

# Physics Long Term Programme of Study Year 11

## Temperance Term

| W/C                         | Week 1   | Week 2 | Week 3 | Week 4 | Week 5 | Week 6  | Week 7 | HALF TERM |
|-----------------------------|--|--------|--------|--------|--------|---|--------|-----------|
| Area of Study               | <b>P7- Magnetism and Electromagnetism</b>  |        |        |        |        | <b>P1- Energy</b>   |        |           |
| Core Learning               | <b>P7-Explain how electromagnetic effects are used in a variety of devices</b><br>-Describe the differences between permanent and induced magnetism<br>Draw the magnetic field pattern of a bar magnet<br>-Describe how the magnetic effect of a current can be demonstrated |        |        |        |        | <b>P1 - There are changes in the way energy is stored when a system changes. Students should be able to describe all the changes involved in the way energy is stored when a system changes, for common situations.</b><br><br>Revision |        |           |
| Opportunities for Challenge | Show that Fleming's left-hand rule represents the relative orientation of the force, the current in the conductor and the magnetic field   |        |        |        |        | Grade 7, 8, 9 challenge questions   |        |           |
| Assessment                  | End of Topic Tests   |        |        |        |        | Self assessment and in-class tests  |        |           |

| W/C                         | Week 8  | Week 9 | Week 10   | Week 11  | Week 12                | Week 13 | CHRISTMAS |
|-----------------------------|---|--------|---|--|------------------------|---------|-----------|
| Area of Study               | <b>P2- Electricity</b>  |        | <b>P3- Particle Model of Matter</b>   | <b>P4- Atomic Structure</b>  | <b>Mocks (Paper 1)</b> |         |           |
| Core Learning               | <b>P2-Describe how to calculate resistance and the factors which can alter it. Describe how electricity is delivered to our homes and businesses.</b><br>Revision |        | <b>P3 – Use the particle model to predict the behaviour in solids, liquids and gases.</b><br>Revision | <b>P4 – Describe the structure of the atom, the nuclear forces and atom stability.</b><br>Revision |                        |         |           |
| Opportunities for Challenge | Grade 7, 8, 9 challenge questions   |        | Grade 7, 8, 9 challenge questions   | Grade 7, 8, 9 challenge questions  |                        |         |           |



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|                   |                                    |                                    |                                    |  |  |
|-------------------|------------------------------------|------------------------------------|------------------------------------|--|--|
| <b>Assessment</b> | Self assessment and in-class tests | Self assessment and in-class tests | Self assessment and in-class tests |  |  |
|-------------------|------------------------------------|------------------------------------|------------------------------------|--|--|

# Physics Long Term Programme of Study Year 11

## Justice Term

| W/C                         | Week 14  | Week 15 | Week 16   | Week 17 | Week 18   | Week 19   | HALF TERM |
|-----------------------------|--|---------|---|---------|---|---|-----------|
| Area of Study               | <b>P5- Forces</b>  |         | <b>P6 Waves</b>   |         | <b>P7- Magnetism and Electromagnetism</b>   | <b>P8 Space Physics</b>   |           |
| Core Learning               | P5 Identify and measure forces acting on objects<br>Revision |         | P6-Show how changes in velocity, frequency and wavelength, in transmission of sound waves from one medium to another, are inter-related<br>Revision |         | P7-Explain how electromagnetic effects are used in a variety of devices<br>Revision | P8-Explain the evidence for the expanding universe and the life cycle of a star<br>Revision |           |
| Opportunities for Challenge | Grade 7, 8, 9 challenge questions                            |         | Grade 7, 8, 9 challenge questions   |         | Grade 7, 8, 9 challenge questions   | Grade 7, 8, 9 challenge questions   |           |
| Assessment                  | Self assessment and in-class tests                           |         | Self assessment and in-class tests  |         | Self assessment and in-class tests  | Self assessment and in-class tests  |           |

| W/C                         | Week 20                | Week 21                            | Week 22   | Week 23 | Week 24   | Week 25 | EASTER |
|-----------------------------|------------------------|------------------------------------|---|---------|---|---------|--------|
| Area of Study               | <b>Mocks (Paper 2)</b> | Science skills                     | <b>P1- Energy</b>   |         | <b>P2- Electricity</b>  |         |        |
| Core Learning               |                        |                                    | P1 - There are changes in the way energy is stored when a system changes. Students should be able to describe all the changes involved in the way energy is stored when a system changes, for common situations. Revision |         | P2-Describe how to calculate resistance and the factors which can alter it. Describe how electricity is delivered to our homes and businesses. Revision |         |        |
| Opportunities for Challenge |                        | Grade 7, 8, 9 challenge questions  | Grade 7, 8, 9 challenge questions   |         | Grade 7, 8, 9 challenge questions   |         |        |
| Assessment                  |                        | Self assessment and in-class tests | Self assessment and in-class tests  |         | Self assessment and in-class tests  |         |        |



# Physics Long Term Programme of Study Year 11

## Courage Term

| W/C                         | Week 26  | Week 27 | Week 28   | Week 29 | Week 30                           | Week 31 | HALF TERM |
|-----------------------------|--|---------|---|---------|-----------------------------------|---------|-----------|
| Area of Study               | P3- Particle Model of Matter   |         | P4- Atomic Structure  |         | Y11 on bespoke revision timetable |         |           |
| Core Learning               | P3 – Use the particle model to predict the behaviour in solids, liquids and gases.<br>Revision |         | P4 – Describe the structure of the atom, the nuclear forces and atom stability.<br>Revision |         |                                   |         |           |
| Opportunities for Challenge | Grade 7, 8, 9 challenge questions  |         | Grade 7, 8, 9 challenge questions   |         |                                   |         |           |
| Assessment                  | Self assessment and in-class tests   |         | Self assessment and in-class tests  |         | GCSE Exams                        |         |           |

| W/C                         | Week 32     | Week 33 | Week 34 | Week 35 | Week 36 | Week 37 | SUMMER |
|-----------------------------|-------------|---------|---------|---------|---------|---------|--------|
| Area of Study               |             |         |         |         |         |         |        |
| Core Learning               | Study Leave |         |         |         |         |         |        |
| Opportunities for Challenge |             |         |         |         |         |         |        |
| Assessment                  | GCSE Exams  |         |         |         |         |         |        |