

What is the equation linking...

- * E_k = kinetic energy
- * m = mass
- v = speed

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Q-1



What is the equation linking...

- * Ep = gravitational potential energy
- * m = mass
- # g = gravitational field strength
- h = height

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Q-2

What is the equation linking...

- * P = power
- * E = energy transferred
- * t = time

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Q-3



What is the equation linking...

- * P = power
- * W = work done
- * t = time

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Q-4



What is the equation linking...

- Efficiency
- * Useful power out
- * Total power in

Q-5



What is the equation linking...

- Efficiency
- Useful energy out
- Total energy in

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Q-6

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 $E_p = mgh$

Gravitational potential energy = mass x gravity x height

A-2

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 $E_k = \frac{1}{2} m v^2$

Kinetic energy = $\frac{1}{2}$ x mass x velocity²

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A-1

9.

P = <u>W</u>

T

Power = work / time

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 $P = \underline{E}$

T

Power = energy / time

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A-3



Efficiency = <u>useful energy out</u> total energy in

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A-6

A-4

Efficiency = <u>useful power out</u> total power in

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A-5

9.	What is the equation linking		.00	What is the equation linking	
	* Q = Charge			V = Potential difference	
	* I = Current		* I = Current		
	* t = Time			R = Resistance	
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.,,	What is the equation linking		9.	What is the equation linking	
	* P = Power			* P = Power	
	V = Potential difference			* I = Current	
	<pre># I = Current</pre>			* R = Resistance	
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	What is the equation linking			What is the equation linking	
	* E = Energy			• ρ = density	
	* Q = Charge			* m = mass	
	V = Potential difference			V = volume	
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V = IR

Potential difference = current x resistance

A-8

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Q = It

Charge = current x time

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A-7



 $P = I^2R$

Power = current² x resistance

A-10

0

P = VI

Power = potential difference x current A.

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 $\rho = \underline{m}$

V

Density = mass / volume

A-12



E = QV

Energy = charge x potential difference

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A-11

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What is the equation linking...

- * W = weight
- * m = mass
- * g = gravitational field strength

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Q-13



What is the equation linking...

- W = work done
- * F = force
- * s = distance

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Q-14



What is the equation linking...

- * F = force
- * k = spring constant
- * e = extension

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Q-15

Q-17



What is the equation linking...

- * M = moment
- * F = force
- * d = distance

Physics only Q-16

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What is the equation linking...

- * p = pressure
- * F = force
- * A = area

Physics only

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What is the equation linking...

- * s = distance
- * v = speed
- * t = time

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Q-18



W = Fs

Work done = force x distance

A-14



W = mg

Weight = $mass \times gravitational$ field strength

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A - 13



M = Fd

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Moment = force xdistance

A-16

A-18

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F = ke

Force = spring constant x extension

A-15

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s = vt

distance = speed x time

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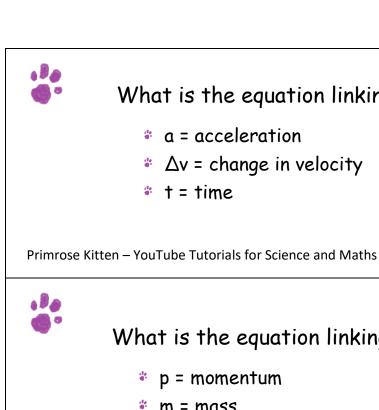


p = F

Pressure = force / area

A - 17

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What is the equation linking...

- * a = acceleration
- * $\Delta v = change in velocity$
- * t = time

Q-19

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What is the equation linking...

- * F = force
- * m = mass
- a = acceleration

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Q-20

What is the equation linking...

- * p = momentum
- * m = mass
- * v = velocity

higher tier only Q-21

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What is the equation linking...

- * v = velocity
- * f = frequency
- * λ = wavelength

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Q-22



Blank



Blank

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Q-23

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Q-24

F = ma Force = mass x acceleration Primrose Kitten – YouTube Tutorials for Science and Maths A-20	$a = \underline{\Delta v}$ t $acceleration = change in$ $velocity / time$ $Primrose Kitten - YouTube Tutorials for Science and Maths$ $A-19$
v = fA velocity = frequency x wavelength A-22 Primrose Kitten - YouTube Tutorials for Science and Maths	p = mv momentum = mass x velocity Primrose Kitten – YouTube Tutorials for Science and Maths
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