

Science Learning Journey

Problem Solving; Decision Making; Safety; Planning; Communication; Interpretation; Questioning; Confidence; Curiosity

Intent: At CRS, our aim is to provide a curriculum which is challenging, engaging and enjoyable, fostering a desire to learn. Our rigorous safety procedures and scientific methods provide an environment where the students feel comfortable to challenge themselves and stretch their skills, knowledge and confidence. Our science units of work match the National Curriculum students' key stage as far as possible and are taught in ways appropriate to the students' abilities. Where areas of knowledge and skills are identified as being weaker, material has been selected from earlier key stages to enable students to progress and demonstrate achievement.

Implementation: In KS3, students study Biology, Chemistry and Physics. They improve their scientific enquiry through investigation. From Y9, our students study OCR topics-biology topics include the human body, plants and the environment. In chemistry, topics include chemical reactions, elements mixtures and compounds and the Earth and atmosphere. In Physics topics include forces, electricity, magnetism and light. Students improve their scientific enquiry through investigation and exploration.

Impact: At CRS, students participate in all science lessons with excitement, wonder and awe. Students know how to work safely in the lab and are able to transfer these skills to other areas of the curriculum and to life beyond school. Students' progression, knowledge and skills in science are assessed using the school's CREATE system and Go4schools.

Food Factory B12

Fuels C9

Our Electricity Supply P7

Can Do Task Skills - Student improvements and amendments using the board criteria.

Coursework Draft 3 – Final student improvements if required.

Nuclear Power P6

Heavy Metals C8

My Genes B11

Year 11

Gasping for Breath B5
Cooking and Chemistry C7
Driving Along P10

Casualty B6
Are you overreacting C10
Fly me to the Moon P11

Extinction B10
CSI Plus C12
Final Frontiers P12

Coursework Draft 2 - Student improvements and amendments using the board marking criteria.

Coursework Draft 1 – Students complete the coursework using the board criteria.

bio fuel

Fooling your Senses B4
Novel Materials C5
Alternative Energy P5

Control Systems B3
A Place for Everything and Everything in its place C3
Hot stuff P4

Year 10

You only have one life-look after it B7
Clean Air and Water C4
Medical rays P3

Body Wars B8
Sorting Out C6
Attractive Forces P8

Creepy Crawlies B9
How fast, how slow C11
Pushes and Pulls P9

At YEAR 9, some students will begin an OCR qualification which is run over three years. Students can achieve a Level 1,2 or 3. (Bronze, Silver or Gold) The course will include short topic tests, practical skills and coursework.

Babies (Reproduction) B2
Acids and Alkalis C2
Full Spectrum P2

Dead or Alive (Cells) B1
Physical or Chemical Change C1
Getting the message P1

Year 9

Explaining Chemical Changes C4

Exploring Contact and Non-Contact Forces P3

Magnetism and Electricity P4

Explaining Physical Changes C3

Looking at Plants and Ecosystems B4

Getting the Energy your Body Needs B3

Year 8

Materials C1

Elements and Reactions C2

Forces and their Affects P1

Eating, Drinking and Breathing B2

Energy Transfers and Sounds P2

Year 7

Eating, Drinking and Breathing B2

Living Things B1