2017-2018 TIMELINE FOR ERHS STEM SCIENCE FAIR PROJECT:

DETAILED CHECKLIST

|  |  |  |
| --- | --- | --- |
| ASSIGNMENT OR PORTION OF PROJECT | DUE DATE | POINTS |
| Begin research. Print, read and take notes on **2 articles** related to your topic of interest. Use Lang Arts method of online note-taking. | ***Friday***, 9/1/17  ***Monday***, 9/4/17  Due day depends on O/E |  |
| Obtain a 1-1.5 inch binder. Start to assemble your **appendix** with your first research articles and notes.  1 binder/group | ***Friday***, 9/1/17  ***Tuesday***, 9/5/17 |  |
| Cont. research. Print, read and take notes on **2 articles** related to your topic of interest. Use Lang Arts method of online note-taking. | ***Friday***, 9/8/17  ***Monday***, 9/11/17 |  |
| Cont. to build your appendix. Place these new notes/articles in that section.  Signed **group contracts** formally due! | ***Friday***, 9/8/17  ***Monday***, 9/11/17 |  |
| Choose a **question/problem** to investigate. Must be worded in question format. | ***Friday***, 9/8/17  ***Monday***, 9/11/17 |  |
| Develop **hypothesis**. Must be worded in answer format. | ***Friday***, 9/8/17  ***Monday***, 9/11/17 |  |
| Define all **variables** related to your investigation. These include the manipulated variable, responding variable and the controlled variables. | ***Friday***, 9/8/17  ***Monday***, 9/11/17 |  |
| Submit your **first** **Q&H form** with identified variables. | ***Friday***, 9/8/17  ***Monday***, 9/11/17 |  |
| Cont. research. Print, read and take notes on **2 articles** related to your topic of interest. These articles must address specific Q&H. Cont. to build your appendix. | ***Friday***, 9/15/17  ***Monday***, 9/18/17 |  |
| **Refine** your **Q&H form**. Be sure to include detailed variables. Submit old form for reference. Must show changes to original. | ***Friday***, 9/15/17  ***Monday***, 9/18/17 |  |
| Cont. research. Print, read and take notes on **2 articles** related to your topic of interest. Cont. to build on appendix. These must address specific Q&H. | ***Friday***, 9/22/17  ***Monday***, 9/25/17 |  |
| Submit your **final** **Q&H form** for approval. Include old form for reference. | ***Friday***, 9/22/17  ***Monday***, 9/25/17 |  |
| Construct the essay on the **background** and purpose of yourproject– state and explain the key scientific principles (include evidence; even formulas, if possible) central to the project itself. Min. of 3 pages. | ***Thursday***, 10/5/17  ***Friday***, 10/6/17 |  |
| **Experimental Design** - Describe and submit the experiment to prove/disprove the question. Include details on how you will test and how you will measure. Min. of ½ pg. | ***Thursday***, 10/5/17  ***Friday***, 10/6/17 |  |
| **Experimental Forms** - Human Subjects/animal consent forms due if this applies to you. | ***Thursday***, 10/5/17  ***Friday***, 10/6/17 |  |
| **Materials List -** Thorough bullet point list of all items you will utilize during your experiment.  **Methods** (Procedure) – number this list step by step. Min. of 25 steps. | ***Thursday***, 10/12/17  ***Friday***, 10/13/17  ***Thursday***, 10/12/17  ***Friday***, 10/13/17 |  |
| Begin your **experiment**/investigation; Make observations frequently, regularly; Collect **data.** | ***Friday*,** 10/13/17 |  |
| **Log Check #1** - detailed notations on experimental observations will be due today. The experiment does not need to be complete. Frequency and quality of data collection will be checked. For each entry include day, date, time in left margin and pertinent data/observations to the right. Only record a new time if there are multiple entries in a day. | ***Thursday***, 11/2/17  ***Friday***, 11/3/17 |  |
| Be sure to take **photos** during the experimental portion of the project! | ***Thursday***, 11/2/17  ***Friday***, 11/3/17 |  |
| **Log Check #2** - detailed notations on experimental observations will be due today. The experiment does not need to be complete. Frequency and quality of data collection will be checked. For each entry include day, date, time in left margin and pertinent data/observations to the right. Only record a new time if there are multiple entries in a day. | ***Thursday***, 11/16/17  ***Friday***, 11/17/17 |  |
| Complete the experiment. Organize data into **tables** and **graphs** (must be computer-generated). | ***Thursday***, 11/30/17  ***Friday***, 12/1/17 |  |
| Write up **results**. This section is still about the numbers. Here you will discuss any patterns or important relationships that you have identified within your data. | ***Thursday***, 11/30/17  ***Friday***, 12/1/17 |  |
| Compose your **conclusion**. In this section, you will reflect on your original hypothesis (was it right, wrong and why?), what your data actual says about your question and how your results contribute to the field of science. | ***Thursday***, 12/7/17  ***Friday***, 12/8/17 |  |
| Finish your notebook:  Write an **abstract**.  Submit your **annotated bibliography.**  Complete your **appendix** at the end of the binder. | ***Thursday***, 12/14/17  ***Friday***, 12/15/17 |  |
| *WINTER BREAK!* | ----------------------- |  |
| Design the **visual display/exhibition board** for your project. | ***Tues*,** 1/16/18  ***Wed*,** 1/17/18 |  |
| **Final Science Fair Project Submission** | ***Monday***, 1/22/18  ***Tues***, 1/23/18 |  |
| ***Presentation of project to follow: TBA*** |
|  |