

The “Mishkeh” Mechanic:

A STEM/Language Arts Cross-Curricular Project

I am so excited to introduce to you our newest cross-curricular venture with Science and Language Arts! After you complete your hand-steadiness tester projects and turn them in, you will be working closely with both me and Ms. Sri to wear the hat of a “Mistake Mechanic” or a “Success Strategist” (more on what that means later!).

“Mishkeh” is the old Hebrew term for mistake. Why do you think we are calling our project, quite literally, a mistake?

Below are the steps you must take to be successful in this project.

- 1- Listen closely and annotate your notes when Ms. Landy and Ms. Sri are explaining this project. (Right now: pick up a pencil and start! Not everything is written down; jot down anything you think is important.)
- 2- Complete the experiments in Ms. Sri’s class, making sure you use the SeeSaw app to document your work as you go. Ms. Sri will explain more about what she expects you to do; be sure to follow her instructions-- and check out her rubric!-- to earn full credit for this assignment.
- 3- Read this doc, which provides more detailed instructions and is [linked here](#), to compose a 15-20 sentence paragraph documenting your mistakes/successes.
- 4- Wait for your marked rubrics to return to you! You’ll receive separate scores from Ms. Sri and Ms. Landy. Refer to the rubrics attached below to ensure you are aware of what Ms. Sri and Ms. Landy are looking for in this project!

F.A.Q.’s

Q: What IS cross-curricular teaching?

A: Cross-curricular teaching is when teachers team up across fields (i.e. Chumash and History, Language Arts and Science) to show students that knowledge can be transferable to separate subjects and applicable in multiple fields. In this case, Ms. Sri is marking you on the successes or mistakes made in your **scientific** findings, whereas Ms. Landy is looking for the **language and writing** you use in determining the successes or mistakes made.

Q: What IS a “Mistake Mechanic”?

A: Just like when cars need fixing, and car mechanics study the car to determine what went wrong, you will be the “mechanic” of your own experiment. In other words, after you completed your experiment, if you were unsuccessful, you will need to trace your steps back and determine where it is that you “went wrong”; we do this in our own lives every day, and expect you to do it in school as well!

Q: What IS a “Success Strategist”?

A: When things go “right,” and projects succeed, it is important to review how you got there and determine exactly what it is that you did correctly, so you can ensure you repeat those steps again in future. Knowing your strengths is just as crucial as being aware of your weaknesses.

Q: Why is the whole eighth grade not involved in this?

A: Because... you are our guinea pigs! Ms. Sri and Ms. Landy will be wearing our own “Mistake Mechanic” hats as we go through this project with you. There will be problems that arise, and Ms. Sri and I will be meeting regularly to fix them, and we figured that if we roll this out with your class first, you would be willing and able to help us! Thanks in advance, guys ;) (If this project succeeds, which we hope it does, your names will go down in permanent JKHA history! We will then work with the whole eighth grade, and, eventually... maybe... the whole middle school!)

Rubric for Ms. Sri’s Science Project

Rubrics	3	2	0 - 1
<ul style="list-style-type: none"> The problem or the question of the project is described in a clear and in a concise fashion. 	Very clear and concise	Missed a few points	Did not mention at all
<ul style="list-style-type: none"> Sketch or a picture of various steps of the project are included. 	All the necessary pictures are provided	Only a few are provided	None or irrelevant pictures and sketches are provided
<ul style="list-style-type: none"> Logical reasoning for including the pictures is clearly explained 	All the pictures are included with a logical reason	A few of them are included with clarity, while a few aren't	None of them/ only one of them provide good logic
<ul style="list-style-type: none"> Mistake/strategy is clearly identified and highlighted 	Articulated very well	Not very clear	Not identified at all or wrongly identified
<ul style="list-style-type: none"> Well thought solutions are explained that are suitable to the mistake or the success strategy identified 	A critically well thought solution is provided	Not a very clear solution is provided nor solutions that are irrelevant are provided	A wrong solution or no solution is provided

Rubric for Ms. Landy's Paragraph

Rubrics	4	3	2	0 - 1
MLA Format <ul style="list-style-type: none"> Centered title Appropriate font and size Header Heading 	All four MLA criteria met	Three MLA criteria met	Two MLA criteria met	One or no MLA criterion met
Paragraph Length and Language Usage	<ul style="list-style-type: none"> 10-15 sentences Thoughtful, clear, well-crafted writing that clearly answers the questions and is indicative of eighth grade writing 	<ul style="list-style-type: none"> 10-15 sentences Writing is thoughtful, but somewhat unclear and/or is not indicative of eighth grade writing 	<ul style="list-style-type: none"> 10-15 sentences Writing is unclear and/or is not indicative of eighth grade writing 	<ul style="list-style-type: none"> Fewer than 10 sentences Writing is confusing and/or well-below eighth grade level writing
Paragraph Organization	Paragraph is extremely well-organized and provides the three main elements in this order: (1) project background (2) explanation of method (step-by-step) (3) next steps	Paragraph is somewhat out of order, but includes all three main elements, or is well-organized but is missing a part of one of the following three main elements: (1) project background (2) explanation of method (step-by-step) (3) next steps	Paragraph is somewhat well-organized but is missing one or more of the following three main elements in this order: (1) project background (2) explanation of method (step-by-step) (3) next steps	Paragraph is not well-organized and is missing two or more of the following three main elements: (1) project background (2) explanation of method (step-by-step) (3) next steps
Solutions to Mistake OR Explanation of Success	Most important project flaws/reasons for success have been identified clearly			Most important project flaws/reasons for success have NOT been identified clearly
Use of the "תשובה" Process	All three תשובה steps addressed in a clear fashion within paragraph: Acknowledgement Remorse Resolution	Two of three תשובה steps addressed in a clear fashion: Acknowledgement Remorse Resolution	One of three תשובה steps addressed in a clear fashion: Acknowledgement Remorse Resolution	None of three תשובה steps addressed in a clear fashion: Acknowledgement Remorse Resolution

Grammar and Punctuation	Two or fewer grammar or punctuation errors	Three minor grammar or punctuation errors	Four grammar or punctuation errors	Five or more grammar or punctuation errors
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