

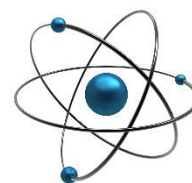


Ballymena Academy

Physics Department

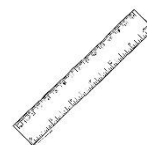
Year 10 Revision Checklist

Winter 2025



Please ensure you bring the following items with you on the day of the exam:

- Pen(s) and pencil(s).
- 30cm ruler
- Scientific calculator

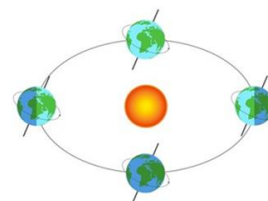


The following is a list of topics which will be examined:

Please refer to the individual pupil notes booklets for a full list of learning outcomes.

Earth and Space:

- Definitions of the terms **Universe**, **galaxy**, **star**, **planet**, and **constellation**.
- List the objects in our Solar System.
- List the eight major planets in order from the Sun.
- Define the terms **day** and **year**.
- Explain why the Earth experiences seasons and label a diagram of the Earth at different positions as it orbits around the Sun.
- Explain what causes a solar eclipse.
- Explain the difference between mass and weight and use the formula:



$$w = m \times g \quad \text{to solve problems.}$$



Nuclear Physics:

- Structure of the atom – relative mass, charge and location of particles.
- Atomic notation – number of protons and total number of protons and neutrons.
- Define what an Isotope is.
- Explain why some nuclei are radioactive.
- Describe the three types of radioactive emission – Alpha, Beta & Gamma.
- Recall the penetrating power of Alpha, Beta & Gamma.
- Complete radioactive decay equations.

(# protons +
neutrons) —

(# protons) —



Symbol of
element

