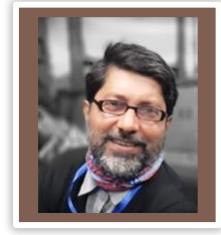




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SET -I

1. I'm found deep in space, yet I have no weight. I bend light, but I can't be seen. What am I?  
.
2. I move at 299,792 kilometers per second but never accelerate. What am I?  
.
3. What has to be broken before you can use it, even though it still holds everything together?  
.
4. I'm present in every action and every reaction, but you can't create me or destroy me. What am I?  
.
5. I'm invisible, yet my presence can be felt when objects resist changes in motion. What am I?  
.
6. What is always moving, but never touches, and has its strength altered based on distance?  
.
7. I take a curved path but only under the influence of a force perpendicular to my motion. What am I?  
.
8. I can heat things up or burn you down, but I'm not made of matter. What am I?  
.
9. I exist in many forms: kinetic, potential, mechanical, but I'm always conserved. What am I?  
.
10. I flow without a conductor, powering the world and machines, but can also cause a storm. What am I?  
.

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**Answer Clue:** 1. A black hole. 2. Light. 3. An atom. 4. Energy. 5. Inertia. 6. Gravity. 7. A projectile in uniform circular motion. 8. Electromagnetic radiation (such as infrared light or microwaves). 9. Energy. 10. Electricity.

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 SET-II

11. The faster I go, the shorter I become. What am I?  
.
12. I'm always moving forward but can be bent, stretched, and slowed down by gravity. What am I?  
.
13. You can feel me push against you when you stand on the ground, but I'm not gravity. What am I?  
.
14. I'm full of pressure, and I help keep balloons inflated. What am I?  
.
15. I can push you back but I am invisible, and I carry the energy from one place to another. What am I?  
.
16. I am the force that stops your car from skidding on the road. What am I?  
.
17. If I increase, you can see more of me, but less of the world around me. What am I?  
.
18. I can make a compass point north, but I'm invisible. What am I?  
.
19. The harder you pull me, the stronger I get. What am I?  
.
20. I keep planets in orbit but don't make contact with them. What am I?  
.

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**Answer Clue:** 11. A relativistic object (length contraction in special relativity). 12. Time. 13. The normal force. 14. Air (or the gas inside a balloon). 15. A wave (such as a sound or light wave). 16. Friction. 17. Magnification (in lenses or microscopes). 18. The Earth's magnetic field. 19. A spring (Hooke's Law: force is proportional to extension). 20. Gravity.

## SET-III

21. I'm made up of tiny particles that are constantly moving, yet you can't see me unless I condense. What am I?

Answer:

22. I'm essential for creating electric power, but I rely on changing magnetic fields. What am I?

Answer:

23. I'm known for being both a particle and a wave, and I'm the foundation of the quantum world. What am I?

Answer:

24. You hear me every day, but I travel faster through solids than through air. What am I?

Answer:

25. When you see me, I'm often followed by thunder, but I'm faster than anything else you'll ever see. What am I?

Answer:

26. I'm the invisible cloak that keeps the Earth warm, yet too much of me causes trouble. What am I?

Answer:

27. I'm present in batteries and lightning but always flow from negative to positive. What am I?

Answer:

28. When you compress me, I get hotter. When you expand me, I get cooler. What am I?

Answer:

29. I'm the reason why objects with different masses fall at the same rate in a vacuum. What am I?

Answer:

30. I'm the state of matter that is so hot, atoms lose their electrons, creating an electrically charged soup. What am I?

Answer:

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**Answer Clue:** 21. Water vapor. 22. Electromagnetic induction. 23. Light (or photon). 24. Sound. 25. Lightning. 26. The greenhouse effect (or greenhouse gases). 27. Electric current. 28. A gas (following the ideal gas law). 29. Gravitational acceleration ( $9.8 \text{ m/s}^2$  on Earth). 30. Plasma.

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 SET-IV

31. I can move faster than sound, but I create a shockwave when I do. What am I?

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32. I can stop light from passing through, and I'm behind every shadow. What am I?

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33. I'm light as a feather but can bring down mountains over time. What am I?

.

34. I exist in all physical objects, making up everything you see, but I'm mostly empty space. What am I?

.

35. I slow things down when they move through air or water. What am I?

.

36. I can store energy by lifting you up, but I release it when you fall. What am I?

.

37. I cause the tides to rise and fall, but I'm not in the water. What am I?

.

38. When I speed up, you feel me pushing you back into your seat. What am I?

.

39. I can split light into many colors, though I am completely transparent. What am I?

.

40. I'm small, invisible, and have a negative charge, but without me, electricity wouldn't exist. What am I?

.

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**Answer Clue:** 31. A supersonic object (like a jet or a bullet). 32. An opaque object. 33. Erosion (caused by wind or water). 34. An atom. 35. Drag (or air resistance). 36. Gravitational potential energy. 37. The Moon's gravitational pull. 38. Acceleration. 39. A prism. 40. An electron.

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SET-V

41. I'm a force that acts over a distance, pulling two objects toward each other, but I get weaker as they move apart. What am I?

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42. I make hot air rise and cold air sink, creating wind and weather patterns. What am I?

.

43. I can bend when I pass from one material to another, and this causes objects to look bent in water. What am I?

.

44. I don't have mass or volume, but I carry energy across space. What am I?

.

45. I give off energy when I lose mass, and I'm the source of power in the stars. What am I?

.

46. I can turn solid into liquid, and liquid into gas, but I'm not fire. What am I?

.

47. I allow you to measure how fast something is going, but I'm different from velocity because I don't care about direction. What am I?

.

48. I'm always there but can never be seen; when you move, I push back against you. What am I?

.

49. I cause light to get weaker and fade as you move further away from the source. What am I?

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50. I am a form of energy that moves through space at the speed of light, but you can't see me; you can only feel me. What am I?

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**Answer Clue:** 41. Gravitational force. 42. Convection. 43. Refraction of light. 44. Electromagnetic wave.

45. Nuclear fusion. 46. Heat. 47. Speed. 48. Air resistance. 49. The inverse square law (of intensity).

50. Infrared radiation (or heat energy).

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 SET-VI

51. I can make metal stick to me, but I'm invisible and I lose my power when I'm too hot. What am I?  
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52. I'm a particle that moves so fast, I make up the current in a wire, but I'm invisible. What am I?  
.
53. I'm the reason why a car keeps moving when you take your foot off the gas, but I'm also why it eventually stops. What am I?  
.
54. I'm the force that pulls the planets toward the Sun but keeps them from falling in. What am I?  
.
55. I can turn a solid directly into a gas, skipping the liquid phase entirely. What am I?  
.
56. I'm responsible for why you weigh less on the Moon than on Earth, but I don't change your mass. What am I?  
.
57. I'm invisible, but you notice me when you spin around too fast and feel like you're being pulled outward. What am I?  
.
58. I'm the force that prevents you from falling through the floor, but I'm not gravity. What am I?  
.
59. I happen when something vibrates in place, and I travel through air, water, and even solids. What am I?  
.
60. I'm found in stars, and I cause light to bend around large masses. What am I?  
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**Answer Clue:** 51. A magnet. 52. An electron (in an electric current). 53. Inertia (keeping it moving) and friction (slowing it down). 54. Centripetal force (from gravity). 55. Sublimation. 56. The difference in gravitational force. 57. Centrifugal force (an apparent force due to rotation). 58. The normal force. 59. Sound waves. 60. Gravitational Lensing (caused by curvature of spacetime).

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## SET-VII

61. I can travel through a vacuum without a medium, yet I'm essential for vision. What am I?  
.
62. I'm responsible for why your voice echoes in a canyon, and I exist when waves bounce back. What am I?  
.
63. I'm what makes ice float in water, though I'm solid while water is liquid. What am I?  
.
64. I'm the limit beyond which nothing, not even light, can escape. What am I?  
.
65. I can exist as a solid, liquid, gas, or plasma, depending on temperature and pressure. What am I?  
.
66. I'm the amount of space an object occupies, but I'm not the object itself. What am I?  
.
67. I'm responsible for the rainbow colors you see when light passes through raindrops. What am I?  
.
68. I'm invisible, yet I'm responsible for the transmission of signals in your mobile phone. What am I?  
.
69. I'm the reason why astronauts feel weightless in space, even though gravity still exists. What am I?  
.
70. I'm the force that keeps the Earth moving around the Sun, but I'm also what keeps the Moon from drifting away. What am I?  
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**Answer Clue:** 61. Light. 62. Reflection of sound (an echo). 63. Ice has a lower density than liquid water. 64. The event horizon of a black hole. 65. Matter. 66. Volume. 67. Dispersion of light. 68. Electromagnetic waves (specifically, radio waves). 69. Free fall (or microgravity). 70. Gravitational force (acting as centripetal force in orbital motion).

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 SET-VIII

71. I'm responsible for why you can see your reflection in a mirror, but not in a brick wall. What am I?

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72. I make objects float or sink depending on their density, and I'm a key concept for boats and ships. What am I?

.

73. I'm the reason why the sky is blue during the day and red during sunset. What am I?

.

74. I allow you to see through objects like walls, but you need a special machine to detect me. What am I?

.

75. I am a type of energy that can make a magnet spin, but I require both electricity and magnetism to exist. What am I?

.

76. I'm responsible for why a feather and a hammer fall at the same rate in a vacuum, but not in air. What am I?

.

77. I'm present in liquids and gases, but I get stronger the faster you move through me. What am I?

.

78. I can turn into light when I'm annihilated with my twin, and we both have the same mass. What am I?

.

79. I'm an invisible force that keeps the atmosphere around Earth, but I don't work in space. What am I?

.

80. I happen when energy moves from one particle to the next without the particles themselves moving. What am I?

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**Answer Clue:** 71. Specular reflection (smooth surface reflection). 72. Buoyancy. 73. Scattering of light (Rayleigh scattering). 74. X-rays. 75. Electromagnetic force (or electromagnetic induction). 76. Absence of air resistance in a vacuum. 77. Viscous drag (or fluid resistance). 78. Matter and antimatter. 79. Gravity. 80. Conduction (thermal or electrical).

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## SET-IX

81. I'm the force that resists motion when two surfaces rub against each other, but without me, walking would be impossible. What am I?

.

82. I make stars twinkle when you see them from Earth, but I don't affect how they look from space. What am I?

.

83. I'm a physical quantity that combines both speed and direction. What am I?

.

84. I can stretch a rubber band or compress a spring, storing energy that can be released later. What am I?

.

85. I'm the reason why light slows down when it passes through glass or water. What am I?

.

86. I have no mass, no electric charge, but I carry energy and travel at the speed of light. What am I?

.

87. I'm the process by which an object traveling fast enough can escape the gravitational pull of a planet. What am I?

.

88. I'm the force that keeps your car moving in a circular path around a curve, but I point toward the centre. What am I?

.

89. I'm the phenomenon that makes sound get higher in pitch as it moves toward you and lower as it moves away. What am I?

.

90. I can be used to create energy by splitting an atom, but I also power atomic bombs. What am I?

.

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**Answer Clue:** 81. Friction. 82. Atmospheric turbulence (or atmospheric refraction). 83. Velocity. 84. Elastic potential energy. 85. Refraction (due to a change in medium and speed). 86. A photon. 87. Escape velocity. 88. Centripetal force. 89. The Doppler effect. 90. Nuclear fission.

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SET-X

91. I'm the reason why you feel lighter in water, even though your mass hasn't changed. What am I?

.

92. I can make an object move, but if nothing opposes me, that object will keep moving forever. What am I?

.

93. I'm the reason why your car tires warm up after a long drive, and I oppose motion. What am I?

.

94. I'm a point in a moving fluid where the pressure is the lowest, and I help planes fly. What am I?

.

95. I make time slow down for an object moving at high speeds relative to you. What am I?

.

96. I make up everything in the universe, but my mass only accounts for about 5% of the total. What am I?

.

97. I'm responsible for making a pendulum slow down and stop, even though it was swinging before. What am I?

.

98. I'm the process by which plants convert sunlight into chemical energy, but I also involve physics. What am I?

.

99. I'm responsible for the bending of space and time around massive objects, and I affect the orbits of planets. What am I?

.

100. I'm the writer of Code Name GoD. Who am I?

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**Answer Clue:** 91. Buoyant force. 92. Newton's First Law of Motion (inertia). 93. Friction. 94. The Bernoulli principle. 95. Time dilation (from Einstein's theory of relativity). 96. Ordinary (baryonic) matter. 97. Air resistance (or damping). 98. Photosynthesis (involving the absorption of light photons). 99. General relativity (gravity as the curvature of spacetime). 100. Prof. Mani Bhowmik

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 SET-XI

101. I help you move faster on a bicycle, but if you pedal too hard, I'll slow you down. What am I?

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102. I can change direction without changing speed, and I'm often felt when turning a corner. What am I?

.

103. I'm responsible for the way your voice changes when you breathe in helium. What am I?

.

104. I am an effect that causes the light from distant stars to be redshifted as they move away from us. What am I?

.

105. I'm an invisible form of energy that can heat up your food, but I'm not a microwave. What am I?

.

106. I'm what makes electric charges move through a conductor, creating electricity, but I'm not the charge itself. What am I?

.

107. I'm the reason why a loaded gun recoils when fired, and I act in the opposite direction of the bullet. What am I?

.

108. I can break apart into smaller parts but not be destroyed, and I'm a fundamental building block of matter. What am I?

.

109. I'm the boundary that separates different states of matter, and my nature can change based on temperature and pressure. What am I?

.

110. I exist when the gravitational pull is equal to the centrifugal force in orbit, creating a stable path for satellites. What am I?

.

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**Answer Clue:** 101. Air resistance (drag). 102. Centripetal acceleration. 103. The speed of sound in helium (which is faster than in air). 104. The Doppler effect (specifically, redshift). 105. Infrared radiation. 106. Electric potential (voltage). 107. Conservation of momentum. 108. An atom. 109. Phase boundary (or phase transition). 110. Orbital motion (or a stable orbit).

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 SET-XII

111. I'm the energy that makes your hair stand on end during a storm, but I can also light up the sky. What am I?

.

112. I can carry sound, heat, and light, but you can't see me. What am I?

.

113. I'm responsible for the ability of a straw to draw liquid up, but I'm not a vacuum. What am I?

.

114. I can change from a solid to a liquid at a specific temperature, and I'm found in ice cream. What am I?

.

115. I can be charged positive or negative, and I create electric fields around me. What am I?

.

116. I am the principle that explains why boats float and why things sink or swim. What am I?

.

117. I can be transferred from one object to another, causing a temperature change, but I'm not heat. What am I?

.

118. I'm the unit of measure for how much energy it takes to raise the temperature of one gram of water by one degree Celsius. What am I?

.

119. I can store energy in the form of electric charge, and you can find me in your phone or laptop. What am I?

.

120. I'm the region around a charged particle where electric forces can be felt, but I can't be seen. What am I?

.

---

**Answer Clue:** 111. Static electricity (or electric discharge). 112. A wave (or a medium for sound waves).

113. Atmospheric pressure. 114. A phase change (specifically, melting). 115. An electric charge. 116. Archimedes' principle (buoyancy). 117. Thermal energy. 118. A calorie. 119. A capacitor (or battery). 120. An electric field.

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SET-XIII

121. I can twist and turn, and I'm often used to describe the motion of objects in circular paths. What am I?

.

122. I'm the reason you feel a jolt when you touch a doorknob after walking on carpet, but I'm not the doorknob itself. What am I?

.

123. I'm the temperature at which a substance changes from a liquid to a gas, and I can be different for every material. What am I?

.

124. I can be found in both a river and a refrigerator, but I flow in different ways. What am I?

.

125. I'm an effect where light waves bend around corners, but you won't see me without a source. What am I?

.

126. I can be a solid or a liquid, and I'm essential for electrical conduction in your body. What am I?

.

127. I'm the process of changing from a gas to a liquid, and you'll often see me on cold surfaces. What am I?

.

128. I can be stored in a spring or a rubber band, and I'm released when the object is allowed to return to its original shape. What am I?

.

129. I'm a measure of how much matter is in an object, but I'm often confused with weight. What am I?

.

130. I can transfer heat without any direct contact between objects, and I often occur in space. What am I?

.

---

**Answer Clue:** 121. Angular momentum. 122. Static electricity. 123. Boiling point. 124. Water (flowing vs. circulating). 125. Diffraction. 126. Electrolyte. 127. Condensation. 128. Elastic potential energy. 129. Mass. 130. Radiation (thermal radiation).

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SET-XIV

131. I'm the reason why your car can turn a corner without flipping over, but I'm not friction. What am I?

.

132. I'm the concept that explains why you feel heavier in an elevator going down and lighter when it goes up. What am I?

.

133. I'm a type of energy that can cause an object to vibrate, but I'm not kinetic energy. What am I?

.

134. I'm produced by moving electric charges, and I can create a magnetic field around me. What am I?

.

135. I'm the term for the change in frequency or wavelength of a wave in relation to an observer moving relative to the wave source. What am I?

.

136. I'm the boundary between two different states of matter, and I can change with temperature and pressure. What am I?

.

137. I'm the phenomenon where waves spread out after passing through a narrow opening. What am I?

.

138. I can make things appear lighter than they really are when they are submerged in water. What am I?

.

139. I'm the principle that states energy cannot be created or destroyed, only transformed. What am I?

.

140. I'm the term for the temperature at which a substance changes from a solid to a liquid. What am I?

.

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**Answer Clue:** 131. Centripetal force. 132. Apparent weight (or acceleration due to gravity). 133. Potential energy (specifically, elastic potential energy). 134. An electric current. 135. The Doppler effect. 136. Phase boundary (or phase transition). 137. Diffraction. 138. Buoyancy. 139. The law of conservation of energy. 140. Melting point.

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SET-XV

141. I'm the reason why the planets orbit the Sun, and I'm also what keeps you grounded on Earth. What am I?

.

142. I'm the force that opposes the relative motion of solid surfaces, but I'm not the same as weight. What am I?

.

143. I can be described as a push or pull, and I can change the motion of an object. What am I?

.

144. I'm the energy an object has due to its position, and I can be stored in a stretched spring. What am I?

.

145. I can be measured in joules and represent the ability to do work. What am I?

.

146. I'm the reason you see lightning before you hear thunder, but I travel slower than my partner. What am I?

.

147. I can change an object's temperature, and I'm transferred between objects of different temperatures. What am I?

.

148. I can occur in solids, liquids, and gases, but I'm strongest in solids. What am I?

.

149. I'm what keeps your feet on the ground, and I can be affected by changes in altitude. What am I?

.

150. I can change form and move through different mediums, but I'm always a disturbance in a field. What am I?

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**Answer Clue:** 141. Gravity. 142. Friction. 143. Force. 144. Potential energy. 145. Energy. 146. Light (light travels faster than sound). 147. Heat. 148. Sound waves (or sound propagation). 149. Gravitational force. 150. A wave.

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To be continued ..... if I can manage time. :: Dr. Arindam Chakrabarti 😊

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