

## Step 04. Project Formulation

Mr. M. Gonzalez

Student #1: \_\_\_\_\_ Date: \_\_\_\_\_ Grade: \_\_\_\_\_

### **I. Project Formulation.**

The project formulation is the step where you organize how you will study your topic or how you will prove or disprove a hypothesis. Before beginning this step though you should gather and read enough secondary information on your topic so you can avoid repeating someone else's mistakes or to just get a better insight into your scientific problem. In order to formulate a project you have to have your scientific problem in mind at all times. It is your guiding light. You mustn't stray from it unless you are willing to start your whole project over again. The basic elements you need to have and to complete to formulate your project are:

- A. Topic
- B. Scientific problem.
- C. Hypothesis (optional)
- D. Objectives.
- E. Tasks for your objectives.
- F. Procedures for your tasks.
- G. Materials for your procedures.

Once you have all these in place you will be on your way to *executing* your science project. This is just a fancy way for saying "doing" your science project.

Student #1: \_\_\_\_\_ Date: \_\_\_\_\_ Grade: \_\_\_\_\_  
Student #2: \_\_\_\_\_ Date: \_\_\_\_\_ Grade: \_\_\_\_\_  
Student #3: \_\_\_\_\_ Date: \_\_\_\_\_ Grade: \_\_\_\_\_  
Student #4: \_\_\_\_\_ Date: \_\_\_\_\_ Grade: \_\_\_\_\_  
Student #5: \_\_\_\_\_ Date: \_\_\_\_\_ Grade: \_\_\_\_\_

**I. Begin writing the elements of your project.**

A. Topic: \_\_\_\_\_  
\_\_\_\_\_

B. Scientific Problem: \_\_\_\_\_  
\_\_\_\_\_

C. Hypothesis: \_\_\_\_\_  
\_\_\_\_\_

D. Objectives:

1. \_\_\_\_\_

a. Task 1. \_\_\_\_\_

b. Task 2. \_\_\_\_\_

c. Task 3. \_\_\_\_\_

d. Task 4. \_\_\_\_\_

e. Task 5. \_\_\_\_\_

2. \_\_\_\_\_

a. Task 6. \_\_\_\_\_

b. Task 7. \_\_\_\_\_

c. Task 8. \_\_\_\_\_

d. Task 9. \_\_\_\_\_

e. Task 10. \_\_\_\_\_

3. \_\_\_\_\_

a. Task 11. \_\_\_\_\_

b. Task 12. \_\_\_\_\_

c. Task 13. \_\_\_\_\_

d. Task 14. \_\_\_\_\_

e. Task 15. \_\_\_\_\_

**II. Procedures:**

A. Task 1

\_\_\_\_\_  
\_\_\_\_\_

Materials list: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

B. Task 2

\_\_\_\_\_  
\_\_\_\_\_

Materials list: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

C. Task 3

\_\_\_\_\_  
\_\_\_\_\_

Materials list: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

D. Task 4

\_\_\_\_\_  
\_\_\_\_\_

Materials list: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

E. Task 5

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Materials list: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

F. Task 6

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Materials list: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

G. Task 7

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Materials list: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

H. Task 8

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Materials list: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I. Task 9

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Materials list: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

J. Task 10

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Materials list: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

K. Task 11

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Materials list: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

L. Task 12

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Materials list: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

M. Task 13

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Materials list: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

N. Task 14

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Materials list: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

O. Task 15

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Materials list: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

P. Task 16

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Materials list: \_\_\_\_\_  
\_\_\_\_\_

## Step 03c. Flow Chart

Mr. M. Gonzalez

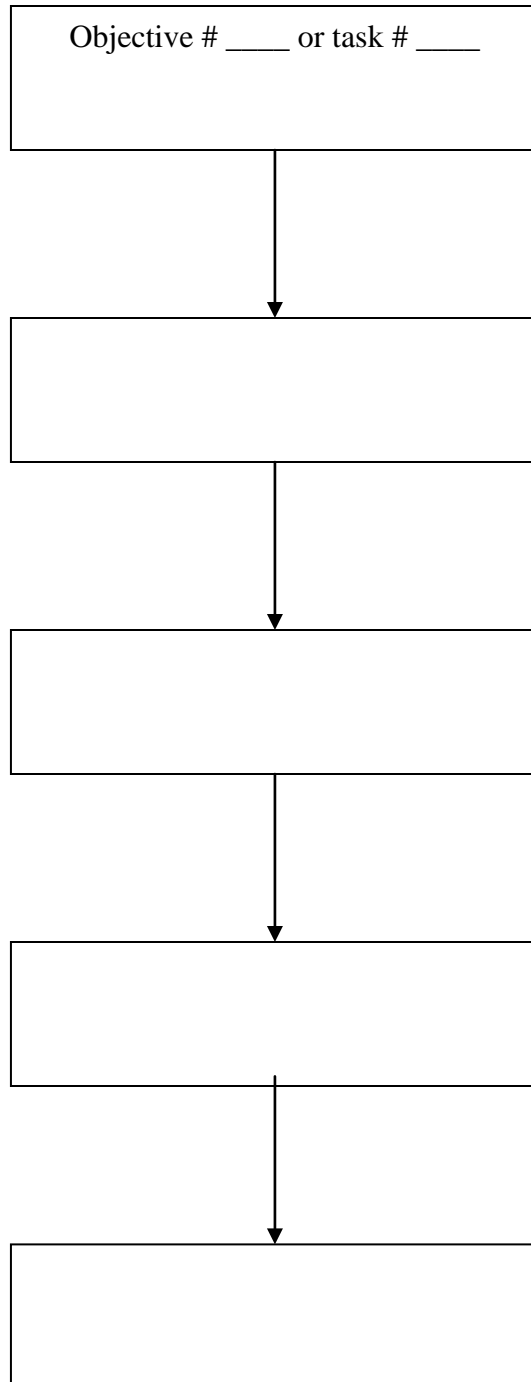
Name: \_\_\_\_\_ Date: \_\_\_\_\_ Grade: \_\_\_\_\_

Problem:

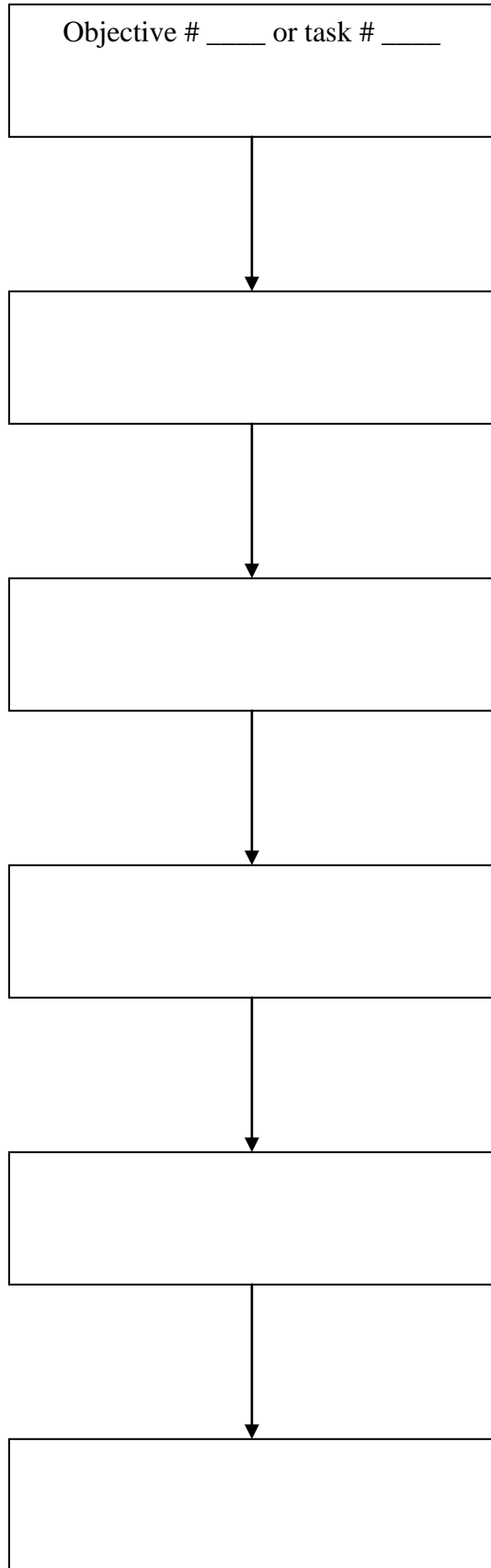
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**Flow chart:**



**Flow chart:**

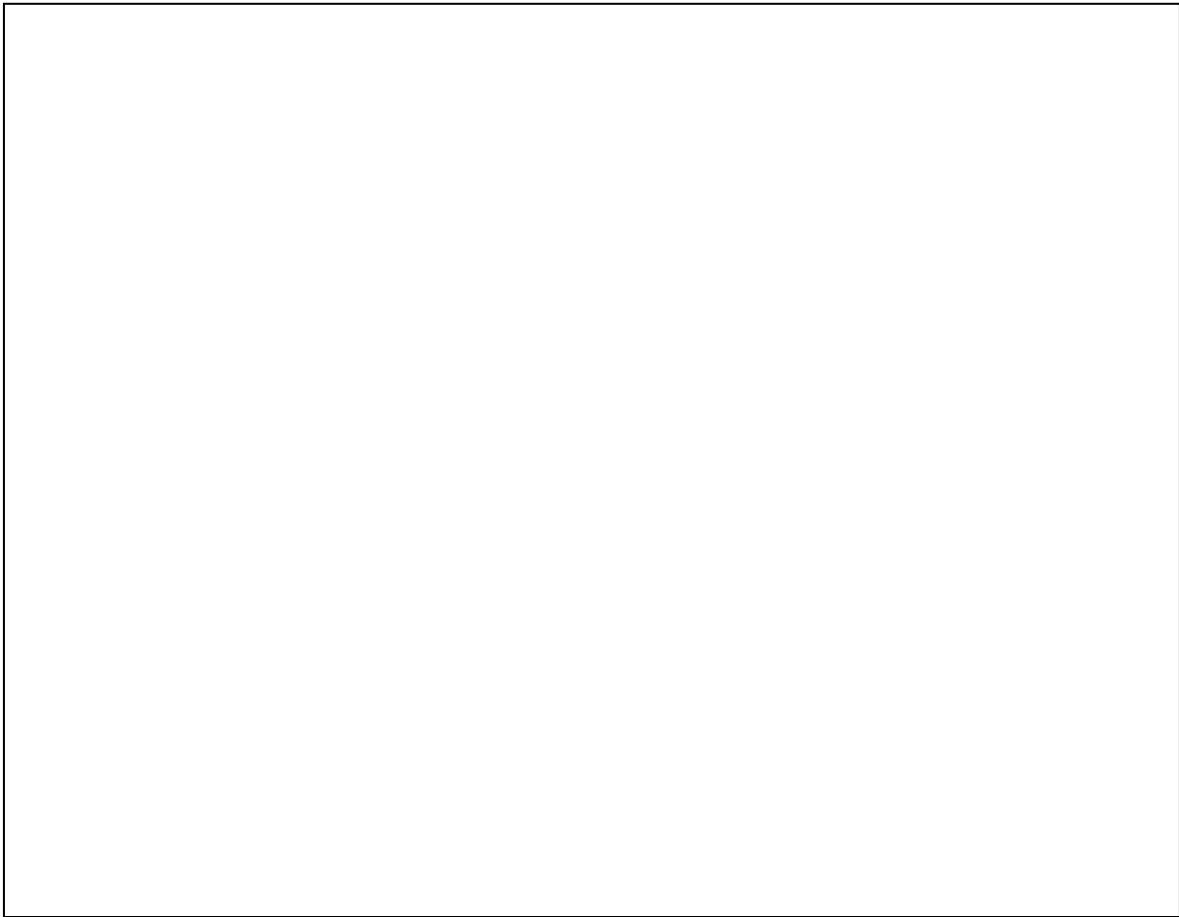


**Task:** \_\_\_\_\_.

Name \_\_\_\_\_ Class \_\_:\_\_\_\_\_ Date \_\_\_\_\_

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**Directions:** Draw your project set-up to the best of your ability. Label **all** the parts of your project. Include as much detail as necessary. Draw different views of your project. Include a qualitative description of what your project is about.

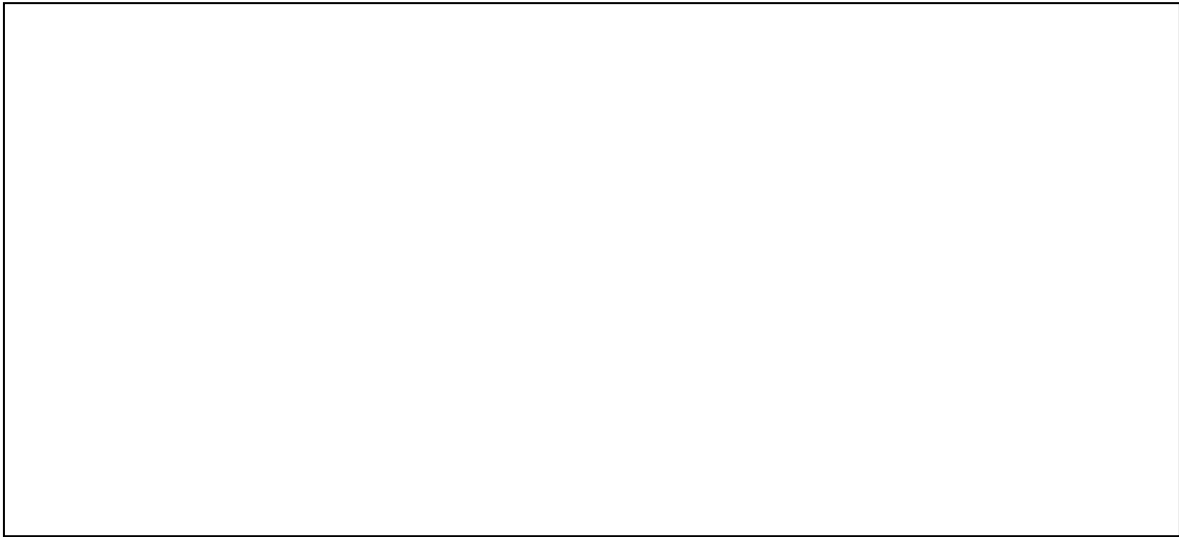


**Figure** \_\_. \_\_\_\_\_ . \_\_\_\_\_ **view.**

Added comments or notes:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_





**Figure** \_\_. \_\_\_\_\_ . \_\_\_\_\_ **view.**

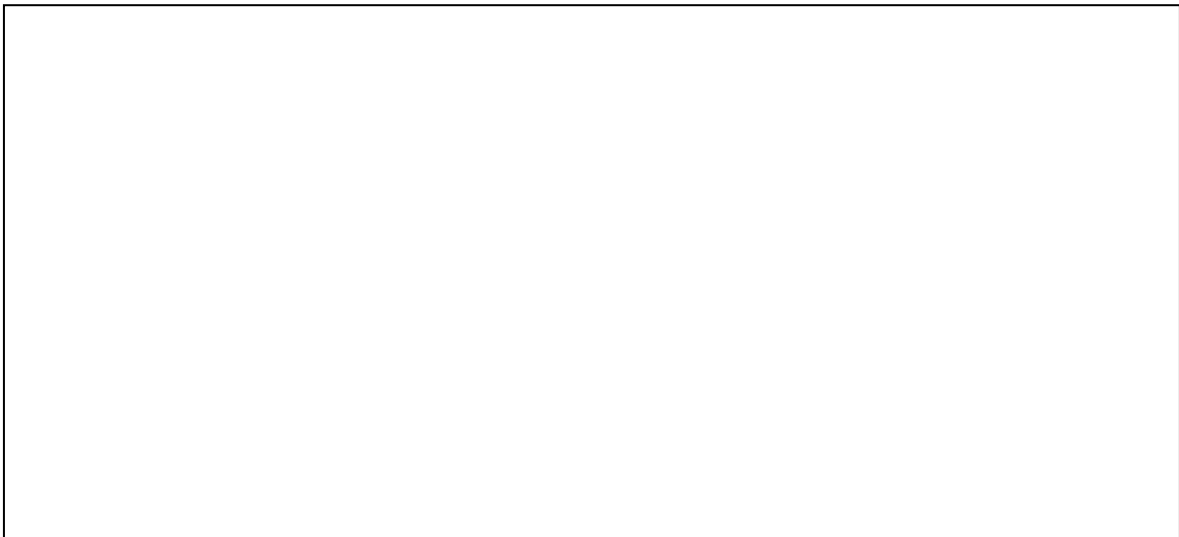
Added qualitative notes:

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**Figure** \_\_. \_\_\_\_\_ . \_\_\_\_\_ **view.**

Added qualitative notes:

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