## A LEVEL PHYSICS

## DAILY WORKOUT

Year 1: July - October

## Question Index



## Daily Workout - Book 1 - July

|  | Question 1 | Question 2 | Question 3 |
| :---: | :---: | :---: | :---: |
| $1{ }^{\text {st }}$ | Trigonometry | Relationships | $\mathrm{E}_{\mathrm{k}}$ and momentum |
| $2^{\text {nd }}$ | Trigonometry | Relationships | Vectors |
| $3{ }^{\text {rd }}$ | Pythagoras | Relationships | Sound calculation |
| $4^{\text {th }}$ | Pythagoras | Relationships | Electricity calculation |
| $5^{\text {th }}$ | Pythagoras | Relationships | Atoms |
| $6^{\text {th }}$ | Pythagoras | Relationships | Electricity calculation |
| $7^{\text {th }}$ | Standard form | Trigonometry | Motion calculation |
| $8^{\text {th }}$ | Standard form | Trigonometry | Waves calculation |
| $9^{\text {th }}$ | Constants | Rearranging equations | Motion calculation |
| $10^{\text {th }}$ | Maths skills | Rearranging equations | Motion calculation |
| $11^{\text {th }}$ | Maths skills | Rearranging equations | Motion calculation |
| $12^{\text {th }}$ | Maths skills | Rearranging equations | Waves calculation |
| $13^{\text {th }}$ | Maths skills | Definition | Vector diagram - forces |
| $14^{\text {th }}$ | Averages | Definition | Vector diagram - forces |
| $15^{\text {th }}$ | Averages | Definition | Resultant force diagram |
| $16^{\text {th }}$ | Standard form | Identifying forces | Resultant force calculation |
| $17^{\text {th }}$ | Standard form | Radiation | Resultant force diagram |
| $18^{\text {th }}$ | Significant figures | Energy calculation | Resultant force calculation |
| $19^{\text {th }}$ | Significant figures | Trigonometry | Radiation |
| $20^{\text {th }}$ | Significant figures | Components of a force | Motion calculation |
| $21^{\text {st }}$ | Maths skills | Components of a force | Energy calculation |
| $22^{\text {nd }}$ | Definition | v-t graph | Electricity calculation |
| $23^{\text {rd }}$ | Definition | Graph skills | Resistors calculation |
| $24^{\text {th }}$ | Definition | Graph skills | Sound calculation |
| $25^{\text {th }}$ | $y=m x+c$ | Rearranging equations | Atoms |
| $26^{\text {th }}$ | $y=m x+c$ | Rearranging equations | Motion calculation |
| $27^{\text {th }}$ | $y=m x+c$ | Rearranging equations | Reflection |
| $28^{\text {th }}$ | $y=m x+c$ | Rearranging equations | Silds, liquids, gases |
| 29th | $y=m x+c$ | Trigonometry | Energy calculation |
| 30th | Sketch graph | Definition | Motion calculation |
| $31^{\text {st }}$ | Sketch graph | Definition | Atoms |

## Daily Workout - Book 1-August

|  | Question 1 | Question 2 | Question 3 |
| :---: | :---: | :---: | :---: |
| $1{ }^{\text {st }}$ | Circle | Vector diagram | Base units |
| $2^{\text {nd }}$ | Circle | Symbols | Derived units |
| $3{ }^{\text {rd }}$ | Triangle | Vector diagram | Components of a force |
| $4^{\text {th }}$ | Sphere | Constants | Resultant force |
| $5^{\text {th }}$ | Sphere | Relationships | Resistors calculation |
| $6^{\text {th }}$ | Cylinder | Graphs | Energy calculation |
| $7^{\text {th }}$ | Sphere | Rearranging equations | Wave calculation |
| $8^{\text {th }}$ | Wire | Rearranging equations | Radioactivity |
| $9^{\text {th }}$ | Cylinder | Rearranging equations | Gas pressure |
| $10^{\text {th }}$ | $y=m x+c$ | Rearranging equations | Force calculation |
| $11^{\text {th }}$ | $y=m x+c$ | Rearranging equations | Energy calculation |
| $12^{\text {th }}$ | $y=m x+c$ | Variables | Wave calculation |
| $13^{\text {th }}$ | Circle | Graphs | Electricity calculation |
| $14^{\text {th }}$ | Graphs | Graphs | Radioactivity |
| $15^{\text {th }}$ | Graphs | Constants | Gas pressure |
| $16^{\text {th }}$ | Relationships | Rearranging equations | Derivation |
| $17^{\text {th }}$ | Relationships | Rearranging equations | Force/motion calculation |
| $18^{\text {th }}$ | Graphs | Rearranging equations | Energy calculation |
| $19^{\text {th }}$ | Graphs | Angles | Practical data |
| $20^{\text {th }}$ | Relationships | Angles | Wave refraction |
| $21^{\text {st }}$ | Graphs | Angles | Energy calculation |
| $22^{\text {nd }}$ | Graphs | Angles | Radioactivity |
| 23rd | Definition | Definition | Pressure in a fluid |
| $24^{\text {th }}$ | Definition | Electricity | Relationships |
| $25^{\text {th }}$ | Definition | Gas pressure | Radioactivity |
| $26^{\text {th }}$ | Graphs | Relationships | Energy calculation |
| $27^{\text {th }}$ | Definition | Relationships | Practical graph |
| $28^{\text {th }}$ | Angles | Derivation | Refraction calculation |
| $29^{\text {th }}$ | Angles | Circular motion | Electricity calculation |
| 30th | Graphs | Graphs |  |
| $31^{\text {st }}$ | Graphs | Graphs |  |

## Daily Workout - Book 1 -September

|  | Question 1 | Question 2 | Question 3 |
| :---: | :---: | :---: | :---: |
| $1{ }^{\text {st }}$ | Trigonometry | Derived units | Waves |
| $2^{\text {nd }}$ | Trigonometry | Derived units | Waves |
| $3{ }^{\text {rd }}$ | Trigonometry | Derived units | Practical - Hooke's law |
| $4^{\text {th }}$ | Trigonometry | Derived units | Force on a slope |
| $5^{\text {th }}$ | Pythagoras | Derived units | Force on a slope |
| $6^{\text {th }}$ | Maths skills | Definition | Force on a slope |
| $7^{\text {th }}$ | Graphs | Definition | Force on a slope |
| $8^{\text {th }}$ | Wave calculation | $y=m x+c$ | Graphs |
| $9^{\text {th }}$ | Definition | Force |  |
| $10^{\text {th }}$ | Maths skills | Constants | Force on a slope |
| $11^{\text {th }}$ | Maths skills | Graphs | Force on a slope |
| $12^{\text {th }}$ | Maths skills | Electrical components | Force on a slope |
| $13^{\text {th }}$ | Rearranging equations | $y=m x+c$ | Force on a slope |
| $14^{\text {th }}$ | Definition | Vector diagrams | Graphs |
| $15^{\text {th }}$ | Circuit symbols | Vector diagrams | Scalars and vectors |
| $16^{\text {th }}$ | Circuit symbols | Energy | Resultant force |
| $17^{\text {th }}$ | Relationships | Energy calculation | Resultant force |
| $18^{\text {th }}$ | Units | Energy calculation | Resultant force |
| $19^{\text {th }}$ | Forces | Refraction | Resultant force |
| $20^{\text {th }}$ | Rearranging equations | Transformers | Energy/motion calculation |
| $21^{\text {st }}$ | Circle | Electricity calculation | Definitions |
| $22^{\text {nd }}$ | Rearranging equations | Resistors calculation | Momentum calculation |
| 23rd | $y=m x+c$ | Resistors calculation | Electricity calculation |
| $24^{\text {th }}$ | Units | EM spectrum | Electricity calculation |
| $25^{\text {th }}$ | Units | Electricity | Refraction |
| $26^{\text {th }}$ | Graphs | IV characteristics | Graphs |
| $27^{\text {th }}$ | $y=m x+c$ | IV characteristics | Graphs |
| $28^{\text {th }}$ | $y=m x+c$ | IV characteristics | Graphs |
| 29th | Units | Resultant force | Electrical circuits |
| $30^{\text {th }}$ | Circle | Derived units | Electrical circuits |

## Daily Workout - Book 1 - October

|  | Question 1 | Question 2 | Question 3 |
| :---: | :---: | :---: | :---: |
| $1{ }^{\text {st }}$ | Circle/sphere | Vernier scale | Electricity calculation |
| $2^{\text {nd }}$ | Constants | Vernier scale | Standing/progressive waves |
| $3^{\text {rd }}$ | Rearranging equations | Vernier scale | Refraction |
| $4^{\text {th }}$ | Rearranging equations | Vernier scale | Momentum calculation |
| $5^{\text {th }}$ | Standard form | Vernier scale | Electricity |
| $6^{\text {th }}$ | Standard form | Motion calculation | Force on a slope |
| $7^{\text {th }}$ | Averages | Motion calculation | Force on a slope |
| $8^{\text {th }}$ | Graphs | Graphs |  |
| $9^{\text {th }}$ | Sphere | Definition | IV characteristics |
| $10^{\text {th }}$ | Sphere | Definition | Standing waves |
| $11^{\text {th }}$ | Unit conversion | Micrometer | Practical |
| $12^{\text {th }}$ | Unit conversion | Micrometer | Graphs |
| $13^{\text {th }}$ | Trigonometry | Micrometer | Graphs |
| $14^{\text {th }}$ | Trigonometry | Micrometer | Electricity |
| $15^{\text {th }}$ | Angles | Vernier scale | Standing waves |
| $16^{\text {th }}$ | Standard form | Definition | Absolute uncertainty |
| $17^{\text {th }}$ | Unit conversion | Definition | Percentage uncertainty |
| $18^{\text {th }}$ | Unit conversion | Rearranging equations | Practical |
| $19^{\text {th }}$ | Unit conversion | Moments | Terminal velocity |
| $20^{\text {th }}$ | Units | Radiation | Terminal velocity |
| $21^{\text {st }}$ | Refraction | Moments | Graphs |
| $22^{\text {nd }}$ | Constants | Definition | Electrical circuits |
| $23^{\text {rd }}$ | Graphs | Graphs |  |
| $24^{\text {th }}$ | Graphs | Definition | Electricity calculation |
| $25^{\text {th }}$ | Graphs | Graphs |  |
| $26^{\text {th }}$ | Angles | Definition | Refraction |
| $27^{\text {th }}$ | Angles | Practical | Motion calculation |
| $28^{\text {th }}$ | Angles | Practical | Resistors calculation |
| $29^{\text {th }}$ | Graphs |  |  |
| $30^{\text {th }}$ | Graphs | Efficiency | Electricity calculation |
| $31^{\text {st }}$ | Wire | Efficiency | Refraction |

