## 20 Questions You Can Ask

- 1. How did you get this idea?
- 2. What was the most interesting background reading you did?
- 3. Which are your control factors/your variables? What is/are the difference(s) between your control & experimental groups(s)?
- 4. Where did you get your animals (bacteria, plants, etc.)?
- 5. What skills did you acquire to do this project?
- 6. What help did you receive from others (students, adults, teachers, family, etc.)?
- 7. How many times did you repeat this experiments and what changes, if any, did you make?
- 8. Why did you choose the statistical test used and what do your results mean?
- 9. Explain this graph to me.
- 10. What is the most important thing you found out in doing this experiment?
- 11. What changes would you make if you continued this project next year?
- 12. What application does this project have to your/my life?
- 13. Is this a continuation of an earlier year's project and has a full year's work been added to that done previously?
- 14. How does this experiment conform to the scientific method?
- 15. What experimental errors are in your project and how did you correct them?
- 16. How did you determine the sample size to be used?
- 17. Explain your procedure to me.
- 18. How does your project differ from others you researched?
- 19. Where was your project done?
- 20. What does this (some project detail) mean?

## **GUIDELINES SUMMARY**

Judges should look for sound evidence of:

- > the scientific method (proper sample size, variables and controls) creativity
- thoroughness (lots of data)
- validity of conclusions
- > quality of written presentation
- > quality of visual presentation

