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Worksheet: Forces and Laws of Motion

1. The SI unit of momentum is also equivalent to:
2. A force can change the:
3. A bullet fired from a gun experiences a recoil. This is an example of:
4. If no external force acts on a system, its momentum remains:
5. Which concept was first introduced by Galileo Galilei?
6. A fielder catching a fast-moving cricket ball often moves his hands backward with the ball. This is done to:
7. When a carpet is beaten with a stick, dust comes out of it, Explain
8. A force of 10 N acts on an object of mass 2 kg. What is the acceleration produced?
9. What is the momentum of a 10 kg object moving with a velocity of 5 m/s?
10. Which of the following would require the largest force to accelerate?
11. The S.I. unit of momentum is:
12. An object of mass 1 kg travelling in a straight line with a velocity of 10 m/s collides with and sticks to a stationary wooden block of mass 5 kg. Then they both move off together in the same straight line. Calculate the total momentum just before the impact and just after the impact. Also, calculate the velocity of the combined object.
13. What is the S.I. unit of acceleration?
14. If a net force acts on an object, the object will:
15. When you throw a ball upwards, what happens to its momentum as it goes up?
16. The formula for momentum is:
17. Impulse is defined as:
18. A cart of mass M is moving with velocity V . If a mass m is added to the cart, the new velocity of the cart will be:
19. A cricketer pulls his hands back while catching a ball. This helps to:
20. If an object experiences a net force, it will: