North Herts
Education Support Centre

Course Title
KS3 Science
Overview
Our aim at NHESC is to deliver a science curriculum which provides an understanding of the world through an enquiry-based approach. We want out students to explore problems and search for solutions through investigative learning whilst asking questions. At NHESC we develop a broad curriculum to cover the three disciplines of biology, chemistry, and physics.
Outline of the Course
The general aims and objectives of the curriculum are to: • To develop scientific knowledge and conceptual understanding through well sequenced lessons. • Develop understanding of the nature, processes, and methods of science through enquiries to answer scientific questions. • To use technical terminology and to work scientifically across the three disciplines of biology, physics and chemistry through investigations, analysis, and evaluations.
Assessment details
The KS3 Science course is based on the AQA KS3 specification. It covers the main science themes of Forces, Electromagnets, Energy, Waves, Matter, Reactions, Earth, Organisms, Ecosystems & Genes. Students are assessed using both formative and summative assessments. Where the students complete regularly purple sheet tasks within lessons to consolidate previous learning. In addition to having end of unit assessments. This will consist of no more than ten questions both multiple choice and extended answer. Mini assessments take are embedded throughout the topics.
Staff Roles
Teacher – Mr Lewis
Equipment/Health and Safety
Scientific equipment will be used in lessons and taking good care of the equipment will be important. Accidents do happen, and if damage to equipment is considered accidental by staff then parents/carers will not be asked to pay for the equipment. Following all instructions in a practical lesson is paramount to everyone's safety. Students safety is vital in science lessons and working together will be appreciated.
Curriculum Plan

This table sets out the intended curriculum plan for science in Key Stage 3. Learning throughout each key stage is carefully sequenced to build on existing knowledge and deepen their understanding of scientific processes. The curriculum overview for the year takes into consideration the topics the students are covering in our feeder schools.

KS3	
Autumn 1 • The Human Body including Skeletal System, Muscular System, Respiratory System, Circulatory System and Digestive System.	**Autumn 2** • Organisms: Movement & Cells / Breathing & Digestion • Ecosystems: Respiration • Photosynthesis/ Interdependence • Plant reproduction
Spring 1 • States of Matter: Particle model & Separating mixtures/ Periodic table & Elements	**Spring 2** • Forces: Contact forces & Pressure / Speed & Gravity • Energy: Work & Heating & cooling / Energy costs & transfers • Waves: Wave effects & Wave properties /Sound & Light
Summer 1 • Reactions: Chemical energy & types of reaction • Metals & non-metals & Acids & alkalis	**Summer 2** • Earth: Earth structure & the Universe Climate & Earth resources