PRINCE EDWARD ISLAND PHYSICS 12 · UNIT D

Momentum and Energy — Practice Test

Prince Edward Island Physics 12 • 25 questions

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **A force of 10 newtons pushes a sled for 3 seconds. The impulse in newton seconds is**



ANSWER

Understand It with Pulse | Flag a mistake

2 **A machine does 600 joules of work in 20 seconds. Its power in watts is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **An object of mass 2 kilograms moving at 4 metres per second has kinetic energy in joules of**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **An object of mass 2 kilograms moving at 5 metres per second has momentum in kilogram metres per second of**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **A force of 50 newtons moves a crate 2 metres. The work in joules is**



ANSWER

Understand It with Pulse | Flag a mistake

6 **A 1 kilogram object moving at 10 metres per second has kinetic energy in joules of**

ANSWER

Understand It with Pulse | Flag a mistake

7 **An object of mass 6 kilograms at height 10 metres has gravitational potential energy in joules , using g = 10 , of**

ANSWER

Understand It with Pulse | Flag a mistake

8 **A force of 20 newtons moves an object 5 metres in the direction of the force. The work in joules is**

ANSWER

Understand It with Pulse | Flag a mistake

9 **A larger force pushing a bowling ball for the same time gives a**



A smaller impulse

B same impulse

C zero impulse

D larger impulse

Understand It with Pulse | Flag a mistake

10 **Efficiency is useful energy output divided by**

A total energy input

B wasted energy

C time

D power

Understand It with Pulse | Flag a mistake

11 **Energy cannot be created or destroyed, only**

A measured

B transferred or transformed

C lost completely

D increased

Understand It with Pulse | Flag a mistake

12 **Gravitational potential energy depends on**

A mass, height and gravity

B speed

C mass only

D time only

Understand It with Pulse | Flag a mistake

13 **Impulse equals change in**

A energy

B mass

C velocity only

D momentum

Understand It with Pulse | Flag a mistake

14 **In an elastic collision, both momentum and**

A only momentum is conserved

B only kinetic energy is conserved

C neither is conserved

D kinetic energy are conserved

Understand It with Pulse | Flag a mistake

15 **A force of 12 newtons acts on a wagon for 5 seconds. The impulse in newton seconds is**



ANSWER _____

Understand It with Pulse | Flag a mistake

16 **A machine does 900 joules of work in 30 seconds. Its power in watts is**

ANSWER _____

Understand It with Pulse | Flag a mistake

17 **An object of mass 3 kilograms moving at 2 metres per second has kinetic energy in joules of**

ANSWER

Understand It with Pulse | Flag a mistake

18 **An object of mass 4 kilograms moving at 3 metres per second has momentum in kilogram metres per second of**

ANSWER

Understand It with Pulse | Flag a mistake

19 **A force of 25 newtons moves an object 4 metres. The work in joules is**

ANSWER

Understand It with Pulse | Flag a mistake

20 **A 4 kilogram object moving at 5 metres per second has kinetic energy in joules of**

ANSWER

Understand It with Pulse | Flag a mistake

21 **A rock of mass 2 kilograms at height 5 metres has gravitational potential energy in joules , using g = 10 , of**



ANSWER

Understand It with Pulse | Flag a mistake

22 **A force of 15 newtons acts for 4 seconds. The impulse in newton seconds is**

ANSWER

Understand It with Pulse | Flag a mistake

23 **A machine does 1000 joules of work in 25 seconds. Its power in watts is**

ANSWER

Understand It with Pulse | Flag a mistake

24 **An object of mass 5 kilograms moving at 4 metres per second has kinetic energy in joules of**

ANSWER

Understand It with Pulse | Flag a mistake

25 **A wooden block of mass 10 kilograms moving at 2 metres per second has momentum in kilogram metres per second of**



ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. 30
2. 30
3. 16
4. 10
5. 100
6. 50
7. 600
8. 100
9. D
10. A
11. B
12. A
13. D
14. D
15. 60
16. 30
17. 6
18. 12
19. 100
20. 50
21. 100
22. 60
23. 40
24. 40
25. 20

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