Lesson Topic : Milk and Dishwashing Liquid		
Year Group: Year 7 and 8		
Learning Outcome	WALT:o identify the key features of a scientific report and apply them to our writing.	
Links with the New Zealand Curriculum	Science  Engage with a range of science texts and begin to question the purposes for which these texts are constructed.  Ask questions, find evidence, explore simple models, and carry out appropriate investigations to develop simple explanations  English  constructs texts that show an awareness of purpose and audience through deliberate choice of content, language, and text form	
Key Competencies	Thinking The students will need to make connections between the texts that they are reading, their prior knowledge and the science experiment  Using Language, Symbols and Texts  The students will interpret the information presented in the texts and follow the text structure for their own experiment	
Prior knowledge	The students have been engaging in Genomics lessons (created by Dr. Janie Van Hees) for two terms. This has seen them participate in a range of activities connected to biology. They have completed experiments but have not written their own before.	
Lesson Sequence	We started by watching a video about the scientific method and we discussed that scientists explore their ideas through experimentation. We then looked at an exemplar of a science experiment to identify the key features of this type of text. Finally we created our own experiment and wrote about it.	



## **Session Outline**

- 1. Discuss the scientific method (based on the video) and read exemplars of science experiments
- 2. Discuss the key steps of a science experiment and then follow them in the milk and dishwashing liquid experiment.
- 3. Students write their own experiment using the features that we discussed.

Student Activity	Teacher Activity
Learn:	
Watch the scientific method video and read the science experiments.  Discuss the features of a science experiment.	Facillitate a discussion drawing on prior knowledge and the structure of a science experiment. Why do scientists work in this way?
	Introduce the experiment to the students
Create:	and support them to conduct it
Participate in the milk and dishwashing liquid experiment. Write this up using the correct structure.	Support the students to write about the experiment, checking in with them at each stage, scaffolding them less over time.
Share:	
Share your activity on your blog	Discuss what the students have created and give them feedback

## Resources

Slides

## **Reflection and Analysis**

**Lesson Content -** The students really enjoyed writing about the experiment - it motivated my reluctant writers. However I forgot to introduce the aim of the experiment and I didn't make the difference between the observation/results and the conclusion clear. I later realised this and we went through this.

**Lesson Pacing -** The lesson naturally followed each stage in the experiment, it took about 30 minutes to facilitate and I did this with each of my groups so that we could have greater discussions.

Manaiakalani Class OnAir 2019 Lesson Plan Number 12 Danni Stone - Pt England School

**Lesson Delivery -** I was a little flustered at first and forgot the aim of the investigation! However, I got into it later on and we had a good time participating in the experiment!

**Student Understanding-** The students did really well with identifying the reason the food colouring spread. It was great to see my most reluctant writer contributed the most to this.