



2015-2016

Pinecrest Academy

Middle School

Science Fair Packet

Name: \_\_\_\_\_

# Schedule of Due Dates

<u>DUE DATE</u>	<u>COMPONENT</u>	<u>COMPLETED</u>
12/15/2015	Purpose: Assignment 1	
12/17/2015	Background Research: Assignment 2	
12/17/2015	Hypothesis: Assignment 3	
12/18/2015	Materials List: Assignment 4	
12/18/2015	Procedures: Assignment 5	
On or before 12/18/2015	Proposal: Students must complete proposal with parent signature and turn in. **MUST BE APPROVED BEFORE EXPERIMENT CAN BE STARTED**	
12/19-1/8	Complete your experiment and collect data.	
01/11/2016	Data: Assignment 6	
01/13/2016	Results & Conclusion: Assignment 7	
01/14/2016	Title & Abstract: Assignment 8	
01/18/2016	Go Further: Assignment 9	
01/22/2016	Science fair board & lab book due in class	
01/25-01/29	Science Fair Board Presentations in class	

### Rules and Regulations

1. Must be an ORIGINAL, high quality scientific experiment.
2. Parents can help but the project must be your own work.
3. The results of the project must be clearly and neatly displayed.
4. If you are selected to move on to the UNLV Science Fair there are additional guidelines that you will have to follow.

### Steps

1. Bring in a 1 subject, composition book to use as your log book. This MUST be a composition book, spiral notebooks will not work.
  - a. Handwrite everything into this notebook
    - ~LEAVE THE FIRST PAGE BLANK
    - ~All ideas and brainstorming

**~Write in ink (DO NOT ERASE ANYTHING)**  
~Always enter the time and date
2. Observe and Ask Question
  - a. Think of an area of interest.
  - b. Write down some questions.
  - c. Narrow it down to one question that can be explored.
  - d. The question must be measurable and have only one answer.
3. Write Proposal  
Must include:
  - a. Name
  - b. Signature of parent or guardian
  - c. Measurable Question
  - d. Materials needed
  - e. Summary of project (5 sentences)
4. Background Research
  - a. 3 paragraphs (at least 5 sentences each) or more
  - b. Summarize; Don't Plagiarize!
  - c. Sources: Library, Internet, Teachers, Parents, Friends, Experts in the area of interest, Magazines, Books, other written material.
  - d. Write down all sources for Citations
5. Hypothesis
  - a. Use background research to make an educated guess
  - b. Must state in an "IF ..... THEN ..... BECAUSE" statement
  - c. A list of every material you will be using.

### Materials and Steps

- d. This must be specific. For example:
  - 2 paper clips
  - 1 gallon of water
- e. Steps must be listed in step format.
  - 1. First...
  - 2. Then...
- 6. Test with an Experiment (Done at home)
  - a. Must have a control (what happens under normal conditions)
  - b. Must have at least 2 variables (the one single thing that you change at least two different ways)
- 7. Data/ Examine Results
  - a. Record everything (ex: all measurements, dates, times, reactions...)
  - b. Did the experiment give you the expected results? Why? or Why not?
  - c. Use your results to create graphs or charts.
- 8. Draw Conclusions
  - a. Use results to answer these questions in paragraph form:
    - i. What variables are important?
    - ii. Was your hypothesis correct?
    - iii. Did you collect the proper data?
    - iv. Does more work need to be done or is your experiment finished?
    - v. If your hypothesis was false, yet all of the errors are explained, tell how you would change your experiment or methods.
    - vi. Was more than one variable changed at a time?
    - vii. Was the experiment done with the exact same steps each time?
    - viii. Are there causes that you had not considered or observed?
    - ix. Were there errors in your observation?
    - x. How large were the errors?
- 9. Write an Abstract
  - a. Write a one-paragraph summary of the steps in the project and record this in the Science Log Book and on the Project Display Board.
- 10. Go Further
  - a. You must include 5 ways that you could take this project further.
  - b. In the form of questions or suggestions that you could take your project further
  - c. Put them in a list.
  - d. You can also include 5 additional ways for extra credit.

# BOARD SET-UP

Abstract	TITLE	Conclusion
Question	Experiment	Go Further
Hypothesis	Materials	Steps
	Data	
	Pictures and Other Items	

NAME: \_\_\_\_\_

PERIOD: \_\_\_\_\_

**SCIENCE FAIR  
RUBRIC**

BOARD (150 pts):

ABSTRACT	TITLE	CONCLUSION
/15	/5	/20
QUESTION	EXPERIMENT	GO FURTHER
/10	MATERIALS    STEPS    DATA	
HYPOTHESIS	VISUALS and/or PICTURES	
/15	/10    /25    /15	/15
	/20	/10 EC

BOARD \_\_\_\_\_/150

PRESENTATION (100 pts):

Materials Present	/10
Goes through the Scientific Method During Presentation	/25
Speech Fluency	/20
Eye Contact	/15
Teacher Questions Answered with Confidence	/30
<b>TOTAL POINTS</b>	<b>/50</b>

Comments:

**LAB BOOK**

- \_\_\_ Title Page
- \_\_\_ Table of Contents
- \_\_\_ Observation/Questions
- \_\_\_ Question
- \_\_\_ Abstract
- \_\_\_ Proposal
- \_\_\_ Background Research
- \_\_\_ Works Cited
- \_\_\_ Hypothesis
- \_\_\_ Materials
- \_\_\_ Steps
- \_\_\_ Data
- \_\_\_ Conclusion
- \_\_\_ Go Further
- \_\_\_/50 TOTAL EARNED

**Total Score: \_\_\_\_\_/300**