## **Planet Protectors**

- 1. **<u>DESCRIPTION:</u>** Teams will be assessed on their knowledge of human interaction with the earth, including interacting positively and negatively with the environment, resource use, and consequences of these interactions.
- 2. ESSENTIAL STANDARDS ALIGNMENT: 1.L.1, 4.L.1
- 3. **TEAM OF UP TO:** 2
- 4. MAXIMUM TIME: 60 min.
- 5. **TEAMS:** Must bring writing instruments and safety goggles.
- 6. **EVENT LEADERS:** Will provide a hands-on event with all necessary items, objects, materials, questions, and response sheets for participants to complete stations.
- 7. **SAFETY REQUIREMENTS**: Safety Goggles (indirect vent goggles)
- 8. **IMPOUND:** No
- 9. <u>THE COMPETITION:</u> This event will be run in a station format. Teams will rotate through stations that assess any or all of the following topics. There may be a hands-on lab portion to this event.
  - a. Helpful interactions with the earth such as reducing, reusing, repurposing, recycling, or composting.
  - b. Harmful interactions with the earth such as strip mining, deforestation, overconsumption, overpopulation, and bycatching.
  - c. Renewable vs. non-renewable resources.
  - d. Energy sources: Coal, Petroleum, Nuclear, Solar, Wind, Wave, Geothermal, Biomass, and Hydroelectric.
  - e. Point and non-point pollution including air, water, groundwater, noise, and light.
  - f. Best practices for conservation and pollution prevention.
  - g. Consequences of not using best practices, especially the Great Pacific Garbage Patch, ozone layer depletion, ocean acidification, loss of biodiversity, and climate change.
  - h. Air quality index ratings and their impact on individual's health.
- 10. **SCORING:** Points will be awarded for the accuracy of responses. Ties will be broken by the accuracy or quality of answers to selected questions chosen by the event leader prior to competition.
- 11. EVENT RESOURCES:

See the Event Resources tab on our website at www.sciencenc.com for instructions, videos and more.