SASKATCHEWAN SCIENCE 10 · UNIT D · 25 QUESTIONS

Forces and Motion Technologies — Practice Test

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 5 kg wooden crate accelerates at 4 m per second squared. The net force, in newtons, is _____**



ANSWER

Understand It with Pulse | Flag a mistake

2 **A force of 20 N moves an object 15 m. The work done, in joules, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **Work of 200 J is done in 10 s. The power, in watts, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **A force that opposes motion between surfaces in contact is called**

A net force

B friction

C Newton first law

D Newton second law

Understand It with Pulse | Flag a mistake

5 **A push or pull on a wagon cart is called**



A force

B friction

C gravity

D net force

Understand It with Pulse | Flag a mistake

6 **An attractive force between masses is called**

A Newton first law

B Newton second law

C Newton third law

D gravity

Understand It with Pulse | Flag a mistake

7 **An object stays at rest or in uniform motion unless acted on by an unbalanced force is called**

A Newton third law

B normal force

C Newton first law

D force

Understand It with Pulse | Flag a mistake

8 **An object with greater mass has greater**

A inertia

B speed

C volume

D temperature

Understand It with Pulse | Flag a mistake

9 **Seat belts reduce injury mainly by**

A increasing the time over which a person stops

B increasing speed

C removing friction

D adding mass

Understand It with Pulse | Flag a mistake

10 **The combined effect of all forces acting on a sled is called**



A Newton second law

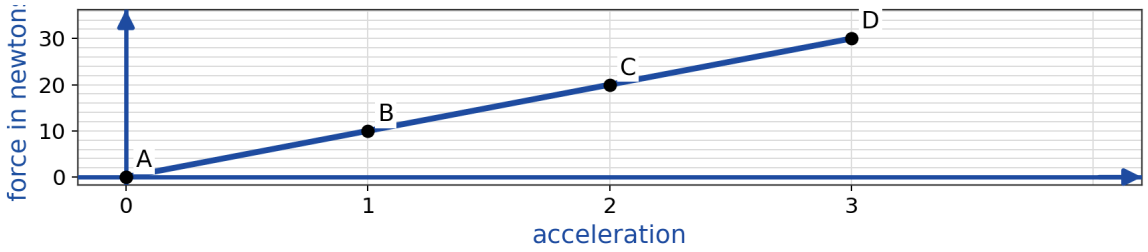
B net force

C Newton third law

D normal force

Understand It with Pulse | Flag a mistake

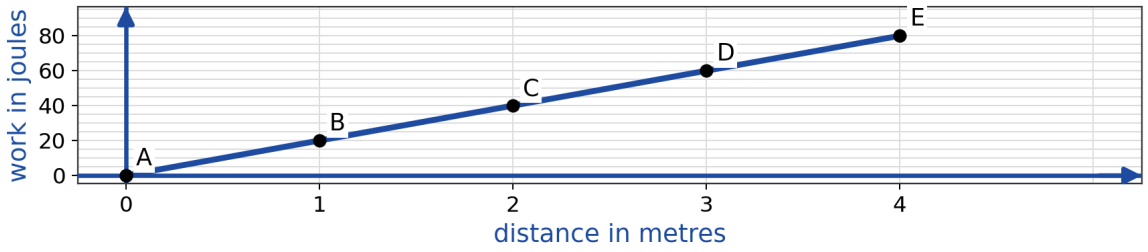
11 **The graph shows force against acceleration for one mass. Doubling the acceleration doubles the**



- **A** mass
- **B** time
- **C** force
- **D** distance

Understand It with Pulse | Flag a mistake

12 **The graph shows work done against distance at a constant force. The work at 4 m, in joules, is _____**



ANSWER _____

Understand It with Pulse | Flag a mistake

13 **The law that every action has an equal and opposite reaction is called**

A Newton third law

B force

C inertia

D friction

Understand It with Pulse | Flag a mistake

14 **The law that net force equals mass times acceleration is called**

A normal force

B force

C inertia

D Newton second law

Understand It with Pulse | Flag a mistake

15 **A wooden block rests on a ramp. The support force perpendicular to the ramp surface is called**



A inertia

B normal force

C friction

D gravity

Understand It with Pulse | Flag a mistake

16 **The tendency of an object to resist a change in its motion is called**

A gravity

B net force

C Newton first law

D inertia

Understand It with Pulse | Flag a mistake

17 **When you push on a wall, the wall pushes back with a force that is**

A greater

B smaller

C equal and opposite

D zero

Understand It with Pulse | Flag a mistake

18 **A mass of 10 kg accelerates at 3 m per second squared. The net force, in newtons, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

19 **A force of 50 N moves an object 4 m. The work done, in joules, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

20 **A cyclist does 600 J of work in 20 s. The power, in watts, is ____**



ANSWER _____

Understand It with Pulse | Flag a mistake

21 **A mass of 2 kg accelerates at 9 m per second squared. The net force, in newtons, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **A force of 30 N moves an object 10 m. The work done, in joules, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **A mass of 8 kg accelerates at 5 m per second squared. The net force, in newtons, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **A force of 40 N moves an object 6 m. The work done, in joules, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **A 12 kg bowling ball accelerates at 2 m per second squared. The net force, in newtons, is ____**



ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. 20
2. 300
3. 20
4. B
5. A
6. D
7. C
8. A
9. A
10. B
11. C
12. 80
13. A
14. D
15. B
16. D
17. C
18. 30
19. 200
20. 30
21. 18
22. 300
23. 40
24. 240
25. 24

© 2026 Brett Robbins. All Rights Reserved.