

# Science set V

## Curriculum Map: Year 10

- Identify parts of the human body and their function
- explore the effects of exercise and the role of medicines in staying healthy

### Mixtures and Separating Mixtures



**AUTUMN TERM**

### The Human Body



- Define elements, compounds and mixtures
- separation techniques;
- separate salt and sand

**SPRING TERM**

- Cells, tissues
- Organs
- organ systems and organisms
- the digestive, circulatory and nervous systems

### Magnets and Electromagnets



- Follow a method for an investigation into reaction times
- table of results and conclusion



### Investigating Reaction times



### The Order of Structures that make up an organism

- Magnetic fields around bar magnets
- making an electromagnet
- uses of electromagnets

**SUMMER TERM**



- Differences between animal and plant cells
- specialised cells –linking structure to function
- modelling cells

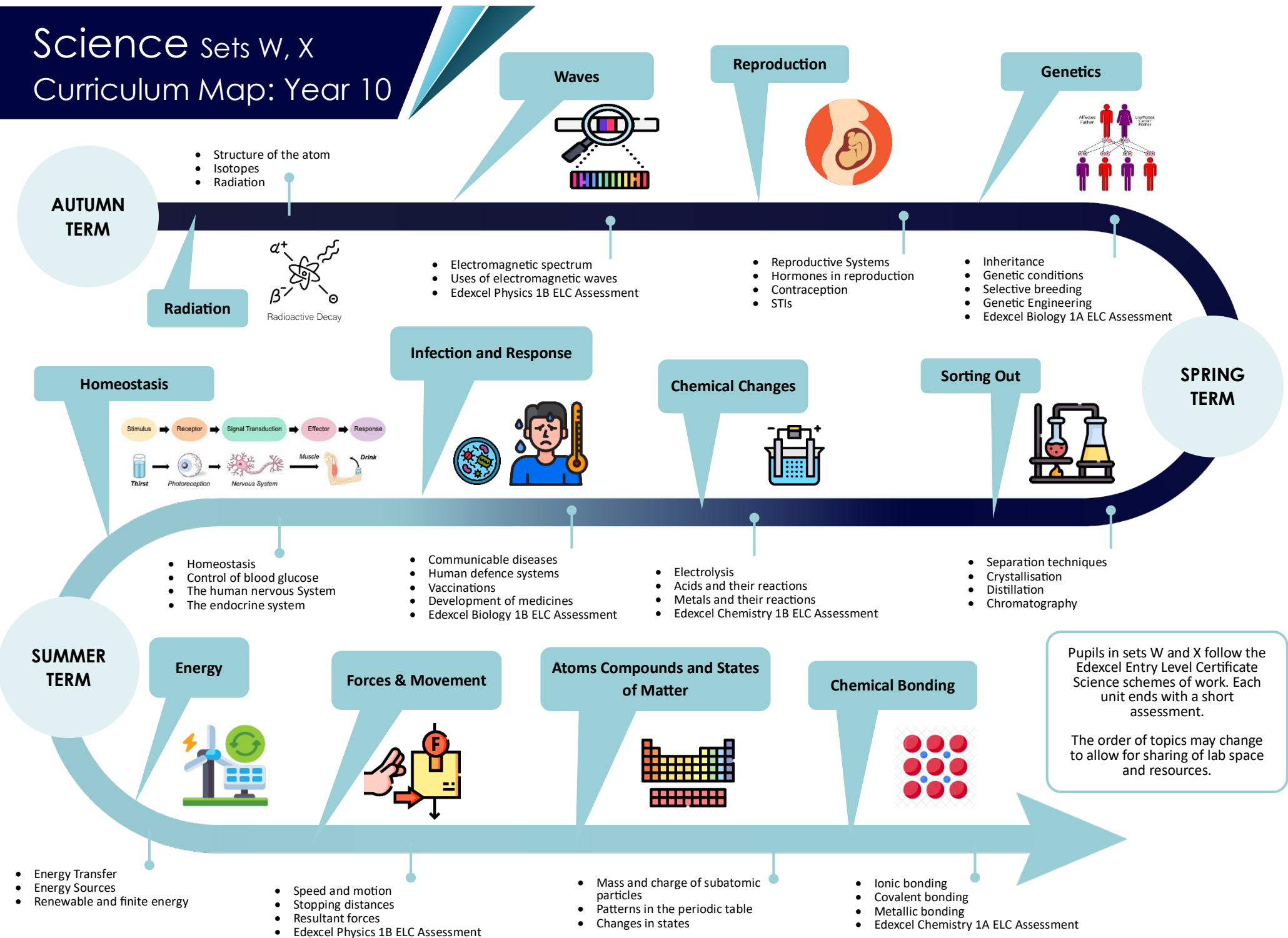
- Functions of the human skeleton
- categories of fracture
- main causes of osteoporosis



**Cells**

**Bones and Muscles with Support**

# Science sets W, X Curriculum Map: Year 10



# Science Sets Y, Z Curriculum Map: Year 10

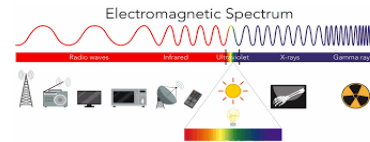
**AUTUMN TERM**

- Current, potential difference and resistance
- Series and parallel circuits
- Domestic supply and use of electricity



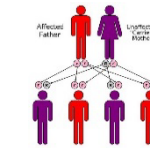
## P2 Electricity

## P6 Waves



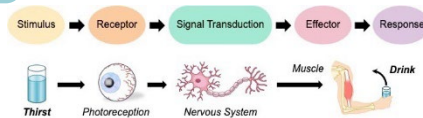
- Transverse and longitudinal waves
- Properties of waves
- Electromagnetic waves
- Uses of electromagnetic waves

## B6 Inheritance



- Reproductive Systems
- Hormonal control of puberty
- Genetics of reproduction
- Inheritance

**B5 Homeostasis**



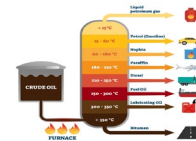
- Homeostasis
- Control of blood glucose
- The human nervous System
- The endocrine system
- Edexcel Biology 1A ELC Assessment

## B3 Infection and Response



- Communicable diseases
- Human defence systems
- Vaccinations
- Development of medicines
- Edexcel Biology 1B ELC Assessment

## P7 Organic Chemistry



- Formation of crude oil
- Fractional distillation
- Alkanes and Alkenes
- Cracking

## P1 Energy

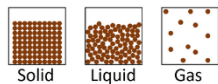


- Renewable and non-renewable energy
- Energy demand
- Alternative Energy
- Edexcel Physics 1B ELC
- Assessment

**SPRING TERM**

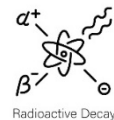
**SUMMER TERM**

## P3 Particle Nature of Matter



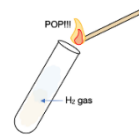
- Density of materials
- Internal Energy and Energy transfer
- Particle model of matter

## P4 Atomic Structure



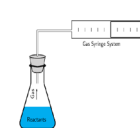
- Atoms and isotopes
- History of model of the atom
- Nuclear radiation
- Edexcel Physics 1B Assessment

## C8 Chemical Analysis



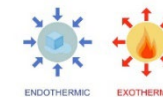
- Chromatography
- Purity
- Testing for gases

## C8 Rate and Extent of Chemical Change



- Measuring rates of reaction
- Collision theory
- Factors affecting reaction rates
- Equilibrium

## C5 Energy Changes



- Endothermic reactions
- Exothermic reactions
- Energy profiles

Pupils in sets Y and Z follow the AQA Trilogy GCSE schemes of work. Each unit ends with a short assessment.

The order of topics may change from the map to allow for sharing of lab space and resources.

In Year 10 pupils will also sit their Entry Level Science Certificate assessments.