BIOLOGY/MICROBIOLOGY

Description

The science of life or of the origin, structure, reproduction, growth and development of living organisms collectively.

Projects in this category could involve the biology of organisms from the macroscopic scale to
the microscopic scale (e.g., bacteria, viruses, protozoa, fungi, yeast, genes, etc.)

Project Submission

1. Single Entry per Competition: Only one project may be submitted per competition.
2. Scientific Paper:
    - Content: Submit a double-spaced scientific paper (maximum 20 pages) that includes:
        - Introduction: Background and purpose of the research.
        - Experimental Section: Methods and results.
        - Conclusion: Discussion of results and implications.
    - Formatting: Include tables, graphs, charts, maps, photographs, raw data, references, and acknowledgements.
    - Identification: Each page must include the student's name, page number, unit name, and number.
    - Supporting Documents: Submit all supporting documents with the scientific paper.

Oral Presentation

3. Presentation Time: Deliver a minimum 10-minutes oral presentation. Additional time may be allotted for the judge's questions and responses.

4. Equipment: Contestants are responsible for providing their own equipment.
5. Display Board*:
    - One Board per Entry: Each qualifying entry requires a separate display board.
    - Relevance: Ensure the display board content is directly related to the competition.
    - Shared Items: Demonstration items may be transferred between displays if necessary.
    - Power and Tables: The NAACP ACT-SO Program will provide electrical power and display tables upon request (subject to deadlines).
    - *Acceptable display boards include trifold, pentafold, and foam core. Poster boards are not permitted

STEM Verification

Submit a completed STEM Verification Form signed by a qualified scientist or science teacher with a professional degree or license. This individual can also serve as a coach, guiding the student throughout the research process.

Judging Criteria

Category	Criteria	Points
Quality of Research	Scientific Approach/Method	20
	Validity of Information	10
	Validity of Conclusion(s)	10
Depth of Understanding & Oral Presentation	Knowledge Gained and Creativity	20

	Thoroughness & Individual Work	20
Written Report	Clarity and Organization	10
Visual Presentation	Effectiveness of Display	10

Tips for Contestants

- Start Early: Begin your research well in advance to allow ample time for experimentation, data analysis, and report writing.
- Choose a Fascinating Topic: Select a subject that genuinely interests you to maintain enthusiasm throughout the project.
- Master Your Material: Thoroughly understand your research to answer questions confidently during the oral presentation.
- Practice Your Presentation: Rehearse your presentation multiple times to improve delivery and timing.
- Engage Your Audience: Use clear and concise language, visual aids, and storytelling techniques to captivate your audience.
- Anticipate Questions: Consider potential questions and prepare thoughtful responses.
- Seek Feedback: Consult with your mentor or teacher to receive constructive criticism and improve your project.
- Stay Organized: Keep meticulous records of your experiments, data, and observations.
- Be Creative: Use innovative approaches to present your findings and stand out from the competition.
- Have Fun: Enjoy the process of learning and discovery!