

Finding your research question...

Keys to a good research question:

Focused

Testable

Interesting (to YOU!)

Feasible (with your resources)

Original

Step 1: Find your inspiration.

List all your interests: Hobbies, sports, games, food, animals, art, coding, gaming, etc.

Step 2: Brainstorm Questions

Now, choose one area that interests you the most. Are there any problems or issues within that area? What are people talking about? What are people frustrated with? Happy with? Think of as many questions as you can and write them all down. Don't leave any out, don't "judge" any. Just keep writing.

[illegible]

Step 3: Start Narrowing your focus

Look through your list of questions.

Are there any that can't be answered by scientific research? Cross those out.

Are there any that are beyond the scope of your available resources? Cross those out.

Choose your top three of the remaining questions:

Write them here.

Do a little research on each one of your top three questions. What are other researchers doing? What answers have they discovered?

Choose the question that interests you the most, and write it here.

Now, look closely at your question. Work with a mentor to revise your question until it is answerable with an experiment or engineering project that is within your capabilities, and has ONE independent variable.

Write your final question here:

Independent variable (what are you changing?) _____

Dependent variable (what are you measuring?) _____

Experimental groups: _____

Will you have a control group? _____

Constants (controlled variables) _____