## Names: Alanna, Hailey, Megan

**IV vs DV:** Level of acid in the vinegar; amount of time it takes for chalk to fully dissolve (rate of erosion)

	Trial A - One beaker with 40 mL of vinegar	Trial B - Beaker with 30 mL vinegar and 10 mL water	Trial C - Beaker with 20 mL of vinegar and 20 mL water	Trial D - Beaker with 10 mL of vinegar and 30 mL of water
Mass before:	4.21	4.05	4.00	3.85
Mass after:	4.47	4.24	4.30	4.19
Difference:	It got heavier by 0.26 grams.	It got heavier by 0.19 grams.	It got heavier by 0.30 grams.	It got heavier by 0.34 grams.
Observations:	It bubbled and started to dissolve,	It bubbled and dissolved like A,	Chalk immediately begins to dissolve.	It bubbled and dissolved, but

## Names: Derick, Ryan, and Landen

IV vs DV: Independent Variable: The levels of acidity Dependent Variable: The rate in which the chalk erodes.

	Vinegar (20mL)	Vinegar (10 mL) and Water (10mL	Water (20mL)
Mass before	5.2g	5.5g	5.8g
Mass after	5.6g	5.8g	6.0g
Difference in mass	0.4g	0.3g	0.2g
Observations	Like water the chalk absorbed the vinegar, caused some cracks on the surface of the chalk.	Absorbed the fluids again, pasty texture, and chalk just runs off it.	No physical change, chalk is now just wet. The water was stuck to/ absorbed by the chalk.

## Names: Bella, Joe, Damian, Austin and Megan

## IV vs DV: iv= vinegar and water dv= alka seltzer tablet.

	20ml. water	10ml. Water	20ml. vinegar	10ml. vinegar
Time to dissolve	1m. 40s.	6m. 15s.	2m. 18s.	5m. 7s.
Observe	It is fizzing a lot. Almost completely dissolved. Quickly dissolved. Powder at the bottom	Low fizzing, getting powdery. Small bubbling. Almost dissolved. Takes longer with less water more powder than last time	It's fizzing a lot more then the water. Bubbling. Took a slower time dissolving. No powder at bottom.	Still fizzing a lot more than the water. Bubbling and getting frothy. The water is a lot less clear than the waters. Is dissolving a lot more than the water. Still dissolving. Powdering more than last test.it's clear but has bubbles.

Names: Anna Lakey, Denali Norris, Alaina Lambert IV: Levels of acidity (amounts of vinegar and water) DV: Rate of erosion (time of takes for tablet to dissolve

procedure	contents	Time to dissolve	observations
#1	0 ml vinegar, 40 ml water	1:18	Starts bubbling and fizzing and popping, floats to the top, after dissolved there are still a lot of bubbles in the cup, water is cloudy with white bubbles
#2	10 ml vinegar, 30 ml water	1:07	A lot louder than #1 fizzed more, it has suds/foam, after tablet dissolved bubbles still bubbled faster than the #1 after a while the bubbled disappeared
#3	20 mil vinegar, 20 ml water	58.0	Didn't start fizzing as fast as #1 and #2 but once it started it made large bubbles, lots of bubbles after dissolved
#4	30 ml vinegar, 10 ml water	1:09	Bubbles are not as big as previous samples after dissolved water was very cloudy and small bubbles
#5	40 ml vinegar, 0 ml water	1:11	A lot smaller bubbles white, some large bubbles, very cloudy, bubbles stayed