





**Question of the month**  
**WHO IS CONSIDERED AS THE FATHER OF OBSERVATIONAL ASTRONOMY?** *Answer in next month's issue*



**Moon phases**

First quarter	December 21, 2020	04:42:31 PM	249,204 miles
Full moon	December 29, 2020	08:30:24 PM	244,630 miles
Last quarter	January 6, 2021	02:38:35 AM	226,614 miles
New moon	January 12, 2021	10:02:37 PM	234,586 miles

**What Are Sunspots?**

**ANSWER:** Sunspots are darker, cooler areas on the surface of the sun in a region called the photosphere. The photosphere has a temperature of 5,800 degrees Kelvin. Sunspots have temperatures of about 3,800 degrees K. They look dark only in comparison with the brighter and hotter regions of the photosphere around them. They are caused by interactions with the Sun's magnetic field which are not fully understood. But a sunspot is somewhat like the cap on a soda bottle: shake it up, and you can generate a big eruption. Sunspots occur over regions of intense magnetic activity, and when that energy is released, solar flares and big storms called coronal mass ejections erupt from sunspots.

**We Encourage members/non-members to get involved in star-gazing activity,**

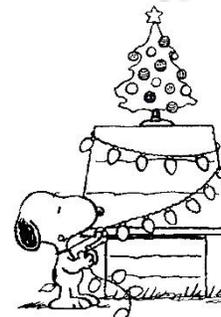
We have The Beginners Certificate and Messier Certificate and other Certificates on our website. It gives purpose to stargazing. There are always people to help you along. Good luck and clear skies to all.

Bill Montague has logged 27 of the 65 objects from the **Bill's Finest Globular List**

Linda Pulliah has logged 50 of the 110 objects from the **Finest NGC's List**

Bob Chapman has logged 1310 of the 2517 objects from the **Complete Herschel List**

Curtis Irish has logged 3 of the 25 objects from the **Beginner's Certificate List**



Congrats to everyone taking part in your beginners certificate or messier list or other list.

**On-going Progress with Certs and Lists**

**E-mail me your progress**, let me know how you're doing, I'll print it in the NBAC News Letter.

For any inquiries or to update me with your progress my e-mail is: [stargazingran@yandex.com](mailto:stargazingran@yandex.com)



The **RASC-Sudbury Centre** welcomes anyone wishing to take part in their virtual meetings to send a request to [rascsudburycentre@gmail.com](mailto:rascsudburycentre@gmail.com) Or many of you know Linda Pulliah you can contact her at [pulliah@fibreop.ca](mailto:pulliah@fibreop.ca) The Sudbury Astronomy Club Meetings are every **first** Friday of each month at 7:30pm-9:30pm. For full details go to [www.sudburyastronomyclub.com](http://www.sudburyastronomyclub.com)

**THE SKIES ARE YOURS TO DISCOVER**  
**stargazingran NBAC**

