Keywords: Autumn 1 Science

Topic Title: **Introduction to the topic:** **Waves**	
Keyword	**Definition**
Electromagnetic Waves	**Transverse waves that transfer energy from the source of the waves, to an absorber. They form a continuous spectrum of different frequencies and all travel at the same speed in a vacuum.**
Frequency	**The number of waves passing a given point in a second. It is the inverse of the wave's period.**
Infrared radiation	**A type of radiation that all objects emit and absorb. The hotter an object is, the greater the infrared radiation it emits in a given time.**
Ionising radiation	**Radiation that can cause the mutation of genes and cause cancer. X-rays and gamma rays are both forms of ionising radiation.**
Longitudinal waves	**Waves with oscillations that are parallel to the direction of travel/energy transfer.**
Normal	**The normal is an imaginary reference line that is constructed perpendicular to a boundary at the point that the wave intercepts it.**
Period	**The time it takes for one complete wave to pass a given point. It is the inverse of frequency.**
Radio Waves	**Used for television and radio signals. They can be produced by oscillations in electrical circuits.**
Reflection	**Reflection is when a wave bounces off a boundary. The angle of incidence always equals the angle of reflection.**
Refraction	**When a wave crosses a boundary to a different material and the wave changes direction due to the change in its speed and wavelength. Its frequency remains the same.**
Transverse wave	**Waves with oscillations that are perpendicular to the direction of travel/energy transfer.**
Visible light	**The only type of electromagnetic radiation that our eyes can detect. It is used for fibre optic communications.**
Wave speed	**The speed at which energy is transferred through the medium. It is equal to the product of the wave's wavelength and frequency.**
Wavelength	**The distance from a point on one wave to the same point on the adjacent wave (ie. peak to peak or trough to trough).**