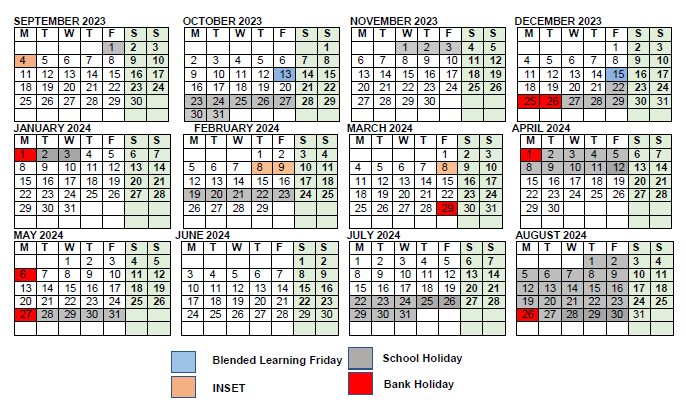
Physics **SOW** & **Required Practical** (2022-2023)**: Y11**

**AQA GCSE: 8463**

**** QAN code: 601/8751/7

***Year 10:***

*1. Energy*

*2. Electricity*

*3. Particle model of matter*

*4. Atomic structure*

**Year 11:** *(green=covered)*

**5. Forces**

**6. Waves**

**7. Magnetism and electromagnetism…**

**8. Space physics** (physics only)

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| **Week** | **Date** | **Topic** |  | **Additional notes** |
| W1 | 04-09-23 | * N/A * 8.1 Vectors and scalars/8.2 Forces between objects |  | **Monday (4th ) INSET day**  **5. Forces**  **Spec\_code: 4.5.1.1 to 4.5.7.3** |
| W2 | 11-09-23 | * 8.3 Resultant forces * 8.4 Moments at work |  |  |
| W3 | 18-09-23 | * 8.6 Centre of mass * 8.7 Moments and equilibrium |  |  |
| W4 | 25-09-23 | * 8.8 Parallelogram of forces * 8.9 Resolution of forces |  |  |
| W5 | 02-10-23 | * Summary and review * 9.1 Speed and distance-time graph |  |  |
| W6 | 09-10-23 | * 9.2 Velocity and acceleration * 9.3 Velocity and acceleration II |  | Blended learning: Friday 13th |
| W7 | 16-11-23 | * 9.4 Analysing motion graphs * Summary and review/ EOU Test |  |  |
| W8 | HT  (23-10-23) |  |  |  |
| W9 | HT  (30-10-23) |  |  |  |
| W10 | 06-11-23 | * FD and review * 10.1 Forces and acceleration | **GCSE Engineering**  Aerodynamics: 3.4.3 | Student learn **lift**, **drag** & **thrust** in Physics and Engineering |
| W11 | 13-11-23 | * 10.2 Weight and terminal velocity * 10.3 Forces and breaking |  |  |
| W12 | 20-11-23 | * 10.4 Momentum/10.5 Using conservation of momentum * 10.6 Impact forces/10.7 Safety first |  |  |
| W13 | 27-11-23 | * 10.8 Forces and elasticity * Buffer |  |  |
| W14 | 04-12-23 | * 11.1 Pressure and surfaces/ 11.2 Pressure in liquid * 11.3 Atmospheric Pressure/ 11.4 Up thrust and flotation |  | Blended learning: Friday 15th |
| W15 | 11-12-23 | * Summary and review * EOU test * RP6 Investigating the relationship between the force and extension of a spring |  | **✓** |
| W16 | 18-12-23 | * FD and gap analysis * Buffer * *RP7 Investigation between force and acceleration* |  | ***School breaks on Thursday 21st:*** |
| W17 | HT  (25-12-23) |  |  | **Winter break:**  BANK holiday Monday 25th and Tuesday 26th |
| W18 | HT  (01-01-24) |  |  | BANK holiday Monday 1st |
|  |  |  |  | **Schools opens Tuesday 4th of Jan** |
| W19 | 08-01-24 | * 12.1 The nature of waves/12.2 The properties of waves * 11.3 Reflection and refraction |  | **6. Waves**  **Spec\_code: 4.6.1.1 to** 4.6.2.6 |
| W20 | 15-01-24 | * 12.4 Sound waves * 12.5 The use of ultrasound/ 12.6 Seismic waves |  |  |
| W21 | 22-01-24 | * Summary and review * Buffer |  |  |
| W22 | 29-01-24 | * 12.1 The electromagnetic spectrum * 12.2 Light, IR, MW and RW | **GCSE Biology**  The eye: 4.5.2.3 | In Physics, students learn how eye detect visible light though cone and rods, but very briefly. This learning is extended in Bilogy |
| W23 | 05-02-24 | * 12.3 Communications * 12.4 UV, X-rays and gamma rays * RP8 Investigating plane wave in a ripple tank |  | **INSET day Thursday 8th and Friday 9th**  ***RP8 would be done in W26, Some apparatus parts are broken, should get them by the end of the half term*** |
| W24 | 12-02-24 | * 12.5 X-rays in medicine * Summary and review | **GCSE Biology**  Cancer: 4.2.2.7 | How ionization radiation destroys cells and leads to mutation, this understanding is further extended in Biology |
| W25 | HT  (19-02-24) | **Higher tier only:**   * *16.1 Formation of solar system* * *16.2 The life history of a star/ 16.3 Planets, satellite and orbits* * *16.4 The expanding universe/ 16.5 The beginning and the future of the universe* |  | **7. Space**  Spec\_code: 4.8.1.1 to 4.8.2 |
| W26 | 26-02-24 | * 13.1 Magnetic fields /13.2 Magnetic fields and electric currents * 13.3 Electromagnets in devices | **GCSE Engineering**  Electrical systems: 3.3.2 | **INSET (20-02-23 Friday)**  **8. Magnetism and**  **Electromagnetism**  **Spec\_code:** 4.7.1 to 4.7.3.4  Electrical systems such as power supplies (mains and batteries), input control devices (for example relays and switches), output devices (motors, buzzers, bells, lamps and solenoids). |
| W27 | 04-02-24 | * 13.4 The motor effect * 13.5 the generator effect * RP 10 investigating IR |  | **INSET day Friday 8th** |
| W28 | 11-03-24 | * 15.6 The alternating-current generator * 15.7 Transformers and uses of transformers |  |  |
| W29 | 18-03-24 | * 14.1 Reflection and refraction of light * 14.2 Light and colour |  | **Lenses**  spec-code: 4.6.2.5 to 4.6.2.6 |
| W30 | 25-03-24 | * 14.3 lens/ 14.4 uses of lens * RP9 Investigation of refraction and reflection * Summary and review |  | BANK holiday Friday 29th |
| W31 | HT  (01-04-24) |  |  | **Easter break:**  BANK holiday Monday 1st |
| W32 | HT  (08-04-24) |  |  |  |
| W33 | 15-04-24 | * Revision * Revision |  |  |
| W34 | 22-04-24 | * Revision * Revision |  |  |
| W35 | 29-04-24 | * Revision * Revision |  |  |
| W36 | 06-05-24 | * Revision * Revision |  | BANK holiday Monday 6th |
| W37 | 13-05-24 | * Revision * Revision |  |  |
| W38 | 20-05-24 | **Paper 1** | | |
| W39 | HT  (27-05-23) | BANK holiday Monday 27th | | |
| W40 | 03-06-23 | * Exam * Exam | | |
| W41 | 10-06-23 | * Exam * Exam | | |
| W42 | 17-06-23 | * Exam * Exam | | |
| W43 | 24-06-23 | * Exam * Exam | | |
| W44 | 01-07-23 | * Exam * Exam | | |
| W45 | 08-07-23 | **Paper 2** | | |
| W46 | 15-07-23 | * Exam * Exam | | |
| W47-52 | 22-07-23  END of the academic Year | **Summer break: *School breaks Friday 19th*** | | |