

| Spec Ref | Topic | TAP episode | comments |
|----------|---|-------------|--------------------------------------|
| 3.4.1 | Momentum and Impulse | 220, 222 | |
| | Conservation of momentum | 220 | |
| | Elastic and inelastic collisions | 221 | |
| | Circular motion | 224 | |
| | Centripetal force and acceleration | 224 | |
| | Simple harmonic motion | 301 | |
| | Mass –spring pendulum | 303 304 | |
| | Forced vibrations and resonance | 307 | |
| 3.4.2 | Newton’s law | 401 | |
| | Gravitational field strength | 402 | |
| | Gravitational potential | 404 | |
| | Orbits of planets and satellites | 403 | |
| 3.4.3 | Coulomb’s law | 407 | |
| | Electric field strength | 408 | |
| | Electric potential | 408 | |
| | Comparison of electric and gravitational fields | 409 | Final section |
| 3.4.4 | Capacitance | 126, 127 | |
| | Energy stored by a capacitor | 128 | |
| | Capacitor discharge | 129 | |
| 3.4.5 | Magnetic flux density $F=BIL$ | 412 | |
| | Moving charges in a magnetic field | 413 | |
| | Magnetic flux and flux linkage | 414 | |
| | Electromagnetic induction Faraday’s and Lenz’s laws. | 414 | |
| | Transformers | 416 | Second half |
| | Transmission of electrical power | 416 | Small item at the end of the episode |