

## Physics Trivia Answers

- 1) A: Nicolaus Copernicus
- 2) A: Galileo
- 3) A: Marie Curie
- 4) A: Isaac Newton
- 5) A: Electromagnetic radiation or radio waves
- 6) A: IQ
- 7) A: gravity
- 8) A: Mars
- 9) A: Germany
- 10) A: True
- 11) A: CERN
- 12) A: Black hole
- 13) A: Hubble Space Telescope
- 14) A: C) 100-150 yrs ago – X-rays were discovered in the 1890s
- 15) A: patent clerk
- 16) A: joules/second OR energy/time
- 17) A: False
- 18) A:  $E=mc^2$
- 19) A: Quarks
- 20) A:  $9.11 \times 10^{-31}$  kg
- 21) A: spectrometer OR prism
- 22) A: J.J. Thompson
- 23) A: Thermal energy
- 24) A: Richard Feynman
- 25) A: Sally Ride
- 26) A: Electric field (from an induced current)
- 27) A: photons
- 28) A: speed of light
- 29) A: charge of an electron
- 30) A: 26
- 31) A: Illinois
- 32) A: False – they will be younger!
- 33) A: mass
- 34) A: 1, Einstein had a sister named Maja
- 35) A: True
- 36) A: d) the properties of magnetism
- 37) A: Ohm
- 38) A: B) X-rays – Note: Because X-rays are absorbed by the atmosphere, space based observatories are the only way to obtain images using them
- 39) A: A) energy
- 40) A: B) mass of the person holding the string Note- The equation for centripetal force is  $mv^2/r$ , where m is the mass of the object.

41) A: A) 2 resistors in series Note: The equation for the power absorbed by a resistor is  $P=IR^2$ . The resistors in series have a higher equivalent resistance, and therefore will absorb less power.

42) A: False Note – The weight of an object is the downward gravitational force on the object. The mass is a measure of the amount of matter in an object.

43) A: True

44) A: Visible Light Rays

45) A: refraction

46) A: the car on the Grizzly Bear Note – This is due to the law of conservation of energy. The car at the greater height has more potential energy to convert into kinetic energy at the bottom.

47) A: D) the potential energy of both objects combined

48) A: A) radio waves and strong magnetic fields Note: Gamma rays are the most energetic form of electromagnetic energy and you would not want them going through any part of your body!

49) A: radio detection and ranging

50) A: The Doppler Effect