**SCIENCE FAIR UNIT: Table of Contents/Grade Breakdown**

**Experimental Method in Bold,** *Engineering in Italics*

|  |  |  |  |
| --- | --- | --- | --- |
| **Scientific Method**  | **Task** **(Individually required/graded tasks are shaded in)** | **Point Value** | **Dead-line**  |
| **Ask Question***Define Problem* | Brain storming Session |  | Wk 2 |
| Research Team (Entire Class) Goal Chosen All Projects will be centered around this broader topic |  | Wk 2 |
| Form Project Team (2-3 classmates of similar interests/skills) |  | Wk 7 |
| Independent Researchers (students who wish to do a non-related topic) |  | Wk 7 |
| ***Preparation*** “Background Research” Research Plan Project Approval Process | ISEF FORM 1A: Research Plan “Project Proposal and Experimental Design” (20% of paper) |  | Wk10 |
| ᶧISEF FORM 1A: Student Checklist |  | Wk10 |
| ISEF FORM 1: Checklist for Adult Sponsor |  | Wk11 |
| Additional ISEF Forms: 2-4 are dependent on experiment |  | Wk12 |
| ISEF FORM 1B: Approval Form |  | Wk13 |
| ᶧBackground Research Paper | **50** | Wk15 |
| **Construct Hypothesis***Specify Requirements*  | Hypothesis Rough Draft (10% of paper) “Project Proposals” |  | Wk15 |
| **Trouble-shoot Procedure** *Choose Solution/**Develop Prototype*  | Perform Procedure |  |  |
| Adjust parameters, experiment, correct variables, etc.(Repeat as necessary) |  |  |
| Perform Final Procedure |  |  |
| **Analyze Data***Test Solution* | Data/Data-Analysis/Conclusions (20% of paper) |  |  |
| **Communicate Results**This is done throughout.Done for the purpose of Peer-Review  | Science Fair Notebook (1 per Project Team) | **50** |  |
| Title Page  | **5** |  |
| Results Paper (Data/Data Analysis/Conclusions/Discussion) | **50** | Wk16 |
| ISEF FORM 1C: Qualified Scientist evaluation of student. |  | Wk16 |
| Science Fair Board | **20** | Wk17 |
| ISEF FORM: Abstract (included with board) | **20** | Wk17 |
| ᶧ**Peer review** (throughout), Discussion groups, pre-grading,  |  |  |
| Derousie Science Fair  | **100** | Wk17 |
| RHS Science Fair (3rd Quarter)-Participation | \*30 |  |
| Clay County Science Fair (3rd Quarter)-Participation | \*35 |  |
| State Science Fair (4th Quarter) -Participation | \*35 |  |
| International Science Fair (4th Quarter) -Participation | \*50 |  |
| International Science Fair (4th Quarter) –Placing 1st-3rd  | \*150 |  |

ᶧIndividual Grade, \*Possible Bonus Points

Term Paper Components in gray.

Deadlines are on the Friday of the assigned week.

Students are encouraged to work ahead; since if they only finished items by the deadline they will only have 2 weeks to perform their experiments (Thanksgiving break and week #16)



NOTE: Have these Taped to front of Science Fair notebook for appropriate projects

[http://3.bp.blogspot.com/-8F4aV3CoFDY/UFTFABpK3BI/AAAAAAAAATA/o0sxq3W1sIA/s1600/seps+in+scientific-method+-+Copy.png](http://3.bp.blogspot.com/-8F4aV3CoFDY/UFTFABpK3BI/AAAAAAAAATA/o0sxq3W1sIA/s1600/seps%2Bin%2Bscientific-method%2B-%2BCopy.png)