Year 8 Science SKI Week Preparation

All students will **sit a 75 mark test** that will test their knowledge of the topics covered this year. These topics have been chosen as they underpin all future Science learning. We would really appreciate any support and encouragement you can offer at home to help your young person consolidate their learning from this year and set the foundation for their future success in Science.

Biology topics

Cells – tissue- organ (stomach as an example) - system, Recall cell structure and specialised cells (microvilli)	What are plant and animal cells? - BBC Bitesize	
Roles of system (revision Y7 systems) – digestion system and Diffusion	The structure of the digestive system - Nutrition, digestion and excretion - KS3 Biology - BBC Bitesize	
What enzymes do	What enzymes break down starch? - BBC Bitesize	
Food groups and balanced diet	Healthy diet - Nutrition, digestion and excretion - KS3 Biology - BBC Bitesize	

Chemistry topics

Structure of atom – sub atomic particles linked to mass and atomic number	Structure of the atom - Atoms - Edexcel - GCSE Physics (Single Science) Revision - Edexcel - BBC Bitesize	
Symbols – identify as elements/compounds	What is a chemical reaction? - BBC Bitesize	
Writing word equations – metals with and water & oxygen & acid	Writing word equations - BBC Bitesize	
Combustion and fire triangle	Combustion: what is it? - BBC Bitesize	

Physics topics

Waves including sound and light	Features of waves links to energy transfer guide for KS3 physics students - BBC Bitesize Introduction to sound waves guide for KS3 physics students - BBC Bitesize Reflection guide for KS3 physics students -	
	BBC Bitesize	
Types of energy		
Energy transfer	Energy stores - Energy - KS3 Physics - BBC Bitesize	
Use efficiency equation and using a Sankey diagram		
Types of forces		
Resultant forces	Force diagrams and resultant forces - Forces and movement - KS3 Physics - BBC Bitesize	
Speed, Distance time graphs		
Hooke's Law	Hooke's law - Forces and movement - KS3 Physics - BBC Bitesize	

Science skills

Identifying variables	<u>Variables - Working scientifically - KS3</u> <u>Science - BBC Bitesize</u>	
Equipment	KS3 Science - Working Scientifically - Drawing scientific apparatus - BBC Bitesize	
Calculating a mean	Observation and measurement skills - Working scientifically - KS3 Science - BBC Bitesize	

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<u>Conclude and evaluate - Working scientifically - KS3 Science - BBC Bitesize</u>

How to revise?

Students should look back at the end of topic tests that they have completed and select specific topics that they found difficult, to do some independent revision on.

The questions in the end of year test will be similar to the questions used in the end of topic tests which should be stuck into their Science book.

All of the BBC Bitesize links shared have excellent videos and mini quizzes to help students to revise. Students might also find it helpful to summarise the main points whilst they are reading/watching the videos.