Harrison James Bb Ph Indicator Experiment-

Bb =Bromothymol Blue

WALT	➔ Make observations ➔ Make inferences ➔ Make connections ➔ Create wonderings
Method	1. Fill cup with approx ¼ cup of water 2. Add a few drops of BB 3. Place a straw in the liquid 4. Blow air through the straw (like you are blowing bubbles with no spill)
Hypothesis	When we blow into the straw I predict that bubbles will form on top of the water and they will be yellow.
Observation	as we dropped the bb into the water it slowly blended into the water, making it blue. As we blew into the water it slowly changed from blue to purple to green and finally to a yellow.
Inference	when we blew into the water we released carbon dioxide into the water converting the water with bb into a light acid.

Universal Indicator pH Colour chart	
What has pH got to do with Antarctica?	What has ph got to do with Antarctica? - sea ice, Antarctica has a lot of sea ice and sea ice has a large amount of salt. Salt is also very acidic. The ph of salt is mostly 7. The ph level for fish is 6.5-9 meaning that if ice melts in Antarctica the ph level of 7 could drop because there is a larger amount of salt meaning fish can die from low ph.

What is the blue solution we used?	Bromothymol Blue Indicator Solution
Reflection on Hypothesis	My hypothesis was partly correct because the solution did turn yellow but the bubbles did not stay on top of the water for a lomg period of time.
How does this experiment relate to your daily life? E.g. classroom, home	This experiment relates to my daily life because it's talking about environmental issues such as the ocean. This also relates to my life because it is talking about ph levels and acidification, an example of this is a swimming pool. You have to measure the ph levels and add chlorine and other chemicals to maintain a neutral ph level.
Reflection on your learning **Antarctica Science Solo Rubric** **Gather & interpret data** *Learners make careful observations and differentiate between observation and inference. Scientific knowledge is based on data derived from direct, or indirect, observations of the natural physical world and often includes measuring something. An inference is a conclusion you draw from observations – the meaning you make from observations. Understanding the difference is an important step towards being scientifically literate.* **Prestructural** — I need help to: - Gather data - Interpret data - Communicate data **Unistructural** — I have been able to do one of the following: - Gather data - Interpret data - Communicate data **Multistructural** — I have done all of the following: - Gathered data - Interpreted data - Communicated data **Relational** — I have gathered and interpreted data from the experiment and communicated the findings of the experiment in relation to Antarctica. **Extended Abstract** — I have applied my knowledge from the experiment to a different context.	I feel that I would rate my learning at the solo level of Extended Abstract because I have taken my information and compared it to an environmental issue and come up with the problem.
Ocean Acidification-	[Ocean Acidification in Antarctica](#) Key words- - Ocean acidification

- Carbon Dioxide (co2)
- Cold water ecosystems
- Southern ocean
- Sea water (salt)
- Sea surface
- Rising globally
- Natural
- Calcium
- Acid and alkali of ph 7

Biological and physical pumps of carbon dioxide

Δ sea−surface pH [−]