

Curriculum Intent

We want our students to be knowledgeable, curious learners who are able to apply their learning to the real world. We want our students to be able to use scientific language confidently, plan and run investigations to test scientific theories and be able to critically analyse data and evidence provided to them. Our curriculum prepares our learners to better understand the world they live in and make informed and wise choices. The Oasis Science Curriculum prepares students with the fundamental knowledge needed to pursue a range of careers from medicine, to engineering, from astrophysics to careers in geo science.

Programme of study – Specialist Centre Entry Level

Subject: Science

Year 10 &11	
Rationale/ narrative	Year 10 & 11 is an opportunity to build on topics learnt. The programme of study is based on AQA Entry Level components and is made up of units of Chemistry, Physics and Biology. Topics have been grouped together because we feel that they sequence well with each other. Students will take part in ongoing assessments completing externally set assessments and teacher devised practical work for each unit. At the end of the school year, student work is marked by the teacher then sent to an external moderator for confirmation of successful completion.



Oasis Academy Brislington: Curriculum

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	Chemistry	Chemistry	Physics	Physics	Biology	Biology
Content	<ul style="list-style-type: none"> • Atoms • Molecules • Elements • Compounds • Mixtures • Paper chromatography • States of matter • Polymers/ plastics • Recycling • Atomic structure of diamond and graphite 	<ul style="list-style-type: none"> • Periodic table • Elements • Metals • Non-metals • Metalloid • Atomic number • Proton • Neutron • Nucleus • Teacher Directed Assessment (TDA) 	<ul style="list-style-type: none"> • Energy • Elastic potential • Gravitational potential • Kinetic energy • Thermal energy • Forces • Calculate speed • Reaction time • Radiation • Alpha particles • Beta particles • Gamma rays 	<ul style="list-style-type: none"> • Energy resources • Renewable resources • Non-renewable resources • Fossil fuels • Types of UK power plants • Advantages/disadvantages of each type of power plant • Teacher Directed Assessment (TDA) 	<ul style="list-style-type: none"> • The Human Body • Organs • Cells • Tissues • Healthy diet • Energy used • Infectious diseases • Red blood cells • White blood cells • Hormones 	<ul style="list-style-type: none"> • Digestive system • Respiratory system • Circulatory system • Teacher Directed Assessment (TDA)
Skills	<p>Identify properties of atoms, molecules, elements, compounds and mixtures.</p> <p>Separate mixtures using paper chromatography.</p> <p>Identify different types of polymers.</p> <p>Recognise different types of plastic.</p>	<p>Calculate the number of protons, neutrons and electrons for different elements.</p> <p>Naming apparatus.</p> <p>Selecting appropriate apparatus.</p> <p>Explaining why certain apparatus is used during TDA.</p> <p>Record, analyse results.</p>	<p>Recognise what energy is and the different types of energy.</p> <p>Calculate speed and reaction time.</p>	<p>Identify different types of energy resources by their properties.</p> <p>Recognise the different types of power plants used in UK and identify the advantages and disadvantages of each.</p> <p>Complete TDA and record and analyse results.</p>	<p>Identify different organs in human body.</p> <p>Understand the job of each organ.</p> <p>Identify what is required for a healthy diet.</p> <p>Recognise, record the jobs of red, white blood cells and hormones.</p>	<p>Identify, label the parts of the digestive, respiratory and circulatory systems.</p> <p>Complete TDA using different methods to record, analyse results.</p>

