy of the sun is generated by:- (a) nuclear fission, (b) nuclear explosion, (c) nuclear fusion.
4. An astronomical unit of length is the distance from the sun to:- (a) Mercury, (b) Earth, (c) Pluto.
5. Halley's Comet reappears in our skies every:- (a) 20 years, (b) 50 years, (c) 75 years.
6. Voltage divided by current is a constant. This is:- (a) Boyle's Law, (b) Ohm's Law, (c) Graham's Law.
7. Voltage multiplied by current is:- (a) Power, (b) Resistance, (c) Amps.
8. The scientist who first discovered that white light is composed of a spectrum of colours was:- (a) Robert Hooke, (b) Isaac Newton, (c) Thomas Young.
9. Compared to its speed in air, the speed of light in water is:- (a) less, (b) zero, (c) greater.
10. Which of the following is qualified to perform eye surgery?:- (a) an ophthalmologist, (b) an occultist, (c) an optician.
11. The world is divided into time zones - the number of zones is:- (a) 4, (b) 12, (c) 24.
12. The oldest geologic era is:- (a) Pre-cambrian, (b) Paleozoic, (c) Mesozoic.
13. The present calendar is called:- (a) Julian, (b) Gregorian, (c) Augustan.
14. The discovery that the swing of a pendulum can be used to measure time was made by:- (a) Julius Caesar, (b) Archimedes, (c) Galileo.

15. The number of cells in an average adult is about:- (a) fifty million, (b) fifty billion, (c) fifty trillion.
16. Cells divide by a process called:- (a) mitosis, (b) thrombosis, (c) lordosis.
17. The geneticist who thrived under Stalin and caused much damage to Soviet genetics was:- (a) Chekov, (b) Lysenko, (c) Potemkin.
18. The number of different genes in a human is about:- (a) ten thousand, (b) ten million, (c) ten billion.
19. Each of Mary's parents has one gene for blue eyes and one for brown eyes. The probability that Mary will be blue-eyed is:- (a) one, (b) zero, (c) one fourth.
20. If you receive one gene for blue eyes from each parent, for eye colour you are:- (a) homogenous, (b) homozygous, (c) homosexual.
21. The co-author, with Charles Darwin, of the principle of natural selection was:- (a) Alfred Russel Wallace, (b) Thomas Huxley, (c) Gregor Mendel.
22. Social Darwinism is a phrase to describe:- (a) Darwin's behaviour at parties, (b) cooperation, not competition, (c) the theory that upper social classes attain their wealth and power by virtue of biological superiority.
23. Pick the hoax fossil:- (a) Piltdown Man, (b) Peking Man, (c) Man the Hunter.
24. A mutation is:- (a) alien life, (b) a change in the information carried by a gene, (c) half a rotation.
25. Carbon-14 (^{14}C) is a radioactive isotope present in the atmosphere. It decays with a half life of about 5,000 years. It is incorporated into trees when they are living, but not after they die, when the ^{14}C content decays away. Fifteen thousand years after a tree dies the amount of ^{14}C remaining in the tree will be which of the following fractions (approximately) of the original amount?:- (a) $\frac{1}{2}$, (b) $\frac{1}{8}$, (c) $\frac{1}{16}$.
26. The age of the earth has been accurately estimated using:- (a) information in the Bible, (b) ^{14}C -dating, (c) the ratio of uranium to lead found on earth.
27. The skin most sensitive to the touch is on the:- (a) earlobes, (b) finger tips, (c) soles of the feet.
28. The most precise voluntary movements involve the, (a) lips, (b) eyes, (c) tongue.
29. Who said, 'There is only one science, physics. Everything else is social work'?:- (a) Albert Einstein, (b) Francis Crick, (c) James Watson.

30. Who said - 'An expert is a man who has made all the mistakes that can be made in a very narrow field'?- (a) Charles Darwin, (b) Neils Bohr, (c) Fred Hoyle.

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