

Science Road Map

Learning in Science sequenced by year

Science Progress: Y7

- How do scientists design and carry out practical enquiry?
- What is matter and what is it made of?

- What is energy and how can it be transferred?
- What are the building blocks of living things and how can we observe them?

Y7

HT1

- What are the properties of matter and mixtures?
- How do contact forces affect the world around us?

HT2

Have you considered taking part in the STEM CLUB?

End Point Checklist 1

- How science works
- Fundamentals of Chemistry
- Energy
- Organisms
- Matter
- Forces

End Point 1

HT3

- How are living things linked and how do plants reproduce?
- What is electrical current and what can it do?

End Point Checklist 2

- All previous topics
- Ecosystems
- Electricity
- Genes
- The Earth

HT4

HT5

End Point 2

Skills:
Scientific attitudes
Experimental skills and investigations
analysis and evaluation
Measurements

- Why are all living things different and how do humans reproduce?

- What is the earth made of and how is it affected by objects in space?
- What is sounds and how do we hear it?

Science Progress: Y8

- How do metals react and what affects their reactivity?
- How do fields and non-contact forces act?

- How do Humans get all the gases and nutrients they need?
- How is energy linked to chemical reactions?

Y8

HT1

HT2

Have you considered taking part in the STEM CLUB?

- How does light allow us to see?

- End Point Checklist 1
- All previous topics
 - Reactions 1
 - Forces 2
 - Organisms 2
 - Reactions 2
 - Waves 2

End Point 1

HT3

- How do plants make their own food and how do living things get the energy they need?
- How is information passed on in living things from one generation to the next?

- End Point Checklist 2
- All previous topics
 - Ecosystems 2
 - Genes 2
 - Energy 2

HT4

HT5

End Point 2

Skills:
Scientific attitudes
Experimental skills and investigations
analysis and evaluation
Measurements

- How is energy transferred in electrical circuits?

- Where do humans get all their resources from?
- STEM week

Science Progress: Y9

- Energy
- Atomic structure and the periodic table

- Cell biology

Y9

HT1

HT2

- Organisation in Animals

End Point 1

HT3

- Organisation in Plants
- Bonding

HT4

End Point 2

HT5

- Electricity

- Bioenergetics
- Energy of Reactions
- Particle model of matter

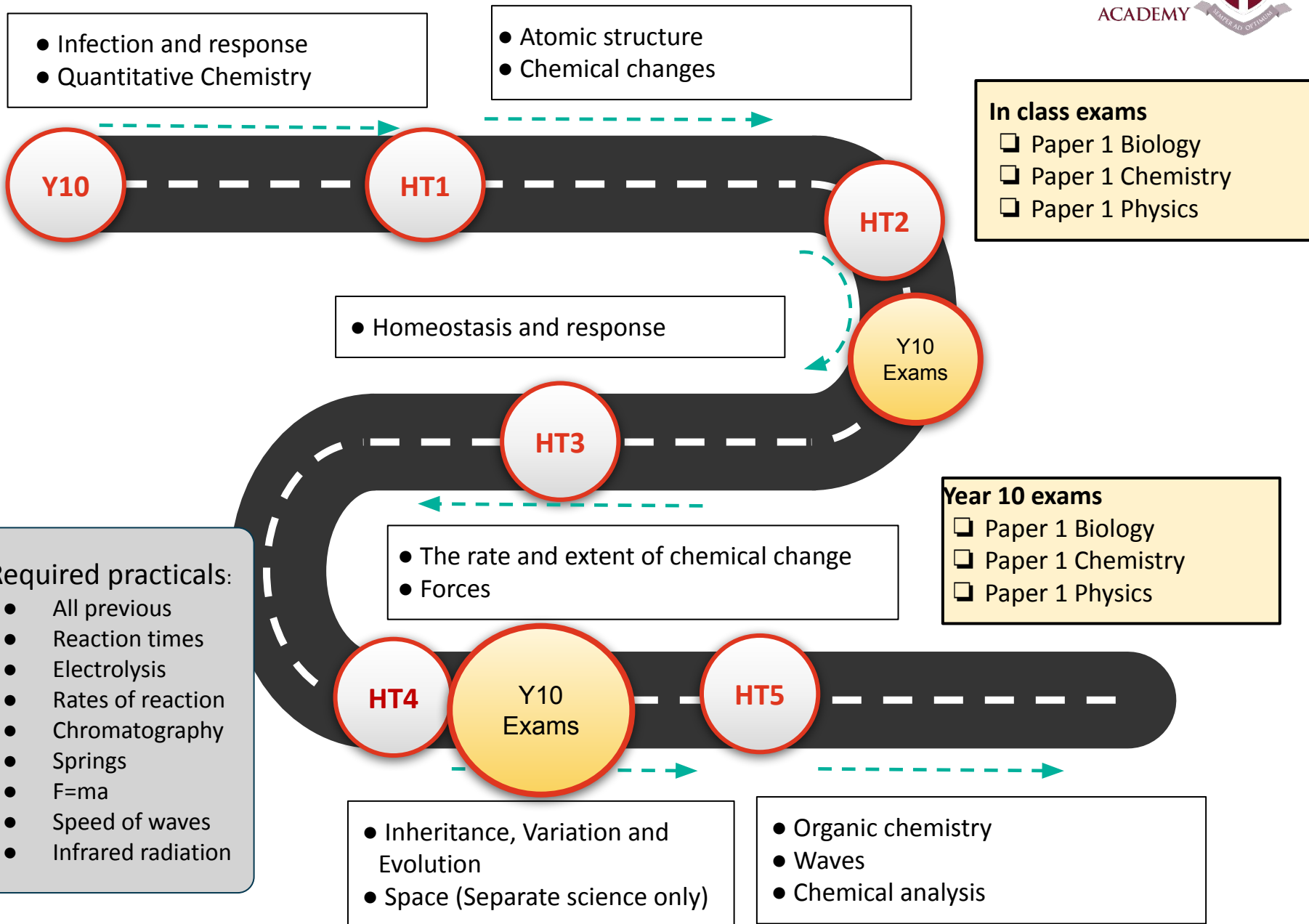
This year, during options, you can choose to do either Separate science (3 GCSEs) or Combined science (2GCSEs).

- End Point Checklist 1
- All previous topics
 - Energy
 - Atomic structure and the periodic table
 - Cell biology

- End Point Checklist 2
- All previous topics
 - Organisation
 - Bonding
 - Electricity

- Required practicals:
- Microscopes
 - Specific heat capacity
 - Enzymes
 - Resistance
 - Ohmic and non-ohmic conductors
 - Food tests
 - Exo/Endothermic
 - Photosynthesis
 - Density

Science Progress: Y10



Science Progress: Y11

- Ecology
- Chemistry of the atmosphere
- Using resources
- Magnetism and Electromagnetism

- Revision for mocks

- ★ Chemistry paper 2
- ★ Physics paper 2
- ★ Biology paper 2

- Targeted revision from mocks

Required practicals

- All previous
- Purifying water
- Field studies

- Revision for mocks

- Targeted revision from mocks

- ★ Paper 1 Biology
- ★ Paper 1 Chemistry
- ★ Paper 1 Physics

Y11

HT1

Mocks
1

HT2

HT3

HT4

Mocks
2

GCSE
Exams

U	1	2	3	4	5	6	7	8	9
U	G	F	E	D	C	B	A	A*	