Stratton School

Science—Key Stage 3

Curriculum Journey
2024 - 2025

End of Year Assessment

Year 8

Unit 6—Waves	Unit 5— Genes and Reproduction	Unit 4— Reactions: Metals and Acids/ Acids and Alkalis	Extended Science Fair Project	Unit 3— Movement and Organisation	Unit 2— Energy	Unit 1—The Scientific Method

Year 7

Unit 1—The Scientific Method	Unit 2— Movement and Organisation	Unit 3 Matter and Mixtures	Unit 4—Forces and Motion	Unit 5—Genes and Reproduction	Unit 6—Reactions: Metals and Acids/ Acids and Alkalis

Feeder Schools

Transition project
Particle Model—
Investigation into Density

Extra curricular

KS3 STEM club, nature club, astronomy club

Various STEM trip opportunities available. Franklin House Activities

STEM WEEK

Stratton School

Biology

Curriculum Journey 2024 - 2025

Year 13 →

- Module 5—Energy Transfers In and Between Organisms
- Module 6—Organisms Responding to their environments
- Module 7 Genetics, Populations, Evolution and Ecosystems
- Module 8—The Control of Gene Expression
- Revision and Consolidation
- Final exams

← Year 12

- End of Year Exams
- Revision and Consolidation
- Module 4—Genetic Information, Variation and Relationships
- Module 3—Organisms Exchange Substances with their environment
- Module 2—Cells
- Module 1—Biological Molecules

Year 11 →

- B5—Homeostasis and Response
- B5—Homeostasis and Response
Mock Exam Paper 1
- B6—Inheritance , Variation and Evolution
- B6 - Inheritance , Variation and Evolution
Mock Exam Paper 2
- Revision and Consolidation
- Final exams

← Year 10

- End of Year Exams
- B7—Ecology
Revision and Consolidation
- B3—Infection and Response
- B3—Infection and Response
- B2— Organisation
- B2— Organisation

Year 9 →

- Unit 1—The Scientific Method
C1– Atomic Structure and Periodic table
- P1a—Energy
P3—Particle Model, Gases and Density
- B1—Cell Biology, Microscopes, Diffusion and Active Transport
- C2—Bonding, Properties and Structure
C4a—Chemical Changes
- P4—Atomic Structure and Radioactivity
- B4— Bioenergetics (Photosynthesis and Respiration)

Key Stage 3 Curriculum

Extra curricular

Nature club, Astronomy club, Biology Challenge

Various STEM trip opportunities available. Franklin House Activities

STEM WEEK

Stratton School

Chemistry

Curriculum Journey 2024 - 2025

Year 13 →

- Module 5— Acids, Bases and Enthalpy
- Module 5— Redox and Transition Elements
- Module 6— Organic: Aromatic Compounds and Polymers
- Module 6— Organic Synthesis and Practical Techniques
- Revision and Consolidation
- Final exams

← Year 12

- End of Year Exams
- Module 4 – Organic Chemistry, Hydrocarbons, Alcohols and Analysis
- Module 4 – Organic Chemistry, Hydrocarbons, Alcohols and Analysis
- Module 3— Energy, Equilibrium and Rates of Reaction
- Module 3— The Periodic Table
- Module 2: Foundations in Chemistry

Year 11 →

- C7—Organic Chemistry
- C9—Chemistry of the Atmosphere
  Mock Exam Paper 1
- C10—Using Resources
- C8—Quantitative Chemistry
  Mock Exam Paper 2
- Revision and Consolidation
- Final exams

← Year 10

- End of Year Exams
- C6—Rates of Reactions
- C5—Energy Changes
- C4b—Electrolysis
- C3—Quantitative Chemistry
- C4a— Chemical Changes. Reactions of Metals and Acids

Year 9

- Unit 1—The Scientific Method
  C1– Atomic Structure and Periodic table
- P1a—Energy
  P3—Particle Model, Gases and Density
- B1—Cell Biology, Microscopes, Diffusion and Active Transport
- C2—Bonding, Properties and Structure
  C4a—Chemical Changes
- P4—Atomic Structure and Radioactivity
- B4— Bioenergetics (Photosynthesis and Respiration)

Key Stage 3 Curriculum

Extra curricular

Nature club, Astronomy club, Chemistry Challenge

Various STEM trip opportunities available. Franklin House Activities

STEM WEEK

Stratton School

Physics

Curriculum Journey 2024 - 2025

Year 13 →

Module 5: Newtonian World and Astrophysics	Module 6: Particles and Medical Physics	Module 6: Particles and Medical Physics	Revision and Consolidation	Revision and Consolidation	Final exams

← Year 12

Module 5: Newtonian World and Astrophysics	Module 4: Electrons, waves and photons	Module 4: Electrons, waves and photons	Module 3: Forces in Motion	Module 2: Foundations in Physics	Module 2: Foundations in Physics

Year 11 →

P6—Waves	P6—Waves	P7— Magnetism and Electromagnetism	P8—Space	Revision and Consolidation	Final exams

← Year 10

End of Year Exams	P5—Forces	P2—Electricity	P2—Electricity	P1b—Energy and Resources	P1b—Energy and Resources

Year 9 →

Unit 1—The Scientific Method C1– Atomic Structure and Periodic table	P1a—Energy P3—Particle Model, Gases and Density	B1—Cell Biology, Microscopes, Diffusion and Active Transport	C2—Bonding, Properties and Structure C4a—Chemical Changes	P4—Atomic Structure and Radioactivity	B4— Bioenergetics (Photosynthesis and Respiration)

Key Stage 3 Curriculum

Extra curricular

Nature club, Astronomy club, Physics Olympiad

Various STEM trip opportunities available. Franklin House Activities

STEM WEEK