Entry Level Science
Curriculum Intent

OCR's Entry Level Certificate in Science provides an entry into the understanding of the physical, chemical and biological world. Scientific understanding is changing our lives and is vital to world's future prosperity, and all learners should be taught essential aspects of the knowledge, methods, processes and uses of science. They should be helped to appreciate how the complex and diverse phenomena of the natural world can be described in terms of a small number of key ideas relating to the sciences which are both inter-linked and are of universal application.

The OCR Entry Level qualification will encourage learners to:

• understand the use of conceptual models and theories to make sense of the observed diversity of natural phenomena
• understand the assumption that every effect has one or more cause
• understand that change is driven by differences between different objects and systems when they interact
• understand that many such interactions occur over a distance and over time without direct contact
• understand that science progresses through a cycle of hypothesis, practical experimentation, observation, theory development and review
• understand that quantitative analysis is a central element both of many theories and of scientific methods of inquiry
• develop scientific curiosity and knowledge and understanding through the specific disciplines of biology, chemistry and physics
• develop understanding of the nature, processes and methods of science, through different types of scientific enquiries that help them to answer scientific questions about the world around them
• develop and learn to apply observational, practical and problem-solving skills, both in the laboratory and in other learning environments
• develop their ability to question claims based on science through analysis of the methodology, evidence and conclusions, both qualitatively and quantitatively

Qualification:

- ☐ OCR's Entry Level Certificate in Science (R483) Entry Level - Science - R483

Content

Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics

- develop understanding of the nature, processes and methods of science, through different types of scientific enquiries that help them to answer scientific questions about the world around them
- develop and learn to apply observational, practical, modelling, enquiry and problem solving skills, both in the laboratory, in the field and in other learning environments
- develop their ability to evaluate claims based on science through critical analysis of the methodology, evidence and conclusions, both qualitatively and quantitatively.

Biology	Chemistry	Physics
	ELC1 Physical or chemical change	ELP1 Getting the message
ELB1 Dead or alive (cells)	ELC2 Acids and alkalis	ELP2 Full spectrum
ELB2 Babies (reproduction)	ELC3 Everything in its place	ELP3 Medical rays
ELB3 Control systems	ELC4 Clean air and water	ELP4 Hot stuff
ELB4 Fooling your senses	ELC5 Novel materials	ELP5 Alternative energy
ELB5 Gasping for breath	ELC6 Sorting out	ELP6 Nuclear power
ELB6 Casualty	ELC7 Let's get together	ELP7 Our electricity supply
ELB7 You can only have one life – look after it	ELC8 Heavy metal	ELP8 Attractive forces
	ELC9 Fuels	ELP9 Pushes and pulls
ELB8 Body wars	ELC10 Are you overreacting?	ELP10 Driving along

ELB9 Creepy crawlies ELB10 Extinction ELB11 My genes ELB12 Food factory	ELC11 How fast? How slow? ELC12 CSI plus	ELP11 Fly me to the moon ELP12 Final frontiers

Assessment

Element 1: End-of-item-tests 72% of the total 72 points

Element 2: Can-do-tasks 8% of the total 8 points

Element 3: Practical task 20% of the total 20 point