

# **Science English 2018 – 2019 Goals and Outlines**

## **Science English Goals**

1. For the students to learn basic Science vocabulary within Physics, Mathematics, Chemistry and Biology.
2. For the students to be able to learn presentation skills and presenting in English.
3. For the students to be able to perform scientific poster presentations to native English speakers.
4. For the students to be able to communicate using basic science language.
5. Be able to explain scientific concepts using English.

## **English Conversation Goals**

1. Students should be able to have a daily conversation in English, decline offers, ask for permission and ask a favor.
2. Students should be able to listen to a conversation and ask relevant questions about the conversation.
3. Students should be able to express their ideas and opinions in English.
4. Students should be able to understand and respond in English. (Especially each other!)

## **Other Goals**

1. To foster a love of science and English
2. For the students to learn to think critically.

## **Materials**

GCSE science foundation textbook

## Lesson Outline

<b>Year</b>	SE	<b>Semester</b>		<b>Lesson</b>	
<b>Focus</b>					
<b>Materials</b>					

Time	Activity	Teachers' Role	Students Activities	Notes
5 min	Conversation Activity	Connect English conversation to Science English through explanation and activities	Students would practice English conversation	– English Only
10 min	Vocabulary Sheet	Students are given a vocabulary worksheet to work through.	–	–
10 - 15 min	Lecture or Book Work	ALT lecture on the topic/ or work time.	–	–
30 min	Work	Students would use this time to work on the semesters subject	–	–
5 min	Homework/ Extra Lesson time		–	–

**English Only:** When English only is written on the board, students should use only English. This will be enforced with an English challenge. Example English Challenges: write a sentence using this grammar point, sing a song, give a 30s speech, say the alphabet backwards, tongue twister, guess how to pronounce a word, answer a question in English.

### Term 1 - Maths and Physics

Lesson #	Subject	Topic
1	N/A	Introduction to SE Lesson, ALT Introductions, English only rule, and “I don’t understand” system.
2	Maths	Introduction of Maths and Statistics, vocabulary and counting big numbers.
3	Maths	Maths Bingo! , averages of sets and frequency tables
4	Maths	Outliers and Boxplots, Probability
5	Reading Skills Physics	Students learn and practice scan reading Introduction to the Universe: Seeing Stars, Time and Space (pgs. 74-77)
6	Physics	Measuring distance of stars: Parallax and Brightness Methods Beyond the Solar System? (pgs. 78-79)
7	Physics	The beginning of the Universe. The formation of stars and the solar system.
8	Mars Lander	Mars Lander Experiment
9	Exam	Review test material
10	Next semester	Introduction to next semesters individual presentations

Start  
Plan for  
Guest  
Lecturer

## Term 2 - Chemistry and Presentations

Lesson #	Subject	Topic
1	Introduction Lesson/ Presentations	Emma Introduction and Chemistry Introduction. Explain props, timed readings and collect scripts.
2	Chemistry/ presentations	Atoms and Molecules - Zooming in (pgs. 142-143) Hand back draft scripts. Peer check. Writing Final Script.
3	Chemistry/ presentations	Molecules big and Small (pgs. 144-146) and Polymers Peer review of Presentations and Collect final scripts.
4	Chemistry/ presentations	Designer Stuff (pgs. 147-149) Cross links and Plasticizers Intonation and Voice in Presentations and Return scripts
5	Chemistry/ presentations	Designer Polymers Continued TED Talk video
~	Guest Lecture	Guest Lecture on Microscopy
6	Review/ presentations	Chemistry test review game and test preparation. Presentation order and practice.
7	Presentations	Student Presentations
8	Presentations	Student Presentations
9	Presentations	Semi-Final Presentations

### **Term 3 - Biology and Research Poster Presentations**

<b>Lesson #</b>	<b>Subject</b>	<b>Topic</b>
1	Biology	Introduction to Biology DNA, Same and Different (pgs. 16-17) Introduce welcome video
2	Banana Experiment	Extracting DNA from a Banana experiment
3	Biology	Review Banana Experiment Biology test review game
4	Poster Presentations	Introduction to English Poster Presentations Translating of Posters
5	Poster Presentation	Preparation of Scripts and Q+A's Finalising of Posters Filming of 'Welcome Video'
6 <sup>th</sup> March		Poster Presentation session with native speakers