



CREATING RESEARCH QUESTIONS

A STEP-BY-STEP GUIDE FOR DEVELOPING RESEARCH QUESTIONS FOR YOUR COMMUNITY SCIENCE PROJECT



CREATE A KEY STATEMENT TO SUMMARIZE YOUR PROJECT

Be direct and use verbs to summarize what you want to do

- "We will EXAMINE..."
- "We will EXPLORE..."

Include specific details about your purpose and what you are focusing on.

- EXAMPLE: "We will determine if the air quality is poorer in the neighborhoods closest to the heavily-used shipping routes compared to that of neighborhoods further away."

BREAK THE STATEMENT UP

- What are main aspects of this statement that you want to focus on?
- Can this statement be broken up into chunks or smaller sections that are easier to address?
- Do these smaller statements provide a clue about the questions you want your project to answer?

EXAMPLE: "We will determine **if the air quality is poorer in the neighborhoods closest to the heavily-used shipping routes compared to that of neighborhoods further away.**"

WRITE A QUESTION TO ADDRESS EACH PIECE OF THE STATEMENT

- Ask yourself how you will address each part of the purpose.
- Do you have a question about how to **describe** a phenomenon?
- Do you have questions about the **relationships involved**?
- Do you have questions about a **cause and effect**?

REVISE YOUR QUESTIONS TO BE CLEAR AND DIRECT

- Make sure your questions clearly connect to your project's purpose
- Remember that its ok if your do not have a question for every aspect of your project
- Your research questions should direct how you observe, experiment, or test the environment for your study

EXAMPLE:

- **What is the average air quality in our area, and how does it compare to what is considered normal?**
- **What is the average air quality of areas further away from the shipping route and how does it compare to our area?**
- How does the air quality in our area change as traffic on the shipping route fluctuates?

**SHARE, GET FEEDBACK, & GET STARTED!
GOOD LUCK!**