

100 Physics Facts.

1. The moon is kept in orbit by the force of gravity.
2. Heat travels through solids by conduction.
3. When a car travels at a constant speed the forces acting on it are balanced.
4. We can see planets because they reflect sunlight.
5. We can see stars because they produce light.
6. Electrical current is measured by an ammeter
7. Iron, steel, cobalt and nickel are the only magnetic metals
8. In a solar eclipse, the moon comes between the Earth and the Sun
9. Density is mass divided by volume
10. The Milky Way is an example of a galaxy
11. Mass is measured in grams and kilograms
12. The brakes of a bicycle convert kinetic energy to thermal energy
13. An echo happens when sound waves are reflected from a surface
14. Gravity on the Moon is $\frac{1}{6}$ that of the Earth
15. A ray of light passing from the air into glass is refracted towards the normal
16. A freely suspended magnet comes to rest on a North- South axis
17. An LDR [Light Dependent Resistor] has Low resistance in Light
18. A small drum makes a higher pitched note than a large one because it vibrates more rapidly
19. Thermal energy flows from a hot block to a cooler one
20. Hooke's Law says that a spring will extend an equal amount for each equal weight (force) added to it

21. We have seasons because the Earth's axis is tilted
22. Heat travels by convection in a liquid and a gas
23. Hot gases rise because they expand and become less dense
24. In an LED, the letter D stands for diode
25. Most of our energy sources come originally from the sun
26. Speed is measured in metres per sec (m/s)
27. In magnets, like poles repel and unlike poles attract
28. The frequency of sound is measured in Hertz
29. When an electric current passes through a wire it creates a magnetic field
30. A parachute slows you down because of increased air resistance
31. Heat travels across a vacuum by radiation
32. The unit of energy is the Joule
33. On Earth, gravity has a force of 10N per kilogram
34. Lamps connected in series are of equal brightness
35. A rainbow is caused when raindrops disperse sunlight
36. Movement energy is known as kinetic energy.
37. Opaque means that light will not pass through.
38. The speed of sound is 340 metres/sec
39. Force is measured in Newtons (N)
40. A planet's year is the time it takes to orbit the sun once.
41. Liquid volumes are measured in millilitres (ml)
42. Pressure is Force divided by area (N/cm^2)
43. Increasing amplitude makes a sound louder.
44. Turning forces are known as moments
45. Light travels much faster than sound.

46. Friction is a force acting in the opposite direction to motion
47. The sun is our nearest star.
48. Wood floats because it is less dense than water.
49. Coal, oil and gas are fossil fuels.
50. Magnetic field lines run from a north-seeking to a south-seeking magnetic pole
51. Daylength on a planet depends on how long it takes to rotate once on its axis.
52. The symbol for a cell is
53. Gravitational potential energy is the energy stored in a stationary object by reason of its position.
54. Two springs suspended side by side share the weight of an object.
55. An uncharged body has equal numbers of positive and negative charges.
56. A mass of 10 kg has a weight of 100N
57. The speed of light is 300,000 km/sec
58. An object moving downhill is changing potential energy to kinetic energy.
59. A cyclist travelling at 10m/s travels 100 m in 10 seconds
60. The strength of an electromagnet is increased by increasing the number of turns in the coil.
61. If the resistance in a circuit is increased the brightness of any lamps will decrease.
62. The symbol for a variable resistor is
63. Shadows are formed because light travels in straight lines

64. Energy cannot be created or destroyed, only changed from one form to another. This is the Law of the Conservation of Energy.
65. Mercury, Venus, Earth and Mars are the inner rocky planets.
66. Electrical current is measured in Amps.
67. The gravitational pull of a planet is proportional to its mass.
68. Static electricity is caused when the electrical charge on an insulator becomes unbalanced, usually by friction.
69. Dark surfaces absorb heat whilst pale surfaces reflect heat.
70. Another name for heat energy is thermal energy.
71. For springs in series, the total extension equals the extension of one spring X the number of springs.
72. A skateboard moving downhill is losing gravitational potential energy.
73. Moments measure turning forces.
74. Sound waves cannot travel in a vacuum.
75. The electrical symbol for a buzzer is
76. A ray of light passing from a more dense to a less dense transparent material is refracted away from the normal.
77. The frequency of a sound is also known as its pitch.
78. A thin wire has more resistance than a thick one.
79. Friction is a force that opposes motion.
80. $\text{Weight (N)} = \text{Mass (g or kg)} \times \text{G/F (N/kg)}$
81. Increasing the current increases the strength of an electromagnet.
82. The Law of Reflection states that the angle of incidence is equal to the angle of reflection.
83. Materials that allow energy to pass through them are called conductors.
84. Energy is the ability to do work.

85. In liquids, pressure increases as you go deeper.
86. We measure force with a Newton meter.
87. Kinetic energy is the energy of movement.
88. We see coloured objects because they reflect that colour into our eyes.
89. The greater the amplitude the louder the sound.
90. Pressure acts equally in all directions.
91. Diodes allow current to flow in one direction only.
92. Gravity never pushes it only pulls.
93. The 'elastic limit' of a spring is the point beyond which it will not return to its original shape.
94. Lightning is a spectacular example of static electricity.
95. A lever is any rigid body which is able to turn about a pivot (fulcrum).
96. The electrical symbol for a fuse is
97. Sound waves carry energy away from a vibration in all directions.
98. An electric current is formed by moving electrons.
99. Our galaxy is known as the Milky Way.
100. Balanced forces are said to be in equilibrium.