MYTHBUSTERS

Step 1. Ask a Question/Brainstorming.

In this homework assignment, you will brainstorm IDEAS and help to plan your involvement in your Mythbusters project group. If you are not familiar with the show, you are encouraged to watch the show on the Discovery Channel and view the Mythbusters fan website before completing this assignment.

Brainstorming: Come up with SEVERAL IDEAS that could become a myth question. Remember to identify ideas that are testable, creative, relevant, scientific, and fun, which have not been already done on the Mythbusters show. For ideas go to Discovery Kids – Mythbusters Lab, PBS kids – Zoom Sci, http://www.envisionprojects.org/cs/envision/view/env_p/91

1. _____
   _____

2. _____
   _____

3. _____
   _____

4. _____
   _____

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Step 2 Scientific Research - Research Brief.

Question : _____

Complete the following information for each of your research materials:

Notes, quotable material, useful graphics, etc... (continued on next) for the notes they must be hand written. Son of Citation must be used cut and paste is allowed.

This is just one page please add way more info.

Step 3

MYTHBUSTERS Project Benchmark #3: Myth Development

MY HYPOTHESIS IS:	(IF ___I do This____, then ___This____ will happen because...Must answer question above.)

CAN IT BE TESTED? EXPLAIN HOW.	

IS THERE REAL SCIENCE? WHAT IS IT?	

HOW IS IT GOING TO BE FUN, RELEVANT, AND ENTERTAINING? BE SPECIFIC.	

Step 4 Experimental Design and Plan.

Test Description	(example: This test will determine if you stay more dry walking vs running in the rain)

Manipulated Variable	(this is the ONE variable you will change on purpose – example: the speed of which you walk or run in the rain)
Responding Variable	(this variable changes as a result of the manipulated variable – example: the amount of water you accumulate walking vs running in the rain)

Control: (Something in the experiment that is constant and unchanged in the experiment – example when testing drugs on humans a group of humans would get sugar pills instead of the drugs being tested.)

_____

_____

Materials/Resources:

Make a list of the ALL the materials and other resources you will need for your test.

Example: scale

Safety Procedures:

Make a list of the safety precautions that will be followed during the test see Pg. XVIII-XXI in Textbook BC Science 8.

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.
Or more…

Test Procedure and Data:

Make a list of the steps you plan to complete for the test/data collection activity. Be as detailed as possible or you will not get signoff.

Step	Task	Data Collection & Units
1.	Ex. Gather materials....	
2.	Ex: Weigh can before test	Ex: weight of can (kg)
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		

Or More...

Signed by Teacher:X

Signed By Parents:X

MYTHBUSTERS **Step 5 Results**

Busted or Confirmed and why? (Hint answer Hypothesis)

	4	3	2	1	0
Question	Students include a question that is testable and directly relates to the investigation being performed.	Students include a question that is testable and relates to the investigation being performed	Students include a question that is testable but not related to the investigation being performed.	Students include a question that is not testable and does not relate to the investigation being performed.	Students do not include a question.
›thesis	Students form a hypothesis using an if, then, because statement based on relevant prior knowledge that directly relates to the question being investigated.	Students form a hypothesis using an if, then, because statement based on some prior knowledge, that is either irrelevant or incorrect, that directly relates to the question being investigated.	Students form a hypothesis using an if, then statement based on minimal prior knowledge that does not relate to the question being investigated.	Students form a hypothesis that is not written in an if then statement and uses no prior knowledge that does not directly relate to the question being investigated	Students do not include a hypothesis.
Materials	Students list all materials and required to complete the lab.	Students only miss 1 or 2 materials required to complete the lab.	Students miss 3 or 4 materials required to complete the lab.	Students miss more than 4 materials required to complete the lab.	Students do not include materials required to complete the lab.
Procedures	Students list all procedures required to complete the lab, using correct terminology and placing procedures in correct order.	Students miss 1 or 2 of the procedures required to complete the lab.	Students miss 3 or 4 of the procedures required to complete the lab.	Students miss more than 4 of the procedures required to complete the lab.	Students do not include procedures.
Results, Data, and Analysis	Represents all data appropriately and accurately so that trends and findings are clear.	Represents some data appropriately and accurately so that trends and finding are clear.	Represents little data, and presents data in a manner that makes trends and findings unclear.	Data is minimal and unclear.	Students do not include their data
Analysis	Provides an accurate and insightful analysis of the data.	Provides an analysis of the data.	Provides an unclear analysis of the data.	Provides an unclear and inaccurate analysis of the data.	Students do not include an analysis statement with their results.
Conclusion	Provides a summary of the investigation that includes all of the following: • what question was investigated • what the hypothesis was • what results were found • if the hypothesis was correct or incorrect • what was learned from the investigation • Possible source of error. • Ideas for future investigation	Provides a summary of the investigation that includes at least 4 of the following: • what question was investigated • what the hypothesis was • what results were found • if the hypothesis was correct or incorrect • what was learned from the investigation	Provides a summary of the investigation that includes at least 3 of the following: • what question was investigated • what the hypothesis was • what results were found. • if the hypothesis was correct or incorrect • what was learned from the investigation	Provides a summary of the investigation that includes less than 3 of the following: • what question was investigated • what the hypothesis was • what results were found • if the hypothesis was correct or incorrect • what was learned from the investigation	Students do not provide a conclusion to summarize their investigation.
ntific lls & uracy	Descriptions of scientific terms, facts, concepts and theories are complete and correct. Written and/or visual communication is well organized and effective.	Descriptions of scientific terms, facts, concepts and theories are mostly complete and correct. Most of the written and/or visual communication is well organized and effective.	Descriptions of scientific terms, facts, concepts and theories are partially complete and correct. Some of the written and/or visual communication is organized and effective.	Descriptions of scientific terms, facts, concepts and theories are either incorrect or missing. Little to none of the written and/or visual communication is present and/or lacks organization.	Descriptions of scientific terms, facts, concepts and theories are not included.

Mark Total 100

64 marks column mark x 2 times 8 categories

/64

Script /16 Done or not Done

Mythbusters episode Done or not Done /20

/100