

WELLAND GOULDSMITH SCHOOL
ANSWER KEY FOR CLASS VIII PHYSICS

Worksheet : 1

1. a) Melting Point

b) Molecule

c) Mass = Density \times Volume

d) 76cm of Hg

e) 3×10^8 m/s

f) More

g) 0.5 hertz

h) 0 ° C

2. 1. Molecules – Matter

2. 100 °C – Water Boils

3. 0 ° C – Water Freezes

4. At all temp – Evaporation

5. Camphor – Changes from solid to gas

3. Across

6. Electrostatic

7. Magnetic

9. Contact

10. Fluid

Down

1. Pressure

2. Friction

3. Newton

4. Gravitational

5. Balanced

6. Area

4. a) Gases

b) Boiling

c) Volume

d) The atmospheric pressure decreases

e) Dispersion

5. a) K.E b) P.E c) P.E d) K.E e) K.E f) K.E g) P.E h) K.E i) P.E j) K.E

6. Because the water seeps out on surface through the pores in the pot and it evaporates. The heat required for evaporation is taken from water inside the pot which gets cooled.

7. V - Violet

I - Indigo

B - Blue

G - Green

Y - Yellow

O - Orange

R – Red

8. 98°F 78°C
 $C/5=(F-32)/9$ $= 78 + 273$
 $C/5= (98-32)/9$ $=351\text{ K}$
 $C/5=66/9$
 $C= (66\times 5)/9= 36.66^{\circ}\text{C}$
 $= 36.67^{\circ}\text{C}$
9. i) We should not touch switches with wet hands.
 ii) Appliances should be properly earthed.
 iii) The wiring used must have proper insulation.
 iv) We should not try to repair an appliance while it is in use.
10. Stringed Instruments: Piano, Guitar, Violin Wind Instruments : Flute, Shehnai

Worksheet 2

1. John Dalton – Dalton’s Atomic Theory
 Albert Einstein – Theory of Relativity
 J.J. Thomson – Discovery of Electron
 Rutherford – Atomic Model
 Isaac Newton – Laws of Motion, Basic Principles of Modern Physics
 Georg Simon Ohm – Ohm’s Law
 Max Planck – Quantum Theory of Energy
 Archimedes – Principles of Flotation
 C.V. Raman – Raman Effect for Scattering of Light
 Homi.J. Bhabha – Quantum Theory and Cosmic Radiation
 Meghnad Saha – Thermal Ionization Theory
 Satyendra Nath Bose – Worked on Quantum Mechanics, Discovered Boson Particle.
2. i) Repel, attract
 ii) Conductor, insulator
 iii) Repulsion
 iv) Iron
 v) Excess
 vi) Insulators
 vii) Calorimeter
 viii) Spectrum
3. i) Convex Mirror
 ii) Pendulum of a clock
 iii) Relative Density
 iv) Sublimation
 v) I/T
 vi) Concave Mirror
 vii) Cooking Utensils
 viii) Ampere
 ix) Sharp Cutting Edge
 x) Maximum Displacement

4.
 - i)Electrical energy – Light energy
 - ii)Electrical energy – Mechanical energy
 - iii)Sound energy – Electrical energy
 - iv)Heat energy – Mechanical energy
 - v)Electrical energy – Sound energy
5.
 - i)No work done
 - ii)Work done
 - iii)No work done
 - iv)Work done
 - v)No work done
6.
 - i)Vaporization
 - ii)Evaporation
7. Spirit evaporates quickly even in room temperature. To prevent from evaporation, they are stored in closed airtight bottles.
8. Density of ice is less than density of water. Density of ice is 0.9 g/cm^3 while density of water is 1 g/cm^3 .
9.
 - i) Sink (density of the body is more than density of water)
 - ii) Float (density of the body is less than density of water)
10.
 - i) Dentist Mirror – Concave Mirror
 - ii) Street Light Reflector – Convex Mirror
11. When plastic comb is rubbed with dry hair, it acquires charge due to static electricity and so it attracts piece of paper which it uncharges.
12.
 - i) Do not stand under a tree.
 - ii) Take out the plugs of TV sets, computers.