NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Year 12 Physics Self-Assessment: Electricity and Magnetism

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| **Learning Intention** | **Formative Test Question** | **Chapter Questions** | **Proficiency** | **Comments/questions** |
| Coulomb’s law | - | 48-49 |  |  |
| Vector sum of charge forces | 1(b) | 50-52 |  |  |
| Electric field lines | 1(a) | 53 |  |  |
| Electric field strength | 3 | 54-56 |  |  |
| Electric field inside a conductor | 2 | 57-58(a) |  |  |
| Corona discharge | - | 58(b)-(c) |  |  |
| Electric potential difference | 4 | 59 |  |  |
| Electric field strength between plates | - | 60(b)-(c), 62(a) |  |  |
| Motion parallel to electric field | - | 60(a),(d)-(e), 61, 62(b), 63 |  |  |
| Electric field in a cyclotron | 8(a), (d) | 76(c),(d)(1), 77(a)(1) |  |  |
| Motion perpendicular to electric field | 5 | 64-66 |  |  |
| Magnetic field lines | 7(a),(c) | 67(a)-(b),  68(a)-(b) |  |  |
| Magnetic field strength near a conductor | 7(b) | 67(c)-(d), 68(c) |  |  |
| Magnetic force | 6 | 69-73 |  |  |
| Circular motion in a magnetic field | 8(b) | 74-75 |  |  |
| Production of radioisotopes | 8(e) | 76(g) |  |  |
| Magnetic field in a cyclotron | 8(c)  9 | 76(a)-(b) 76(d)(2)-(3), (e) 77(a)(2)-78 |  |  |
| Magnetic flux | 10(a) | 79 |  |  |
| Electromagnetic induction | 10(b) | 80-85 |  |  |
| Generators | 11(a) | - |  |  |
| Transformers | 11(b)-(c) | 86-87 |  |  |