

Name _____

DEVELOP YOUR HYPOTHESIS

Ready to dive into scientific inquiry? It's time to develop a hypothesis, or a prediction statement that you will test.

PART A: Read and Analyze

- 1.** An **independent variable** is what **you** change during an experiment. (Always test only one independent variable at a time.) What is the Green Team's independent variable?

- 2.** A **dependent variable** is what changes **as a result** of changing the independent variable. What is the dependent variable in the Green Team's hypothesis?

- 3.** A **hypothesis** must be able to be tested. Can the Green Team's hypothesis be tested? Why or why not?

SEE IT IN ACTION After conducting research on different solutions to water pollution caused by the toxic runoff of herbicides, Quan, Aaliyah, and Matt decide on a hypothesis: *If we use a vinegar-based herbicide, it will kill weeds equally and as effectively as a conventional herbicide.*



PART B: Write a Hypothesis for Your Project

QUESTION	RESPONSE
Independent Variable: What are we changing?	
Dependent Variable: What are we expecting to change as a result?	
Hypothesis: What is our prediction? If _____, then _____. (we do this) (this will happen)	