

Lesson Topic: Measurement	
Year Group : Year 7/ 8	
Learning Outcome	WALT: make accurate measurements using a variety of measuring equipment
Links with the New Zealand Curriculum 	Use appropriate scales, devices, and metric units for length, area, volume and capacity, weight (mass), temperature, angle, and time.
Key Competencies 	Using language symbols and texts - the students need to read the measurement devices Managing Self - the students need to manage themselves to successfully complete the science experiment well
Prior knowledge 	The students have learnt about measurement and interpreting measuring devices, but the majority of this teaching occurred in the lockdown.
Lesson Sequence 	1. Introduce the tasks to the students and split the room in half - half doing the experiment at a time 2. Roam the class to support the students completing the science experiment and the students identifying the amount of sugar in coke and orange juice Notice, recognise and respond to the students needs 3. Ask the groups to share their results from the experiment and discuss reasons for variation

	<table border="1"> <thead> <tr> <th data-bbox="349 271 919 338">Student Activity</th><th data-bbox="927 271 1485 338">Teacher Activity</th></tr> </thead> <tbody> <tr> <td data-bbox="349 349 919 730"> Learn: 1. Discuss the amount of sugar in coke with others in a small group. Work together to complete the activities on the slides 2. Conduct a science experiment about sugar dissolving in water </td><td data-bbox="927 349 1485 1223" rowspan="3"> 1. Explain the tasks and experiment to the students. Go over any new vocabulary (solubility, meniscus) 2. Roam the class to support the students to complete the activities 3. Notice, recognise and respond to student needs 4. Discuss results as a class and plausible reasons for variation (temperature of water, different measurements, human error) 5. Support groups to create their own experiment to be conducted in the next lesson </td></tr> <tr> <td data-bbox="349 741 919 976"> Create: 1. Create your own science experiment to follow up </td></tr> <tr> <td data-bbox="349 987 919 1223"> Share: 1. Share slides on individual blogs </td></tr> </tbody> </table>	Student Activity	Teacher Activity	Learn: 1. Discuss the amount of sugar in coke with others in a small group. Work together to complete the activities on the slides 2. Conduct a science experiment about sugar dissolving in water	1. Explain the tasks and experiment to the students. Go over any new vocabulary (solubility, meniscus) 2. Roam the class to support the students to complete the activities 3. Notice, recognise and respond to student needs 4. Discuss results as a class and plausible reasons for variation (temperature of water, different measurements, human error) 5. Support groups to create their own experiment to be conducted in the next lesson	Create: 1. Create your own science experiment to follow up	Share: 1. Share slides on individual blogs
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Resources	Sugar, water, measuring jugs, measuring spoons, Google Slides,						
Reflection and Analysis							
	Lesson Content - The students really enjoyed these activities - they were engaging and taught the students about mass and volume in an authentic and interesting context Lesson Pacing - The pacing worked really well with the students taking it in turns to do the slides or experiment. The whole lesson was completed in about an hour Lesson Delivery - There was a lot of opportunities for group discussion and exploration - less of a lecture from myself which was great. Student Understanding - The students have a much clearer understanding of measurement now						