For all exhibits, be prepared to explain:

1) What did you plan to learn or do? (What was your exhibit goal(s)?)
2) What steps did you take to learn or do this? Explain what you wanted to do so it is easily understood. The judge wants to know and understand the steps you used to make your exhibit.
3) What were the most important things you learned?

All scientific investigations should include the following:

- Well defined question
- Background research on the topic
- Clear plan and process for investigating the question
- Careful records on the investigation process and results
- Orderly presentation of the investigations important phases
- Careful collection and organization of data
- Clearly stated reasons for all conclusions
- Conclusions that follow logically from the data collected during the investigation
- Sources of background information are cited in investigation notes and/or display
As youth become more advanced in their scientific investigations look for the following:

- Creativity or originality in the question asked, approach, or data analysis and interpretation
- Background research that goes beyond popular literature to include scientific sources
- Changes in the plan to accommodate unforeseen complications carefully recorded and accounted for in analysis
- Appropriate and thorough Data analysis
- Sufficient data collected to justify the youth’s confidence in their conclusions
- Youth understand the limitations of their investigation, its data, and conclusions
- Youth understand how their research fits into the larger body of scientific knowledge on this topic
- Youth understand what further research is needed