

Name: _____ Earth and Space Science
Classwork 1.4-1.5
Investigation of the Eroding Statue

Phenomena

The image in the CER is of a statue sculpted in 1908, while the image on the right was of the same statue in 1969. This statue was sculpted out of limestone, a rock that contains a large amount of the mineral calcium carbonate (CaCO_3). This statue was also erected in a heavily populated city known to be affected by acid rain.

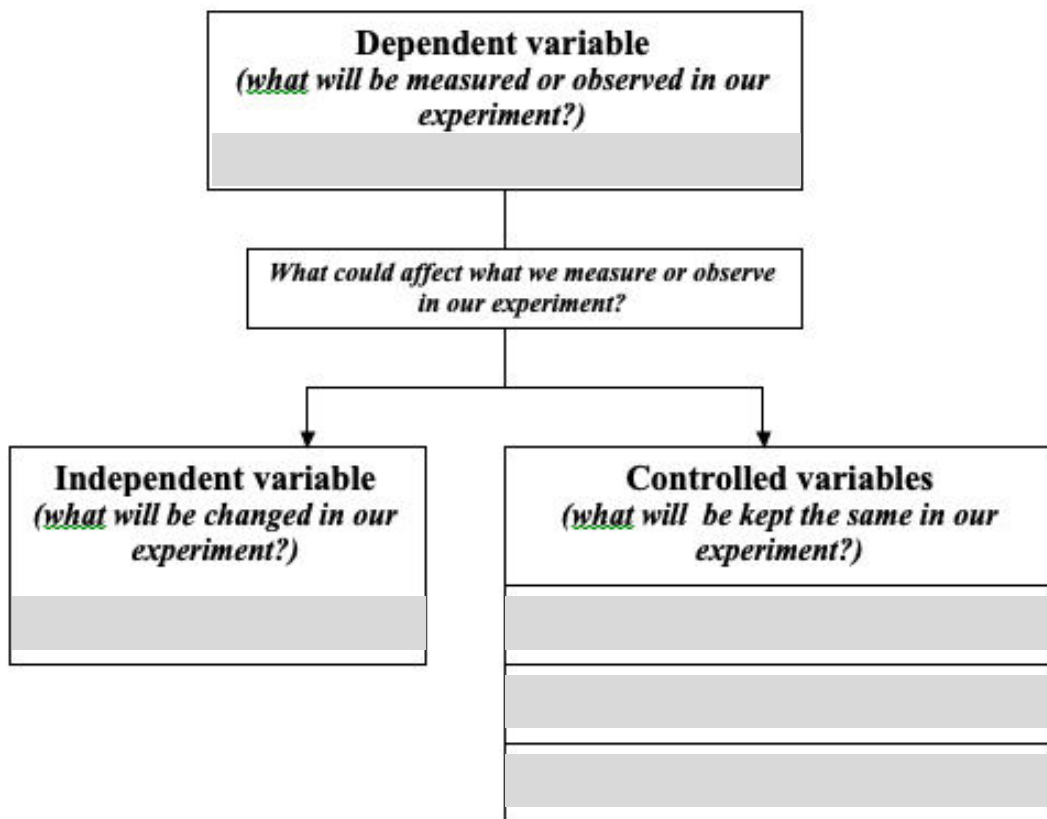


Question: *(What are we trying to find out?)*

How does increasing levels of acid affect the rate at which a statue will erode?

PART 1 PLANNING THE INVESTIGATION

Determining experimental values:



Our prediction *(What do we think will happen and why? Theindependent variable will cause the dependent variable to)*

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What equipment do we need? How will we set it up? *(Labeled drawings of the equipment and materials we will need) HINT: See board for available materials.*

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Procedure *(What will we do? How will we keep safe? Our list of the steps in our experiment):*

Step #	Detailed description of step.

PART 2 CONDUCTING THE INVESTIGATION

Recording our results *(What is the best way to record our results? Are our results the same as, or different from, the results of other teams?)*

Results:

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Are our results the same as or similar to the results of other teams?

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Explaining our results *(What happened to...<dependent variable>...when we changed...<independent variable>...? Why did this happen?)*

What happened to ...(dependent variable)...when we changed... (independent variable)...

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Why did this happen?

Conclusion *(What is our answer to our investigation?)*

Reflection *(How well do I think we did the investigation? Could we improve the way we did the investigation? What questions do I have which could be investigated in future?)*

How well do I think I did the investigation?

I think we could improve the way we did the investigation by...

What questions do I have which could be investigated in future?

ASSESSMENT RUBRIC *(Teacher Use Only)*

Practice 3
Planning and Carrying Out Investigations

	Description of Skill	Meets	No	Comments
A	States a testable hypothesis			
B	Design an experiment with a control and variable			
C	Safely conducts the investigation			
D	Identify the independent and dependent variables within the investigation.			