

The Sky at Night

The Moore Winter Marathon - Observing Form (Telescopic Targets, items 26-50)

Thanks for taking part in the Sky at Night's Winter Moore Marathon challenge. We would like you to tell us which of our selected objects you've managed to find. If you've managed to grab any images, then you can share them via our Flickr group at www.flickr.com/groups/bbcskyatnight

Please print the form, then write in as much information as you can about the objects, sky conditions and equipment used. For your results to be included in the programme, please return the form to us by the end of January at the latest to...

The Sky at Night Moore Winter Marathon,
BBC Bristol, Whiteladies Road,
Bristol, BS8 2LR

The observing guide for these objects and the naked eye/binocular observing form is available from www.bbc.co.uk/skyatnight.

We will not pass your email address or phone number on to anyone else.

Your name:

Address:

Phone number:

Email address:

Filling out the form is easy...

Write your comments here

26 Crab Nebula (M1) in Taurus	Rating - Medium
Visibility - Visible most of the night	
Comments... <i>Wow!! Never seen this before - just a smudge but just think this is the remains of a star which exploded!</i>	
Seen it <input checked="" type="checkbox"/>	Date 12 / 11 / 12 Time 23:00 Equipment 6-inch reflector, x150

Tick this box when you've seen the subject

Enter the date you saw it here

Enter the time you saw it here (use GMT)

Tell us what you saw it with here

The visibility guidelines for each entry have been compiled assuming you're located in the UK and are correct for November 2012 to January 2013.

26 Crab Nebula (M1) in TaurusRating - *Medium*Visibility - *Visible most of the night*

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**27 Messier 77, galaxy in Cetus**Rating - *Hard*Visibility - *Nov best seen 21:00-01:00, Dec best seen 19:00-23:00, Jan best seen 19:00-21:00*

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**28 Jupiter's Great Red Spot (GRS)**Rating - *Easy*Visibility - *Jupiter's up for most of the night. For timings on the visibility of the GRS, see the observing guide*

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**29 Little Dumbbell (M76) in Perseus**Rating - *Medium*Visibility - *Nov - well placed all night, Dec-Jan best seen after night falls*

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**30 Eskimo Nebula, Gemini (Caldwell 39)**Rating - *Medium*Visibility - *Up for most of the night*

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**31 Flaming Star Neb., Auriga (Caldwell 31)**Rating - *Hard*Visibility - *Up for most of the night*

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment

32 Fish's Mouth, part of Orion NebulaRating - *Easy*

Visibility - Nov best seen 23:00-04:00, Dec best seen 21:00-02:00, Jan best seen 19:00-midnight

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**33 Trapezium Cluster in Orion Nebula**Rating - *Easy*

Visibility - Nov best seen 23:00-04:00, Dec best seen 21:00-02:00, Jan best seen 19:00-midnight

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**34 Hind's Crimson Star (R Leporis)**Rating - *Medium*

Visibility - Nov best seen 23:00-04:00, Dec best seen 21:00-02:00, Jan best seen 19:00-midnight

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**35 Owl Cluster, Cassiopeia (Caldwell 13)**Rating - *Easy*Visibility - *Visible all night*

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**36 Caldwell 50, cluster in Monoceros**Rating - *Easy*Visibility - *Up most of the night*

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**37 Gamma Arietis, binary star**Rating - *Easy*Visibility - *Up most of the night*

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment

38 M78, nebula in OrionRating - *Medium*Visibility - *Nov best seen 23:00-04:00, Dec best seen 21:00-02:00, Jan best seen 19:00-midnight*

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**39 Hubble's Variable Nebula (Caldwell 46)**Rating - *Hard*Visibility - *Up for most of the night*

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**40 Messier 74, galaxy in Pisces**Rating - *Hard*Visibility - *Nov best seen 21:00-01:00, Dec best seen 19:00-23:00, Jan best seen 19:00-21:00*

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**41 NGC 604, nebula in Messier 33**Rating - *Hard*Visibility - *Up for a large part of the night Nov-Dec, best viewed just after darkness falls during Jan*

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**42 Beta Monocerotis - triple star**Rating - *Medium*Visibility - *Up for most of the night*

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**43 NGC 1647, cluster in Taurus**Rating - *Medium*Visibility - *Up for most of the night*

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment

44 M79, globular cluster in LepusRating - *Medium*

Visibility - Nov best seen 23:00-04:00, Dec best seen 21:00-02:00, Jan best seen 19:00-midnight

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**45 NGC 1535, planetary in Eridanus**Rating - *Hard*

Visibility - Nov best seen 23:00- 01:00, Dec best seen 21:00-23:00, Jan best seen 19:00-21:00

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**46 NGC 1514, planetary in Taurus**Rating - *Medium*Visibility - *Up for most of the night*

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**47 NGC 2232, cluster in Monoceros**Rating - *Easy*Visibility - *Up for most of the night*

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**48 Caldwell 56, planetary in Cetus**Rating - *Medium*

Visibility - Nov best seen 19:00-22:00, Dec best seen 17:00-20:00, not well seen in January

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**49 Mirach's Ghost (NGC 404)**Rating - *Medium*Visibility - *Up for a large part of the night Nov-Dec, best viewed just after darkness falls during Jan*

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment

50 **Messier 52, cluster in Cassiopeia**Rating - *Easy*Visibility - *Up all night*

Comments...

Seen it Date dd / mm / yy Time hh : mm Equipment**Some Notes about observing The Moore Winter Marathon objects...**

The objects listed here are for viewing with a telescope. We've indicated which is which against each entry. Don't worry if you're not that familiar with astronomy and feel a bit daunted. A helpful guide will be made available on our bbc.co.uk/skyatnight web page. This explains how to find each object in simple, everyday language and, where appropriate, will give you a starchart to help you on your way.

Just to keep you on your toes, most of the objects we've chosen here are a little off the beaten track but should be viewable even in small instruments. This is deliberate and we hope you enjoy seeing and discovering some objects which you may not have visited before.

If you want to have a go, it's best to find a dark site, away from any stray lights. Give yourself a while to get properly dark adapted. Ideally, 20 minutes in darkness will get your eyes sensitive to the dark.

It can get very cold out on a winter's night so it's essential to wrap up nice and warm, especially if you're going to be standing around for a while.

The Moon will interfere with the view when it's up. You'll find the period from November 8-19 should be relatively Moon-free, as will the period between December 8-19 and January 7-19. At other times you may have to dodge the Moon's glare.

The Moon's phases (Nov-Jan) are as follows:

Last quarter (Nov 7)
New Moon (Nov 13)
First quarter (Nov 20)
Full Moon (Nov 28)
Last quarter (Dec 6)
New Moon (Dec 13)
First quarter (Dec 20)
Full Moon (Dec 28)
Last quarter (Jan 5)
New Moon (Jan 11)
First quarter (Jan 18)
Full Moon (Jan 27)
Last quarter (Feb 03)

Observing when there's a full Moon in the sky can be tricky. The best views are to be had around the new Moon.

Good luck and clear skies!