

IES Breckland 2017-18 Year 8 Curriculum Map

Subject:	Science
Year:	8
Overview	Year 8 students cover Physics, Biology and Chemistry in their Science lessons. There is a mixture of practical work and theory lessons. Pupils will start to develop a more detailed knowledge of the particulate nature of matter, body systems and energy.
For KS4	
Number of lessons over 2 weeks	6
Break down by term	<p><i>Autumn 1 & 2, Spring 1</i> <i>2 topics each half term from the following:-</i> <i>Periodic table</i> <i>Combustion</i> <i>Energy transfers</i> <i>Fluids</i> <i>Breathing and respiration</i> <i>Food and nutrition</i></p>
	<p><i>Spring 2, Summer 1 & 2</i> <i>2 topics each half term from the following:-</i> <i>Rocks</i> <i>Earth and Space</i> <i>Plants</i> <i>Unicellular</i> <i>Light</i></p>
How will students be assessed	End of unit tests and extended writing tasks.
How can parents support their child in their learning	By consolidating work using BBC KS3 Bitesize and by listening to or reading about developments in Science in the media e.g. Newsround/ New Scientist.

Subject:	Mathematics
Year:	8
Overview	Year 8 Mathematics will develop and extend the work that students did in Year 7, preparing them for the start of the GCSE course in Year 9.
For KS4	<i>AQA GCSE Mathematics 8300 Specification</i>
Number of lessons over 2 weeks	7
Break down by term	<p><i>Autumn 1 & 2</i> Probability Algebra 3 Shape Properties Transformations</p>
	<p><i>Spring 1 & 2</i> Triangles & Constructions Proportion 2 Interpreting Data Solving Equations & Inequalities</p>
	<p><i>Summer 1 & 2</i> Circles Plotting & Sketching Graphs</p>
How will students be assessed	End of topic tests. Formal end of year tests in the hall.
How can parents support their child in their learning	Encourage practising of timetables through TT Rock Stars and supporting homework.

Subject:	ICT
Year:	8
Overview	At IES Breckland, year 8 students follow a dynamic and engaging ICT curriculum. The programme of study has been designed to allow students to build and develop upon their existing ICT capabilities, preparing them with the skills required at GCSE level.
Number of lessons over 2 weeks	2
Break down by term	<p><i>Autumn 1:</i> E-safety - Students will be reminded about the dangers of social networking and will investigate ways to ensure that they can remain safe when using the internet. Students will be reminded about how to keep their data secure and also how to ensure that their online accounts are setup correctly to minimise the risks of online predators. Additionally students will look at other areas of safeguarding which will include topics to allow students to understand the risks associated with terrorism and develop their knowledge and skills to be able to challenge extremist arguments.</p> <p><i>Autumn 2:</i> Spreadsheets – Students will investigate the use of spreadsheets. The unit will cover simple calculations and formulae, lists, charts, and making predictions through modelling. During this unit, students will use and create spreadsheets to allow them to explore their functionality.</p>
	<p><i>Spring 1:</i> Programming - Students will revisit basic programming concepts before moving onto a text based programming language. Students will embark on a journey that encourages problem solving and includes the development of complex text based programs.</p> <p><i>Spring 2:</i> Databases – This unit will cover what databases are used for, how they are structured and how to create a simple database. Students will carry out a small data handling project to allow them to understand the basic principles of databases.</p>
	<p><i>Summer 1:</i> Websites - This will give learners an opportunity to create a website using web authoring software. Students will look at the features of good website design before developing their own. Some students will explore the use of HTML and CSS to code their website.</p> <p><i>Summer 2:</i> Enterprise project – This project will allow students to work as part of a team to develop a variety of linked products. Students will consolidate their learning by developing products using the software that they have used throughout the last year.</p>

How will students be assessed	Students will be assessed at the end of each topic. Assessments are usually carried out on the computers and generally involve a practical activity which allows students to apply their learning and demonstrate the skills that they have learnt throughout each topic.
How can parents support their child in their learning	Students will be using a variety of different open source software during each topic, which is free and readily available to download.