

Investigation Design and Perform

Step 1: Observing & Questioning

Place sticky notes of the same colour in the space below.

WHAT DID I OBSERVE?

(What do you notice about the object or event?
Use your senses to describe the object or event.)

Place sticky notes of a new colour in the space below.

WHAT AM I WONDERING?

(What questions or predictions do you have about
the object or event?)

How can the questions be answered?
(Question Sort)

LABELLED DIAGRAM:

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Step 2(a): What could I measure or observe about the object, or event?

Brainstorm (Place sticky notes of the same colour in the space below.)

Possible Dependent Variables


Step 2(b): What could I change or vary about the object or event that may affect what I could measure or observe?

Brainstorm (Place sticky notes of a new colour in the space below.)

Variables

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Step 3(a): What will I change?

<p>ONE VARIABLE I WILL CHANGE:</p> <div style="border: 2px dashed purple; padding: 20px; min-height: 150px; display: flex; align-items: center; justify-content: center;"> <p style="font-size: 2em; color: lightgray;">Independent Variable</p> </div> <p style="text-align: center; color: lightgray;">(Place a sticky note from Step 2(b) here)</p>		<p>I WILL MEASURE OR OBSERVE THIS RESULT:</p> <div style="border: 2px solid green; border-radius: 15px; padding: 20px; min-height: 150px; display: flex; align-items: center; justify-content: center;"> <p style="font-size: 2em; color: lightgray;">Dependent Variable</p> </div> <p style="text-align: center; color: lightgray;">(Place a sticky note from Step 2(a) here)</p>
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Step 3(b): What will I not change?

VARIABLES I WILL NOT CHANGE:

What conditions will be held constant so it is a fair test? Place remaining sticky notes from Step 2(b) here.

<div style="border: 2px dashed purple; padding: 20px; min-height: 100px; display: flex; align-items: center; justify-content: center;"> <p style="font-size: 1.5em; color: lightgray;">Controlled Variable</p> </div>	<div style="border: 2px dashed purple; padding: 20px; min-height: 100px; display: flex; align-items: center; justify-content: center;"> <p style="font-size: 1.5em; color: lightgray;">Controlled Variable</p> </div>	<div style="border: 2px dashed purple; padding: 20px; min-height: 100px; display: flex; align-items: center; justify-content: center;"> <p style="font-size: 1.5em; color: lightgray;">Controlled Variable</p> </div>
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Level: 2

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Step 4: What is the question I want to explore?



Step 5: What is my hypothesis (what and why)?

BASED UPON MY QUESTION, I PREDICT THAT:

if the _____ is _____
Independent Variable How the independent variable will be changed
 (e.g. increased or decreased, heated or cooled, stirred or not stirred...)

then the _____ will _____
Dependent Variable How the dependent variable will be affected
 (e.g. increased or decreased, heated or cooled, stirred or not stirred...)

I think this will happen **because** _____

Level: 2