

# Science

## Curriculum Intent

### Year 7

Class	Teacher	Sep/Oct	Oct/Nov	Nov/Dec	Jan/Feb	Feb/March	April/May	June/July
		<u>Topic 1</u>	<u>Topic 2</u>	<u>Topic 3</u>	<u>Topic 4</u>	<u>Topic 5</u>	<u>Topic 6</u>	<u>Topic 7</u>
7.1	SE (5) AG (1)	Forces-1	Organisms-1	Genes-1	Matter-1	Electromagnetism-1	Energy-1	Reactions-1
7.2	AGP (5) SE (1)	Forces-1	Organisms-1	Matter-1	Genes-1	Reactions-1	Electromagnetism-1	Energy-1
7.3	SE (4)	Forces-1	Organisms-1	Genes-1	Matter-1	Matter-1	Electromagnetism-1	Electromagnetism-1
	AG (2)	Reactions-1				Energy-1		
7.4	AGP (6)	Forces-1	Organisms-1	Matter-1	Genes-1	Reactions-1	Electromagnetism-1	Energy-1

### Terms 1, 2 and 3

Year 7 pupils are set by ability in September of Y7 and they have 6 periods of Science per fortnight. The topics covered in Y7 are Forces-1, Organisms-1, Genes-1, Matter-1, Electromagnetism-1, Energy-1 and Reactions-1.

Homework: This is set throughout the year and on Google classroom as part of a trial by the SLT.

How to help: KS3 Revision guides will help which are available from bookstores and online. KS3 BBC bitesize and Seneca Learning are also very good revision websites.

## **Year 8**

Class	Teacher	Sep/Oct	Oct/Nov	Nov/Dec	Jan/Feb	Feb/March	April/May	June/July
		<b><u>Topic 1</u></b>	<b><u>Topic 2</u></b>	<b><u>Topic 3</u></b>	<b><u>Topic 4</u></b>	<b><u>Topic 5</u></b>	<b><u>Topic 6</u></b>	<b><u>Topic 7</u></b>
8.1	AGP (6)	Waves-1	Organisms-1	Matter-2	Organisms-2	Waves-2	Electromagnetism-2	Earth
8.2	KPT (6)	Organisms-1	Waves-1	Organisms-2	Matter-2	Waves-2	Earth	Electromagnetism-2
8.3	NR (5) AGP (1)	Organisms-1	Waves-1	Matter-2	Organisms-2	Waves-2	Electromagnetism-2	Earth

### **Terms 1, 2 and 3**

Year 8 pupils are set by ability based on their Year 7 assessments and they have 6 periods of Science per fortnight. The topics covered in Y8 are Waves-1, Organisms-1, Matter-2, Organisms-2, Waves-2, Electromagnetism-2 and Earth.

Homework: Normally Year 8 pupils are set one short piece of homework every week or a longer piece every two weeks.

How to help: KS3 Revision guides will help which are available from bookstores and online. KS3 BBC bitesize and Seneca Learning are also very good revision websites.

## **Year 9**

Class	Teacher	Sep/Oct	Oct/Nov	Nov/Dec	Jan/Feb	Feb/March	March/April	May/June	June/July
		<b><u>Topic 1</u></b>	<b><u>Topic 2</u></b>	<b><u>Topic 3</u></b>	<b><u>Topic 4</u></b>	<b><u>Topic 5</u></b>	<b><u>Topic 6</u></b>	<b><u>Topic 7</u></b>	<b><u>Topic 8</u></b>
9.1	KPT (6)	Energy-2	Ecosystems-2	Reactions-2	Forces-2	Genes-2	Energy (GCSE)	Cells	Chemistry of Atmosphere
9.2	NR (5) AGP (1)	Ecosystems-2	Energy-2	Forces-2	Reactions-2	Genes-2	Cells	Energy (GCSE)	Chemistry of Atmosphere
9.3	AGP (6)	Energy-2	Ecosystems-2	Reactions-2	Forces-2	Genes-2	Energy (GCSE)	Chemistry of Atmosphere	Cells

### **Terms 1, 2 and 3**

Year 9 pupils are set by ability based on their Year 8 assessments. Year 9 pupils have six periods of Science a fortnight. The topics covered in Y9 are Energy-2, Ecosystems-2, Reactions-2 Forces-2 and Genes-2. Topics 6-8 are GCSE topics which are started around April in Year 9 to help cover the GCSE Sciences curriculum content.

Homework: Normally Year 9 pupils are set one piece of homework every week or a longer piece every two weeks.

How to help: KS3 Revision guides will help which are available from bookstores and online. KS3 BBC bitesize and Seneca Learning are also very good revision websites.

## **Year 10**

### **Biology**

Class	Teacher	<b><u>Sep/Oct</u></b>	<b><u>Nov/Dec</u></b>	<b><u>Jan/Feb</u></b>	<b><u>Mar/Apr</u></b>	<b><u>May/June</u></b>	<b><u>July</u></b>
10.2	NR	Cell Biology	Cell Biology /Organisation	Organisation/ Infection and response	Infection and response	Bioenergetics	Bioenergetics
10.3	NR	Cell Biology	Cell Biology /Organisation	Organisation/ Infection and response	Infection and response	Bioenergetics	Bioenergetics
10.1 (Triple)	NR	Cell Biology	Organisation	Organisation/ Infection and response	Infection and response	Bioenergetics	Bioenergetics

### **Chemistry**

Class	Teacher	<b><u>Sep/Oct</u></b>	<b><u>Nov/Dec</u></b>	<b><u>Jan/Feb</u></b>	<b><u>Mar/Apr</u></b>	<b><u>May/June</u></b>	<b><u>July</u></b>
10.2	SE	Atomic Structure	Bonding & Properties	Bonding & Properties	Quantitative Chemistry	Chemical Changes	Chemical Changes
10.3	SE	Atomic Structure	Bonding & Properties	Bonding & Properties	Quantitative Chemistry	Chemical Changes	Chemical Changes
10.1 (Triple)	AG	Atomic Structure	Bonding & Properties	Quantitative Chemistry	Chemical Changes	Energy Changes	Rates of Reaction

### **Physics**

Class	Teacher	<b><u>Sep/Oct</u></b>	<b><u>Nov/Dec</u></b>	<b><u>Jan/Feb</u></b>	<b><u>March/April</u></b>	<b><u>May-July</u></b>
10.1	KPT	Energy	Electricity	Particle Model of Matter	Atomic Structure	Revision for Y10 exam
10.2	AGP	Energy	Electricity	Particle Model of Matter	Atomic Structure	Revision for Y10 exam
10.3	KPT	Energy	Electricity	Particle Model of Matter	Atomic Structure	Revision for Y10 exam

### **Terms 1, 2 and 3**

In term 1 each class covers the topics above for Sep-Dec.

In term 2 each class covers the topics above for Jan-April.

In term 3 each class covers the topics above from April-July.

Pupils are set by ability and top set do AQA Triple Science and set 2 and set 3 do AQA Combined Science (Triology). Pupils have a different teacher for Biology, Chemistry and Physics and have 12 lessons in total every 2 weeks (4 lessons of each subject).

Homework: GCSE pupils should have one piece of Biology, Chemistry and Physics homework every 2 weeks, i.e. 3 pieces in total every 2 weeks.

How to help: GCSE pupils are loaned a revision guide which is very useful. GCSE Bitesize and Seneca Learning are useful amongst many other revision tools on the internet. Doodle Resources including Boardworks Presentations are also shared with all pupils.

## **Year 11**

### **Biology**

Class	Teacher	<b><u>Sep</u></b>	<b><u>Oct/Dec</u></b>	<b><u>Jan/Feb</u></b>	<b><u>Feb/Apr</u></b>	<b><u>May/June</u></b>	<b><u>July</u></b>
11.1	NR	Bioenergetics	Homeostasis	Inheritance, Variation and Evolution	Ecology	Revision & Exams	N/A
11.2	NR	Bioenergetics	Homeostasis	Inheritance, Variation and Evolution	Ecology	Revision & Exams	N/A
11.3 (Triple)	SE	Homeostasis	Inheritance, Variation and Evolution	Inheritance, Variation & Evolution, then Ecology	Ecology	Revision & Exams	N/A

### **Chemistry**

Class	Teacher	<b><u>Sep/Oct</u></b>	<b><u>Nov/Dec</u></b>	<b><u>Jan/Feb</u></b>	<b><u>Mar/Apr</u></b>	<b><u>May/June</u></b>	<b><u>July</u></b>
11.1	AG	Energy Changes & Reaction Rates	Organic	Chemical Analysis	Using Resources	Revision & Exams	N/A
11.2	AG	Energy Changes & Reaction Rates	Organic	Chemical Analysis	Using Resources	Revision & Exams	N/A
11.3 (Triple)	AG	Organic Chemistry	Chemical Analysis	Using Resources	COA & Revision	Revision & Exams	N/A

### **Physics**

Class	Teacher	<b><u>Sep/Oct</u></b>	<b><u>Nov/Dec</u></b>	<b><u>Jan/Feb</u></b>	<b><u>March/Aril</u></b>	<b><u>May/June</u></b>
11.1	AGP	Forces	Waves	Waves	Magnetism & Electromagnetism	Revision & possibly some Bio
11.2	KPT	Energy-Recap then Waves	Waves	Waves	Magnetism & Electromagnetism	Revision & possibly some Bio
11.3 (Triple)	AGP	Forces	Waves	Waves	Magnetism & Electromagnetism & Space	Revision & possibly some Bio

### **Terms 1, 2 and 3**

In term 1 each class covers the topics above for Sep-Dec.

In term 2 each class covers the topics above for Jan-April.

In term 3 each class covers the topics above from April-July.

Most Y11 GCSE pupils study AQA Combined Science unless they have chosen triple Science. Pupils have a different teacher for Biology, Chemistry and Physics and have 10 lessons in total every 2 weeks. This is split evenly between the three subjects over the 2 years. At SJS we follow the AQA Trilogy route at GCSE.

Students who have opted to do triple Science study AQA GCSE Biology, Chemistry and Physics and have 16 lessons in total every 2 weeks. This is split evenly between the three subjects over the 2 years

Homework: GCSE pupils should have one piece of Biology, Chemistry and Physics homework every 2 weeks, i.e. 3 pieces in total every 2 weeks.

How to help: GCSE pupils are loaned a revision guide which is very useful. GCSE Bitesize and Seneca Learning are useful amongst many other revision tools on the internet. Doodle Resources including Boardworks Presentations are also shared with all pupils.