Year 8 Science

Curriculum Leader: Mrs Claire Allen

The course in designed to help students engage with the fundamentals of science and fulfil their potential. They will study areas that are at the forefront of science as well as more established key concepts and ideas. Students will gain analytical, numerical, evaluative and communication skills that will make them very confident learners and professionals. Science and the Gilberd will give them the ability to think conceptually about abstract ideas and bring this complex thinking into practical situations.

Topics to be covered in Year 8

Topics to be covered

Sept ↓ July

Biology	Chemistry	Physics
8A – Food and Nutrition	8E – Combustion	8I – Fluids
8B – Plants and Photosynthesis	8F – Periodic Table	8J – Light
Autumn Assessment (w/b 25th November)		
8C – Breathing and Respiration	8G – Metals and Reactivity	8K – Energy Transfers
Spring Assessment (w/b 21st April)		
8L—Space	8H—Rocks	9A—Genetics

Key vocabulary

Please find word sheet on VLE and within SOW

Students will be provided with a Topic checklist to outline content and key ideas in each topic

Skills to be developed

- Describing patterns
- Drawing conclusions
- Risk assessment
- Writing and evaluating methods
- Applying maths to scientific concepts
- Understanding variables
- Collecting data
- Understanding relationships between science and society
- Modelling
- Graph drawing
- Accessing impact of scientific progress
- Analysis of secondary data
- IDEAL – Identify, describe, evaluate, apply and link

Opportunities for revisiting previous learning

The topics in year 8 build on the work completed during year 7 and at KS2, developing these skills further and deepening understanding.

There are flashback activities throughout the SOW which are used every lesson . These comprise of quick quizzes to recap over work learnt in previous lessons.

DIRT tasks at the end of each topic allow students the opportunity to recall and apply the science they have learnt in the topic, and gives them aspects to work on if needed.

Interleaving takes place at relevant points to support students progress.

Revision techniques are taught, and sessions may be delivered close to large assessment to guide students

When will formal assessment of progress take place?

<u>Formal assessments</u>

Autumn Assessment w/b 25th November (8A, 8E, 8I,)

Spring assessment w/b 21st April (8A, 8B, 8E, 8F, 8I, 8J)

Students are assessed regularly both informally through questioning in lessons and formally via their Autumn and Spring assessments which include topics studied from the scheme of work .

Each assessment is analysed, and feedback given to assist students to be more targeted in their efforts for further improvement. The student is responsible for acting upon the feedback given.

Feedback is used continually in lessons in many forms, predominantly modelling, discussion, highlighting misconceptions and suggestions for improvement or extension.

Year 8 Useful Resources

Website Links:

https://docbrown.info/ks3science.htm

https://senecalearning.com/en-GB/

https://www.bbc.co.uk/bitesize/subjects/zng4d2p

http://www.educationquizzes.com/ks3/science/

https://www.pearsonactivelearn.com

Marking, Assessment and Feedback

Over the course of an academic year students will complete a number of formal assessments, these will be used to assess where students are in their learning journey.

Information from these assessments could be used when making decisions regarding setting of students, reporting progress home and predicting outcome. We will during lessons, evaluate students' learning through a range of activities including quizzes, class discussions, detailed questioning and other strategies. Through this, students will know where they are in their learning journey and what they need to do next to make further progress.

Teachers will continue to provide planned written feedback on selected pieces of work as detailed on feedback stickers.

Homework

Homework will be set using the online platform Go 4 Schools.

Homework tasks are designed to prepare students for future learning or consolidate work completed in the classroom. It will be clear what should be handed in, when it should be handed in and how it should be handed in.

Contact Information

If you would like to contact the Science Department please email: science@gilberd.com or contact your child's teacher.

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