

Investigation: Creating an Explanation

In this investigation, you will learn how to create an explanation checklist and use it to construct your recommendation!



A man with dark hair is standing in a field of green shrubs and cacti. He is wearing a dark blue t-shirt with the text "Crystal Cove CONSERVANCY" printed on it. The background shows a hilly landscape under a cloudy sky.

Crystal Cove
CONSERVANCY

Ready Your Science Notebook!

Review the *Explanation Checklist* in your Science Notebook document. Add any additional science ideas that you think will be important to include when you make a recommendation to Crystal Cove State Park.

When you're ready, move on to the next slide!

Your Name:

Date:

Making Recommendations: Explanation Checklist

Lana Nguyen, Crystal Cove State Park's environmental scientist, wants to know what you think about the most effective way to restore Moro Canyon!

Based on your findings, do you think that Crystal Cove State Park land managers should use mulch when planting seedlings in Moro Canyon? If so, should they use straw-like mulch or woody mulch?

Before deciding on your recommendation, review the Explanation Checklist below. This checklist should include all of the important science ideas that you think you should include in your recommendation to Crystal Cove State Park.

Directions: Read through the Explanation Checklist. Add any additional science ideas that you want to include.

In my recommendation to Crystal Cove State Park, I want to be certain to mention...

- The physical differences between woody mulch and straw-like mulch
- How mulch affects soil moisture
- How plants use water
- How water in the soil is used
- How soil moisture affects seedling growth
- Your idea:*
- Your idea:*
- Your idea:*

A man with dark hair is standing in a field of green and yellow vegetation. He is wearing a blue t-shirt with the text "Crystal Cove CONSERVANCY" printed on it. The background shows a line of trees and a cloudy sky.

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Ready Your Science Notebook!

Use your science notebook page to draft a recommendation to Crystal Cove State Park! Make sure to follow the *Claim-Evidence- Reasoning* format and include all of the ideas from your Explanation Checklist.

Directions: First, complete the “Gotta Have” Explanation Checklist. Next, explain what kind of mulch you think Crystal Cove State Park land managers should use mulch when planting seedlings in Moro Canyon. Make sure to include all of the ideas from the checklist in your explanation!

“Gotta Have” Explanation Checklist	
<input type="checkbox"/>	_____
<input type="checkbox"/>	_____
<input type="checkbox"/>	_____
<input type="checkbox"/>	_____
<input type="checkbox"/>	_____

I think that *[what you observed]* _____

was caused by *[what you predict is causing what you saw]* _____

This is because *[why you think it happened]* _____

This explanation is also supported by the fact that *[any other observations or evidence that support your idea]* _____
