

## SOLAR SYSTEM: SKY QUEST

1. **DESCRIPTION:** This event will test a team's knowledge of the solar system, focusing on the interaction between the sun, moon, and earth.

**TEAM OF UP TO:** 2

**APPROXIMATE TIME:** 50 min.

2. **EVENT PARAMETERS:** Must bring writing instruments. No other resources are allowed. Event Supervisors will provide a hands-on event with all necessary items, objects, materials, questions, and response sheets for participants to complete stations. Examples include but are not limited to: reference charts, posters, and models for event.
3. **THE COMPETITION:** This competition will include questions relating to the following topics:
  - a. The Earth/Sun relationship
    - i. Rotation and revolution
    - ii. Day/night, shadows
    - iii. Seasons
  - b. The Earth/Sun/Moon relationship
    - i. Phases and relative positions of all three bodies
    - ii. Tides
    - iii. Lunar and solar eclipses
  - c. Identification and understanding of the planets in our solar system, how they relate to each other in size, order from the sun, physical properties, and what is unique about each one.
  - d. Understanding other planetary objects in our Solar System, including planetoids, moons, asteroids, comets, and meteoroids; including where they are generally located and their individual characteristics.
  - e. Identification of Major Constellations and their Alpha stars from the list below:

### ***Major Constellations and their Alpha star in parentheses, if noted:***

Aquila	Cassiopeia	Hercules	Perseus
Andromeda	Capricornus	Leo (Regulus)	Scorpius (Antares)
Aquarius	Cepheus	Libra	Taurus (Aldebaran)
Bootes (Arcturus)	Cygnus (Deneb)	Lyra (Vega)	Ursa Major
Cancer	Draco	Orion (Betelgeuse)	Ursa Minor (Polaris)
Canis Major (Sirius)	Gemini (Castor & Pollux)	Pegasus	Virgo (Spica)

4. **SCORING:** Points will be awarded for the accuracy of responses. Ties will be broken by the accuracy or quality of responses to preselected questions chosen by the event leader.