

**THEMI HILL SECONDARY SCHOOL**

**PHYSICS**

**100 QUESTION FORM ONE**

1. What do you understand by the term Physics
2. What is matter
3. Define the term energy
4. Define the term science

What is the relationship between physics and the following subjects?

5. Mathematics
6. Chemistry
7. Biology
8. Geography

Explain how you can apply physics

9. At home
10. At hospital
11. In industries
12. In transport
13. At school
14. In communications
15. A person who study physics is called
16. What is laboratory
17. List ten laboratory rules
18. List five safety measure you know
19. What is first aid kit

What is the use of the following items?

20. Antiseptic soap
21. Bandages
22. Gloves
23. Painkiller
24. Thermometer
25. Scissor
26. Petroleum jelly

Give the meaning of the following warning sign

27. Toxic
28. Irritant
29. Flammable
30. Oxidizing agent
31. Corrosive
32. Explosive
33. What are the steps in scientific investigation
34. What is scientific method
35. What are the uses of the following laboratory apparatus
36. Measuring cylinder

37. Thermometer
38. Stop watch
39. Micrometer screw gauge
40. Vernier caliper
41. Microscope
42. Spring balance
43. Pipette
44. Burette
45. Beam balance
46. Bunsen burner
47. Conical flask
48. What is measurement
49. Define the term physical quantity
50. Mention three derived physical quantities

Define the following terms;

51. Mass
52. Temperature
53. Length
54. time

Mention the instruments which are used to measure;

55. mass
56. length
57. time
58. When an irregular solid was immersed in  $65\text{cm}^3$  of water, the water level rose to  $81\text{cm}^3$ . What was the volume of the solid?
59. What is error?
60. What is density?
61. An irregular solid X has a mass of 50g. When it is totally immersed in water of volume  $60\text{cm}^3$ , the final water volume is read as  $70\text{cm}^3$ . Calculate the density of irregular solid X.
62. A piece of copper metal of volume  $5.1\text{cm}^3$  has a mass of 41.6g. Calculate the relative density of copper.

63. What is force?
64. Mention types of forces.
65. In a single word what does force of gravity mean?
66. Mention eight effects of forces.
67. In an object weighs 30N on the earth is its mass?
68. If an object has a mass of 200g, how much would it weigh on the earth?
69. An object weighs 200N on the earth. What would be its mass on the moon?

Define the following terms

70. friction force
71. restoring force
72. stretching force
73. What is the difference between friction force and viscosity force?
74. What is the difference between repulsion force and attractive force?
75. State the four types of fundamental forces.
76. Define the following terms
77. Floating
78. Sinking
79. Up thrust
80. A hydrometer is an instrument used for measuring
  81. What is Buoyancy force?
82. Explain the following terms:
  - a) Real weight
  - b) Apparent weight
83. State Archimedes' principle.
84. Mention three conditions for floating.

85. State law of floatation
86. What is hydrometer?
87. An object with a volume of  $150\text{cm}^3$  is floating in water 60% of its volume submerged. What is the density of the object?
88. What is matter?
89. Define the following terms;
  - a) Elasticity
  - b) Surface tension
  - c) Capillarity
  - d) Osmosis
  - e) Diffusion
90. State Kinetic theory of matter.
91. State Hooke's law
92. Mention three physical states of matter.
93. Analyze the difference between adhesion and cohesion.
94. Distinguish between elastic and plastic materials.
95. The attractive forces between molecules of different substances is called .....
96. The elastic force constant of a spring is obtained by the ratio of .....
97. Which phenomenon is taking place when kerosene rises up a wick?
98. State the difference between a solid, a liquid and a gas.
99. A certain spring has a force constant of  $k = 25 \text{ N/cm}$ .
  - a) If an object with a mass of 500g were hung from the spring, how far in centimeters, would it stretch?
  - b) What is the mass of an object that stretches the spring 35cm?
100. Explain how oil can float on water.

101. Explain how adding soap to the water would cause the oil and water to mix