

STARRY, STARRY NIGHT

Description: This event will tests student's knowledge of astronomy in two parts.

Number of Participants: 2 Approximate Time: 30 minutes

The Competition:

1. Each team will be given one test booklet and one answer sheet. Team members may consult with each other by writing (no talking). Only one answer for each question will be accepted.

- 2. At the end of the testing period the test booklet and answer sheets will be collected from those teams who have not turned in their responses.
- 3. The contestants will be shown star charts, slides, overheads or photographs of star fields and be asked to identify indicated stars and constellations.
- 4. Contestants should prepare for the test by looking through astronomy periodicals or textbooks for pictures of the moon, planets, star clusters, nebula, or galaxies.

Part I: The contestants will identify the following celestial objects:

- 1. At least 5 constellations (See attached list of stars and constellations.)
- 2. At least 5 stars. (See list.)
- 3. At least 3 planets.
- 4. The moon and/or any of its phases.
- 5. The sun.
- 6. The totally eclipsed sun.
- 7. A spiral galaxy, a nebula, a star cluster and a comet.

Part II: The contestants will answer a series of written questions about important astronomical facts and concepts:

- 1. Distinguish between the motions of rotation and revolution.
- 2. State the effects produced by rotation and revolution of the earth.
- 3. Demonstrate knowledge about units of time (day, month and year) and their astronomical basis.
- 4. Arrange a group of bodies according to their relative sizes from largest to smallest.
- 5. Arrange a group of objects according to their distance from either the sun or the earth.
- 6. Demonstrate knowledge about the seasons on the earth and their causes.
- 7. Be able to name and identify the phases of the moon and state the factors that produce them.
- 8. Demonstrate knowledge about the celestial sphere and the following points: zenith, horizon, four directions, celestial meridian, north celestial pole, and ecliptic.
- 9. Demonstrate knowledge about the members of the solar system.
- 10. Demonstrate knowledge about solar and lunar eclipses and the conditions that produce them.



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CONSTELLATION	STARS or	CLUSTERS*
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Aquila Altair Bootes Arcturus Canis Major Sirius Canis Minor Procyon

Cassiopeia Cepheus

Deneb Cygnus

Draco

Gemini Castor

Pollux

Regulus Leo Vega Lyra Betelgeuse Orion

Rigel

Pegasus

Scorpio Antares Aldebaran Taurus

Pleiades (7 sisters)*

Hyades*

Ursa Major Merak

Dubhe

Ursa Minor Polaris Spica Virgo

Scoring:

All questions will be evaluated with equal weight. The contestant attaining the highest score will be declared the winner.

NOTE: Students should bring a red penlight.

Check http://skymaps.com/articles/index.html for Star Charts