



**ST. LAWRENCE HIGH SCHOOL**



**A JESUIT CHRISTIAN MINORITY INSTITUTION**  
**TERM- 1**

## **Subject-Physical Science Worksheet- 15 Class – 5**

**Date- 23.03.21**

### **Topic- FORCE AND MOTION**

**CHOOSE THE CORRECT OPTION- (MCQ)**

**MARKS=1×15**

1. A force acting on an object does no work if

- a. a machine is used to move the object.
- b. the force is not in the direction of the object's motion.
- c. the force is greater than the force of friction.
- d. the object accelerates.

2. What is the speed of a bob whose distancetime graph indicates that it traveled 100 m in 25 seconds?

- a. 4 m/s
- b. 250 m/s
- c. 0.25 mph
- d. 100 m/s

3. What is the SI unit of pressure?

- a. a pascal
- b.  $\text{g/cm}^3$
- c. a newton
- d.  $\text{m/s}^2$

4. The operation of a hydraulic lift system is explained by

- a. Newton's principle.
- b. Bernoulli's principle.

- c.** Pascal's principle.
- d.** Archimedes' principle.

5. The amount of matter in an object is called its

- a.** inertia.
- b.** force.
- c.** balance.
- d.** mass.

6. The force that one surface exerts on another when the two rub against each other is called

- a.** gravity.
- b.** friction.
- c.** inertia.
- d.** acceleration.

7. An object that travels around another object in space is called a(n)

- a.** satellite.
- b.** projectile.
- c.** inertia.
- d.** mass.

8. When you know both the speed and direction of an object's motion, you know the a. average speed of the object.

- b.** acceleration of the object.
- c.** distance the object has traveled.
- d.** velocity of the object.

9. What is transferred by a force moving an object through a distance?

- a.** motion
- b.** force
- c.** energy
- d.** mass

10. The SI unit of power is the

- a.** joule.
- b.** watt.
- c.** newton.
- d.** newton-meter.

11. The basic SI unit of length is the

- a. inch. c. meter.
- b. foot. d. mile.

12. Based on your knowledge of energy conservation, which of the following statements is true?

- a. Manufacturers can increase a light bulb's energy efficiency by using technology that increases the amount of electromagnetic energy the bulb converts from a given amount of electrical energy.
- b. Energy can be conserved by turning off lights when they are not in use. c. both a and b
- d. neither a nor b

13. Which of the following is an example of exerting a force?

- a. a train speeding down a track
- b. a carpenter hammering a nail
- c. a child running through a field
- d. an airplane soaring through the sky

14. One way to increase acceleration is by

- a. decreasing force.
- b. increasing mass.
- c. decreasing mass.
- d. increasing both force and mass proportionally.

15. In order to calculate pressure exerted on a surface, what quantity is divided by the surface area?

- a. force c. volume
- b. mass d. altitude
- c. Teacher- Piyali Halder