

# Keywords: Spring 2

## Science

### Topic Title: Atomic Structure

**Introduction to the topic: How does the structure of the atom relate to radioactivity**

**What lessons will you cover during the topic? Atomic Structure and Radioactive Decay**

<b>Keyword</b>	<b>Definition</b>
<b>Energy Levels</b>	Specific amounts of energy that electrons have when they orbit a nucleus is a particular shell.
<b>Ion</b>	Electrically charged particle, formed when an atom or molecule gains or loses electrons.
<b>Isotope</b>	Atoms of an element with the same number of protons and electrons but different numbers of neutrons.
<b>Mass Number</b>	The number of protons and neutrons found in the nucleus of an atom.
<b>Alpha Particle</b>	Subatomic particle comprising two protons and two neutrons (the same as a helium nucleus).
<b>Beta Radiation</b>	A type of ionising radiation consisting of a single electron.
<b>Gamma Radiation</b>	A type of ionising radiation that is also part of the EM spectrum. It has no mass.
<b>Half Life</b>	The time it takes for the number of nuclei of a radioactive isotope in a sample to halve. Also defined as the time it takes for the count rate from a sample containing a radioactive isotope to fall to half its starting level.