2016-2017 Science English Goals and Outline Summarized

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 communicate using basic science language.
- 4. Be able to explain scientific concepts using English.

English Conversation Goals

- 1. Students should be able to express their basic ideas and opinions in English.
- 2. Students should be able to understand and respond in English. (Especially each other!)

Other Goals

1. To foster a love of science and English

Materials

GCSE science foundation textbook

Science Dialogue- guest lecturer

Term 1- Math's and Physics

| Lesson # | Subject | Conversation Strategies | Topic |
|----------|----------------|-----------------------------------|--|
| 1 | N/A | N/A | Introduction Lesson, Student outline |
| 2 | Maths | Lesson 1: Rejoinders | Maths vocabulary and counting big numbers. |
| 3 | Maths | Lesson 2: Follow-up Questions | Averages of sets and frequency tables |
| 4 | Maths | Lesson 6: Expressing Probability | Probability |
| 5 | Astrophysics | Lesson 4: Clarification Questions | Introduction to the Universe: |
| | | | Seeing Stars, Time and Space GCSE (pgs. 74-77) |
| | | | Solar System Formation |
| 6 | Astrophysics | N/A | Spectroscopy introduction |
| | | | Experiment: building a simple spectrometer |
| 7 | Astrophysics | N/A | Finish experiment |
| | | | How Big is the Universe? (78-81) |
| 8 | Astrophysics | N/A | The Exploding Universe (82-83) |
| 9 | Phsyics/Maths | N/A | Review lesson, Introduce Individual |
| | | | presentation: script writing |
| 10 | Reading Skills | N/A | Students learn and practice scan reading |

Term 2- Chemistry and Presentations

| Lesson # | Subject | Topic |
|----------|--------------------------|---|
| 1 | Introduction Lesson/ | Review: Rejoinders and Follow-up questions |
| | Presentations | Introduce new ALT. Review summer homework. Work on presentations. |
| 2 | Chemistry/ presentations | Zooming in, (pgs. 142-143) Introduction to molecules. |
| | | Writing Final Script. |
| | | Watch Excerpts from Bill Nye: Atoms |
| 3 | Chemistry | The Big New Idea, (pgs. 144-145), Introduction to polymers, Model Building |
| 4 | Chemistry | Review last lessons material, Molecules big and small (pgs. 146-148) |
| 5 | CGSB Visit/Guest lecture | Chatum Grammar Students visit, and Guest lecture |
| | | Experiment: Making silly putty with Dr. Youlee Hong |
| 6 | Presentations | Review molecules big and small |
| | | Practice how to speak: intonation and enunciation, and how to apply this to |
| | | your presentation. |
| 7 | Review/ presentations | Script Practice and Test Review |
| 8 | Presentations | Student Presentations |
| 9 | Presentations | Student presentations |
| 10 | Presentations | Semi-Final Presentations introduce welcome video project |
| 11 | Christmas | Plan welcome video/ Christmas lesson |

Term 3- Biology and Research Poster Presentations

| Lesson# | Subject | Topic |
|---------|---------|--|
| 1 | Biology | DNA, Same and Different (Pgs. 16-17) |
| 2 | Biology | Experiment: Extracting Banana's DNA |
| 3 | Poster | Begin Translating Japanese Research Poster to English |
| 4 | Poster | Continue working on English research poster |
| | 2 hrs. | Collect and check poster |
| 5 | Poster | Hand back poster. Students continue working on the poster. |
| | 2hrs. | Hand in Final version. |
| 7 | Review | Review for Science Test, practice poster presentations |
| 6 | Poster | Poster presentations |
| | 2hrs. | |