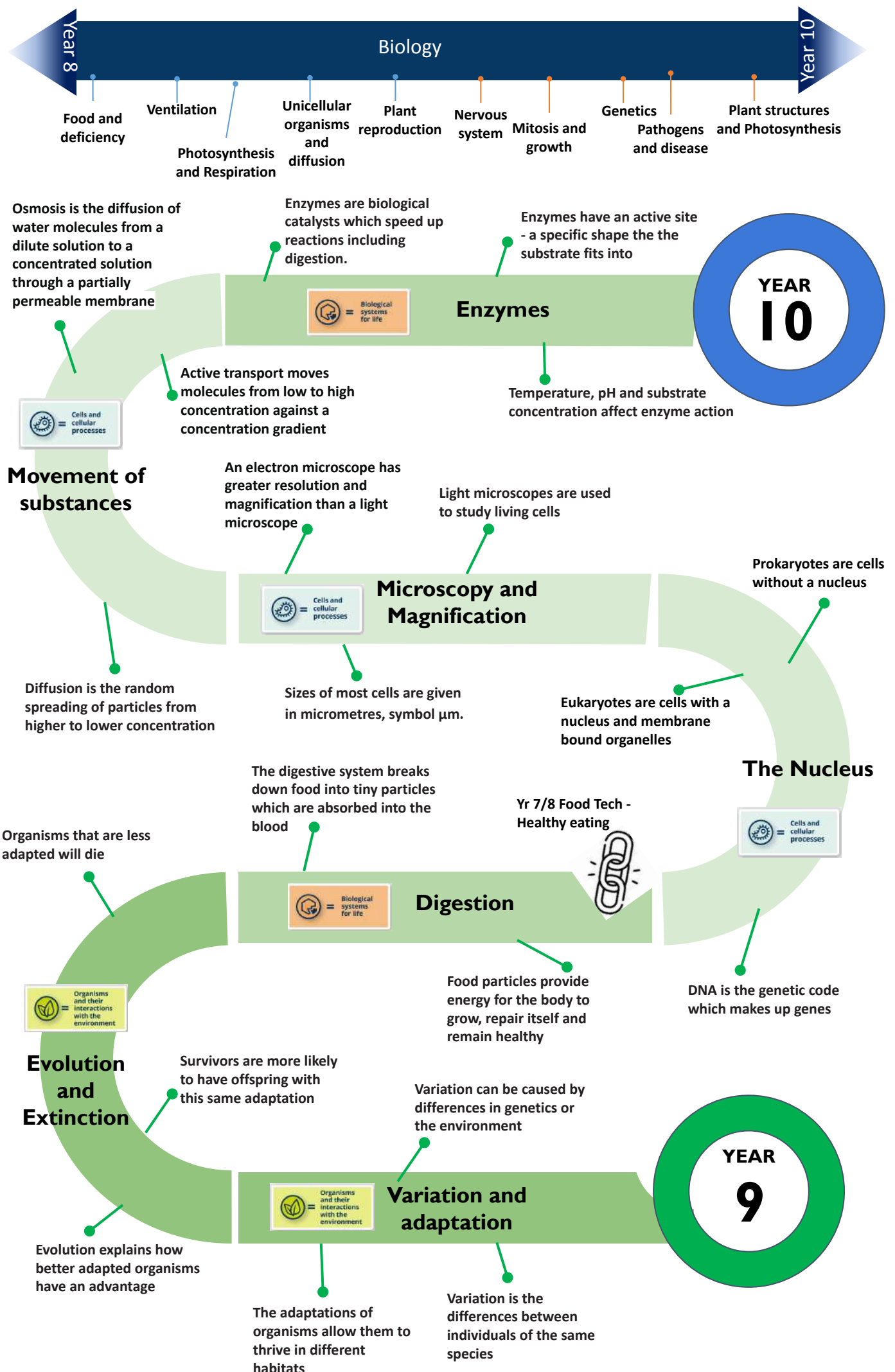


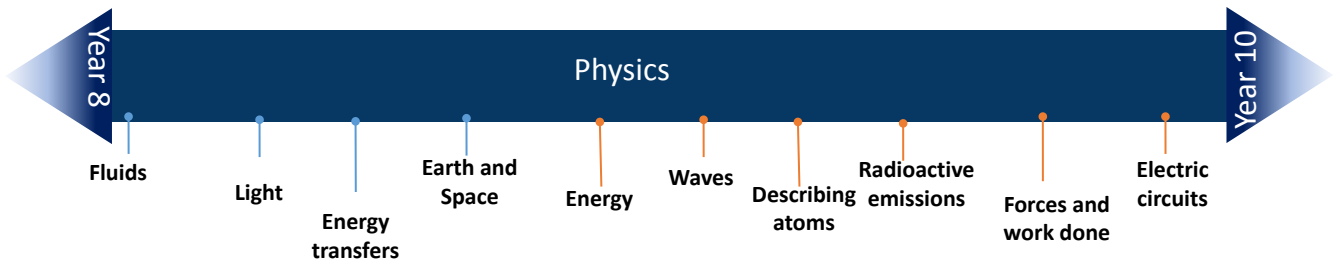
Year 9 - Biology

In year 8 you looked further at some ideas introduced in year 7 and had a more detailed look at respiration, photosynthesis (cellular processes) and some biological systems. In year 9 you will look into the cell in greater depth whilst also examining the importance of variation and how this can lead to evolution.



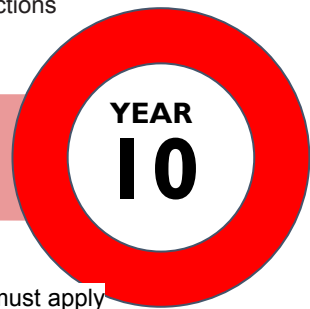
Year 9 - Physics

In year 8 you looked further at some ideas introduced in year 7 and had a more detailed look at Forces and fields, Matter and materials and Energy. In year 9 you will look into the forces relating to motion in greater depth whilst also examining the importance of Energy efficiency and resources.



Electromagnetic (EM) waves are oscillations in electrical and magnetic fields.

Forces are responsible for all the interactions between particles and objects.



Forces and Motion

= Energy

Newton's Laws of Motion must apply to moving objects

DT - Material design and communication technology

Waves and the EM Spectrum

= Forces and fields

Electricity is generated using renewable or non-renewable energy resources..

Energy Resources

= Energy

Energy efficiency measures the proportion of energy which is wasted.

DT - design & materials
Geography - Renewable energy resources

Heat energy can be transferred by conduction, convection or radiation

Heat Energy Transfer

= Energy

Energy can be transferred from one store to another.

Energy cannot be created or destroyed.

Acceleration

= Forces and fields

DT - Transport design and safety
Maths - Graphing

Speed-time and Distance-time graphs can be used to represent motion.



Describing Motion

= Forces and fields

The acceleration of an object is affected by the mass of an object and the resultant force acting on it.

Speed is the rate of change of distance.

Year 9 - Chemistry

In year 8 you were introduced to the 3 big ideas of Chemistry: materials and their properties; chemical changes and our Earth and its atmosphere.

In year 9 we will continue developing the concept of the atom by introducing structure and then linking to the Periodic table. Separating materials builds on previous work done on particles and their properties. Chemical changes reinforces energy changes in reactions.

