NOVA SCOTIA PHYSICS 11 · UNIT C

Work, Energy and Power — Practice Test

Nova Scotia Physics 11 • 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 crate 5 metres in the direction of the force. The work done, in joules, is**



ANSWER _____

Understand It with Pulse | Flag a mistake

2 **A force of 12 newtons pushes an object 5 metres. The work done, in joules, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **An object of mass 2 kilograms is 10 metres above the ground . Use g = 10 metres per second squared . Its gravitational potential energy , in joules , is**

ANSWER

Understand It with Pulse | Flag a mistake

4 **A bowling ball of mass 2 kilograms moves at 4 metres per second. Its kinetic energy, in joules, is**



ANSWER

Understand It with Pulse | Flag a mistake

5 **A machine has useful output 80 joules and input 100 joules. Its efficiency, in percent, is**

ANSWER

Understand It with Pulse | Flag a mistake

6 **A battery stores**

A kinetic energy

B elastic energy

C chemical energy

D nuclear energy only

Understand It with Pulse | Flag a mistake

7 **A device that transforms energy from one form to another is a**

A transducer

B generator only

C motor only

D battery only

Understand It with Pulse | Flag a mistake

8 **A kilowatt is equal to**

A 100 watts

B 10 watts

C 1 watt

D 1000 watts

Understand It with Pulse | Flag a mistake

9 **A machine with efficiency less than 100 percent loses some energy mainly as**

A light only

B heat

C sound only

D mass

Understand It with Pulse | Flag a mistake

10 **A moving sled that stops because of friction transforms kinetic energy into**



A potential energy

B chemical energy

C light only

D thermal energy

Understand It with Pulse | Flag a mistake

11 **A stretched spring stores**

A kinetic energy

B chemical energy

C thermal energy only

D elastic potential energy

Understand It with Pulse | Flag a mistake

12 **As an object falls, its gravitational potential energy is transformed mainly into**

A kinetic energy

B chemical energy

C nuclear energy

D sound only

Understand It with Pulse | Flag a mistake

13 **Chemical energy in food is measured in**

A watts

B joules

C newtons

D pascals

Understand It with Pulse | Flag a mistake

14 **A cyclist doing the same work in less time requires**



A less power

B more energy

C greater power

D less force always

Understand It with Pulse | Flag a mistake

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

A time

B total energy input

C force

D mass

Understand It with Pulse | Flag a mistake

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

A lost forever

B made by machines

C transferred or transformed

D stored as heat only

Understand It with Pulse | Flag a mistake

17 **A force of 20 newtons pushes an object 3 metres in the direction of the force. The work done, in joules, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **A force of 40 newtons pushes an object 2 metres. The work done, in joules, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

19 **A rock of mass 5 kilograms is 4 metres above the ground . Use g = 10 metres per second squared . Its gravitational potential energy , in joules , is**



ANSWER _____

Understand It with Pulse | Flag a mistake

20 **An object of mass 4 kilograms moves at 3 metres per second. Its kinetic energy, in joules, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

21 **A machine has useful output 150 joules and input 200 joules. Its efficiency, in percent, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **A force of 15 newtons pushes an object 4 metres in the direction of the force. The work done, in joules, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **A force of 18 newtons pushes an object 10 metres. The work done, in joules, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **An object of mass 10 kilograms is 3 metres above the ground . Use g = 10 metres per second squared . Its gravitational potential energy , in joules , is**

ANSWER

Understand It with Pulse | Flag a mistake

25 **A wagon of mass 5 kilograms moves at 6 metres per second. Its kinetic energy, in joules, is**



ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. 50
2. 60
3. 200
4. 16
5. 80
6. C
7. A
8. D
9. B
10. D
11. D
12. A
13. B
14. C
15. B
16. C
17. 60
18. 80
19. 200
20. 18
21. 75
22. 60
23. 180
24. 300
25. 90

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