Science Project Background Research Plan

QISS 2014

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What is the **question** you are going to try and answer with your experiment? Or for engineering projects, what **need** are you trying to address?
2. List keywords and phrases from your question and the topic in general?
3. Now use your key words to build some questions to guide your background research. Develop at least two questions from each “question word.” Do not worry about whether you know the answer to the question – you will find these answers when you do your background research.

|  |  |  |
| --- | --- | --- |
| **Question Word** | **Possible Questions (You can think of others)** | **Substitute your keywords for the blanks for complete your questions. Write down the relevant questions and use them to guide your research.** |
| Why | Why does \_\_\_\_\_\_\_\_\_ happen?Why does \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_?Why \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_? |  |
| How | How does \_\_\_\_\_\_ happen?How does \_\_\_\_\_ work?How does \_\_\_\_\_\_ detect \_\_\_\_\_\_?How does one measure \_\_\_\_\_\_\_?How do we use \_\_\_\_\_?How \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_? |  |
| Who | Who needs \_\_\_\_\_\_\_\_\_\_\_\_\_?Who discovered \_\_\_\_\_\_\_\_\_?Who invented \_\_\_\_\_\_\_\_\_\_?Who \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_? |  |
| When | When does \_\_\_\_\_\_\_\_ cause \_\_\_\_\_\_\_?When was \_\_\_\_\_\_\_\_\_ discovered?When \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_? |  |
| Where | Where does \_\_\_\_\_\_\_\_\_\_\_occur?Where does \_\_\_\_\_\_\_\_\_\_ get used?Where \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_? |  |

1. To analyze the results from experiments you might need to know some key formulas or equations. Think about your own experiment and write down any step or task that requires formulas or equations. Don’t worry about whether you already know what the formula or equation is – you will find the actual equation when your do your background research.