Success Key Worksheet

Std: Class 9 (Eng.& Semi) | **Ch.1 Law of Motion** | **Time: 1 Hr.**

(Daily Practice Paper)

Date: | **Subject: Science -1** | **Max Marks: 25**

Q.1) Fill in the blanks: **5**

1) Newton's first law explains the phenomenon of _____.

2) The magnitude of velocity and _____ will be equal if motion is along a straight path.

3) While sharpening a knife, sparks fly off _____ from the grinding stone.

4) A _____ force acting on an object brings it in motion.

5) The momentum of a body of mass 5 kg is 10 kg m/s, then its velocity will be _____.

Q.2) State 'True' or 'False', if 'False' correct it: **5**

1) The distance travelled in a particular direction by an object in unit time is called its speed.

2) An unbalanced force acting on an object brings it in motion.

3) Acceleration is always positive.

4) Average speed of a moving body can be zero.

5) Negative acceleration is also called deceleration.

Q.3) Choose the correct alternative and rewrite the following: **15**

1) If a particle moves with a constant speed, the distance time graph is a …….
(a) straight line (b) circle (c) polygon (d) curved line

2) Newton's first law explains the phenomenon of _____.
(a) momentum (b) force (c)motion (d) inertia

3) When body is at rest, at the starting of motion, its initial velocity (u) is _____.
(a) one (b) infinity (c) zero (d) less than zero

4) When the velocity of an object increases, the acceleration is _____.
(a) negative (b) positive (c) zero (d) either negative or positive

5) _____ is a quantitative measures of inertia of body.
(a) Volume (b) Mass (c) Density (d) Acceleration

6) 1 newton = …… dynes.
(a) $3X10^{-8}$ (b) 10^{7} (c) 10^{5} (d) 10^{-5}

7) If force acting on a body is doubled, acceleration with which it moves is _____.
(a) constant (b) doubled (c) two-fold (d) none of these

8) The speed of the sound in dry air is …… m/s.
(a) 343.2 (b) 268.1 (c) 62.37 (d) 3X10-8

9) Force is linked with _____.
(a) velocity (b) position of rest
(c) inertia (d) acceleration

10) Force which produces acceleration in body is equal to rate of change of _____.
(a) velocity (b) acceleration
(c) density (d) momentum

11) Which of Newton's Laws describes the amount of force applied to accelerate an object's mass?
(a) First Law (b) Second Law
(c) Third Law (d) Fourth Law

12) If a body is moving in a straight line then net force acting on it is _____.
(a) constant (b) increasing
(c) decreasing (d) zero

13) The_____ between two objects are always equal and opposite.
(a) forces (b) speed (c) momentum (d) acceleration

14) The rate of change of …… is called acceleration.
(a) speed (b) distance
(c) displacement (d) velocity

15) If a bus takes a sharp turn then passengers inside moves outward due to
(a) force (b) inertia
(c) normal force (d) friction

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Ch.1 Law of Motion

DPP(Answer key)

Date: | **Subject: Science -1** | **Max Marks: 25**

Q.1) Fill in the blanks: **5**

1)Ans. inertia.

2)Ans. speed

3)Ans. tangentially

4)Ans. 5 m/s.

5)Ans. 2 m/s

Q.2) State 'True' or 'False', if 'False' correct it: **5**

1)Ans. False: The distance travelled by an object per unit time is called its speed.

2)Ans. True

3)Ans. False
Acceleration can be positive, negative or zero.

4)Ans. False. Average speed of a moving body can never be zero.

5)Ans. True

Q.3) Choose the correct alternative and rewrite the following: **15**

1)Ans. (a) straight line

2)Ans. (d) inertia

3)Ans. (c) zero

4)Ans. (b) positive

5)Ans. (b) Mass

6)Ans. (c) 10^5

7)Ans. (b) doubled

8)Ans. (a) 343.2

9)Ans. (d) acceleration

10)Ans. (d) momentum

11)Ans. (b) Second Law

12)Ans. (d) zero

13)Ans. (a) forces

14)Ans. (d) velocity

15)Ans. (b) inertia