

GCSE Physics Equation Brain Blast LEVEL 1

You have two minutes to recall all 23 physics equations. Complete the equations below.

1. Weight = m _____ \times g _____

2. Work done = f _____ \times d _____

3. Force applied to a spring = s _____ \times e _____

4. Moment = f _____ \times d _____

5. Pressure = f _____ \div a _____

6. Distance travelled = s _____ \times t _____

7. Acceleration = change in v _____ \div t _____

8. Resultant force = m _____ \times a _____

9. Momentum = m _____ \times v _____

10. Kinetic Energy = $0.5 \times m$ _____ \times (v _____)²

11. Gravitational Potential Energy = m _____ \times g _____ \times h _____

12. Power = e _____ \div t _____

13. Power = w _____ \div t _____

14. Efficiency = U _____ e _____ output \div U _____ e _____ input

15. Efficiency = U _____ p _____ output \div U _____ p _____ input

16. Wave Speed = f _____ \times w _____

17. Charge flow = c _____ \times t _____

18. Potential Difference = c _____ \times r _____

19. Power = p _____ \times d _____ \times c _____

20. Power = (c _____)² \times r _____

21. Energy Transferred = p _____ \times t _____

22. Energy Transferred = c _____ \times f _____ \times p _____ \times d _____

23. Density = m _____ \div v _____



My Brain Blast score to beat was ___/23

My new Brain Blast score is ___/23

GCSE Physics Equation Brain Blast LEVEL 2

You have two minutes to recall all 23 physics equations . Complete the equations below.

1. Weight = _____ x _____

2. Work done = _____ x _____

3. Force applied to a spring = _____ x _____

4. Moment = _____ x _____

5. Pressure = _____ ÷ _____

6. Distance travelled = _____ x _____

7. Acceleration = _____ ÷ _____

8. Resultant force = _____ x _____

9. Momentum = _____ x _____

10. Kinetic Energy = $0.5 \times$ _____ \times (_____)²

11. Gravitational Potential Energy = _____ x _____ x _____

12. Power = _____ ÷ _____

13. Power = _____ ÷ _____

14. Efficiency = _____ output ÷ _____ input

15. Efficiency = _____ output ÷ _____ input

16. Wave Speed = _____ x _____

17. Charge flow = _____ x _____

18. Potential Difference = _____ x _____

19. Power = _____ x _____

20. Power = (_____)² x _____

21. Energy Transferred = _____ x _____

22. Energy Transferred = _____ x _____

23. Density = _____ ÷ _____



My Brain Blast score to beat was ___/23

My new Brain Blast score is ___/23

GCSE Physics Equation Brain Blast LEVEL 3

You have two minutes to recall all 23 physics equations . Complete the equations below.

1. Weight =

2. Work done =

3. Force applied to a spring =

4. Moment =

5. Pressure =

6. Distance travelled =

7. Acceleration =

8. Resultant force =

9. Momentum =

10. Kinetic Energy =

11. Gravitational Potential Energy =

12. Power =

13. Power =

14. Efficiency =

15. Efficiency =

16. Wave Speed =

17. Charge flow =

18. Potential Difference =

19. Power =

20. Power =

21. Energy Transferred =

22. Energy Transferred =

23. Density =



My Brain Blast score to beat was ___/23

My new Brain Blast score is ___/23

Quantity	SI Units
Weight	
Mass	
Work Done / Energy transferred	
Force	
Distance / Distance travelled	
Extension	
Moment	
Pressure	
Area	
Speed / Velocity	
Time (Time taken)	
Acceleration	
Momentum	
Kinetic / Potential Energy	
Height	
Power	
Wave speed	
Frequency	
Wavelength	
Charge flow	
Current	
Potential Difference	
Resistance	
Density	
Volume	

Do you know your SI units for each quantity?



Quantity	SI Units
Acceleration	
Area	
Charge flow	
Current	
Density	
Distance/ Distance travelled	
Energy – Kinetic or Potential	
Energy transferred / Work done	
Extension	
Force	
Frequency	
Height	
Mass	
Moment	
Momentum	
Potential Difference	
Power	
Pressure	
Resistance	
Speed/Velocity	
Time (Time taken)	
Volume	
Wave speed	
Wavelength	
Weight	

Do you know your SI units for each quantity?

