# Week beginning 27th Sept

# Biology

Cells and Microscopy (12-15)

Enzymes (16-18)

Testing food (19-20)

#### Chemistry

Conservation of p26, Relative mass & chemical formulas p27, Moles p28, More calculations p29

Calculating Empirical formula p30, limiting reactants p31, balancing equations using masses p32

Chemical Equations p12, Chemical Equations involving ions p13,

### **Physics**

Distance, Displacement, Speed and Velocity p12

Acceleration p13

Distance/Time graphs p14.

Velocity/Time graphs p15

Newton's first and Second laws p16

Weight and Circular Motion p17

Investigating Motion p18

Inertia and Newton's Third law p19

Momentum p20

Changes in Momentum p21

Stopping Distances and Reaction Times p22  $\,$ 

Stopping safely p23

#### October 2021

# Week beginning 4th October

#### Biology

Diffusion, Osmosis and Active Transport (21-22)

Mitosis, growth and stem cells (24-26)

#### Chemistry

The Atom p16, Isotopes and Relative mass p17

The Periodic Table p18, Electron Configuration p19, Ions p20

Ionic Bonding p21, Ionic Compounds p22

### Physics

The solar system and gravity p59
Changing ideas about the universe p60
Redshift and CMB radiation p61
The life cycle of stars p62
Looking into Space p63

# Week beginning 11th October

## Biology

Brain and nervous system (27-29)

Eye (30)

Sexual and asexual reproduction 32-33)

#### Chemistry

Transition Metals p62, Alloys p63, Corrosion p64

Covalent Bonding p23, Giant covalent structures and fullerenes p24, Metallic bonding p25

States of Matter p34, Changes of state p35, Purity p36, Distillation p37

#### Physics

Energy Stores p24
Transferring energy p25
Efficiency p26
Reducing unwanted Energy Transfers p27
Energy resources p28
More Energy Resources p29
Trends in Energy Resource Use p30
Revision Questions p31

Week beginning 18th October (work experience)

#### Biology

DNA and protein synthesis (34-36)

Inheritance and Genetic crosses (37-41)

Variation and the human genome (42-43)

### Chemistry

Filtration and crystallization p38, Chromatography p39, Interpreting chromatography p40, Water treatment p41

Acids and Bases p43, strong and weak acids p44, reactions of acids p45, Making Insoluble salts p46, Making soluble salts p47

Titrations p65, Percentage yield p66, Atom Economy p67

# **Physics**

Wave Basics p32
Measuring Waves p33
Wave Behaviour and Boundaries p34
Sound p35
Ultrasound p36
Infrasound & Seismic waves p37
Reflection p38
Investigating Refraction p39

## Week beginning 25th October (Half term)

## Biology

Natural selection and evolution (45-48)

Classification (49)

Modifying organisms (50-53)

### Chemistry

electrolysis p48, predicting products of electrolysis p49, electrolysis of copper sulfate p50

electrolysis p48, predicting products of electrolysis p49, electrolysis of copper sulfate p50

The reactivity series p52, Reactivity of metals p53, Displacement reactions p54

### Physics

Visible Light and Colour p40
Lenses p41
Lenses and ray diagrams p42
Electromagnetic Waves p43
Emitting and absorbing EM radiation p44
Electromagnetic Waves for Communication p45
Microwaves and Infrared p46
More Uses of EM Waves p47

# November 2021

Week beginning 1st November Biology	Chemistry	Physics				
Pathogens and communicable diseases (55-57)	Extracting metals using carbon p55, Other methods of extraction p56, Recycling p57, LCA p5	Model of the Atom p49 Electron Energy Levels p50				
Fighting disease and immunity (58-59)  Monoclonal antibodies (60-61)	Dynamic Equilibrium p59, Le Chatelier's Principle p60	Isotopes and Nuclear Radiation p51 Nuclear equations p52 Half life p53				
	The Haber Process p68, Fertiliser p69	Background Radiation and Contamination p54				
Week beginning 8 <sup>th</sup> November						
Biology	Chemistry Calculations with gases p70, Fuel Cells p71	Physics Uses of radiation p55				
Antibiotics and Other medicines (62-64)	General Chemistry Revision (45 mins)	PET scanning and radiotherapy p56 Nuclear Fission p57				
Non - Communicable disease (65-67)		Nuclear fusion and nuclear power p58				
Week beginning 15 <sup>th</sup> November (mock week 1)						
Biology	Chemistry General Chemistry Revision (60 mins)	Physics				