



Planetary Moon Club

Raleigh Astronomy Club

Version 2.1 18-January-2008

Introduction

Welcome to the Planetary Moon Observing Club. Have you done the RAC Planet Club and are looking for a additional planetary challenge? Then this program is for you! This is an advanced observing club and will test your observing and/or imaging skills. These observations will require some experience, dark skies, and some patience to complete. There are two levels, Silver and Gold. The Silver can be done with relatively modest equipment, but the Gold level will require an instrument of at least 8 inches (to see visually) and will be a real challenge.

You need to either image or sketch the objects, but don't worry about being a great artist, just start with one of templates provided and just do your best. Enjoy your planetary moon hunting!

Rules

In order to earn the Silver Planetary Moon Award, the applicant must meet the following qualifications:

1. Be a member in good standing of the Raleigh Astronomy Club.
2. Complete four of the six requirements of the program below.
3. Record the time and date of each observation or image.
4. Any record sheet/format can be used. There is an attached form that can also be used.
5. Use of Go-To and Digital Setting Circles are permitted.
6. Have your sketches or images reviewed by the Raleigh Astronomy Club Observing Club Coordinator.

In order to earn the Gold Planetary Moon Award, the applicant must meet the following qualifications:

1. Be a member in good standing of the Raleigh Astronomy Club.
2. Complete all of the requirements of the program below.
3. Record the time and date of each observation.

4. Any record sheet/format can be used. There is an attached form that can also be used.
5. Use of Go-To and Digital Setting Circles are permitted.
6. Have your sketches or images reviewed by the Raleigh Astronomy Club Observing Club Coordinator.

Requirements and Tips

Moon – It does count as an observable object, so any image/sketch of the moon is acceptable, whether naked eye, binocular, or telescopic.

Mars – Observe and/or image either Phobos and/or Deimos. This is easiest when Mars is closest to earth, but you may need an occulting bar on your eyepiece to block out the glare of Mars itself.

Jupiter – Observe/Image and identify the four largest moons of Jupiter (Ganymede, Io, Callisto, and Europa). A useful finder utility for Galilean moons is at http://skyandtelescope.com/observing/objects/planets/article_830_2.asp .

Saturn – Observe/Image and identify five moons of Saturn. The moons Titan, Rhea, Dione, Tethys, and Enceladus can all be seen in a 6-8” scope. A good utility for finding them can be found at http://skyandtelescope.com/observing/objects/planets/article_1136_2.asp .

Uranus – Observe/Image and identify two of the Moons of Uranus. Refer to http://skyandtelescope.com/observing/objects/planets/article_1549_1.asp and <http://www.skyhound.com/sh/challenge.html> for details on the moons positions. The outer moons, Titania and Oberon, can be seen with an 8-inch telescope under dark skies, but the inner moons Ariel and Umbriel will need a much larger instrument.

Neptune – Observe/Image one of Neptune's moons, most likely Triton. More information is at <http://www.umich.edu/~lowbrows/reflections/2005/dscobel.20.html> .

Good Luck and Good Observing!!

RAC Planet Club

Observation List

Observer Name: _____

Instruments Used: _____

		<i>Date</i>	<i>Time</i>	<i>Location</i>
[]	1. Moon	_____	_____	_____
	2. Mars (one needed)			
[]	Phobos	_____	_____	_____
[]	Deimos	_____	_____	_____
	3. Jupiter (four needed)			
[]	Ganymede	_____	_____	_____
[]	Europa	_____	_____	_____
[]	Io	_____	_____	_____
[]	Callisto	_____	_____	_____
	4. Saturn (five needed)			
[]	Titan	_____	_____	_____
[]	Rhea	_____	_____	_____
[]	Tethys	_____	_____	_____
[]	Dione	_____	_____	_____
[]	Enceladus	_____	_____	_____
	5. Uranus (two needed)			
[]	Titania	_____	_____	_____
[]	Oberon	_____	_____	_____
[]	Ariel	_____	_____	_____
[]	Umbriel	_____	_____	_____
	6. Neptune (one needed)			
[]	Triton	_____	_____	_____

JUPITER/SATURN SKETCH SHEET



Date : _____

Time : _____

Location : _____

Instruments : _____

URANUS/NEPTUNE SKETCH SHEET



Date : _____

Time : _____

Location : _____

Instruments : _____