# **Stars over Sisters**

#### **By Osmond Bates** & Ramsey Schar

As the weather continues to warm and flowers start to bloom during this first full month of spring, the night skies come alive with new constellations, bright stars, and exciting astronomical events. Probably the brightest and most easily recognized constellation of spring is Leo the mighty lion.

Regulus and Denebola, the two brightest stars in the constellation, mark the beast's heart and point of its tail, respectively.

In the sky, six bright stars define the lion's head that form what looks to be a backwards question mark. Farther to the east, three stars form a right triangle, denoting the cat's hindquarters. Leo is one of the twelve zodiac constellations and lies between Cancer and Virgo.

Besides its collection of bright stars, the constellation contains several magnificent

deep-sky objects as well, all of them galaxies. The most impressive of these are probably M65, M66 and NGC 3628, often referred to as the Leo Triplet.

M65 and M66 are both spiral galaxies discovered by Messier in 1780 and are slightly brighter than nearby NGC 3628, which wasn't found until 1784 by William Herschel. NGC 3628, also called the Hamburger Galaxy, is an unbarred spiral galaxy viewed edge-on. The galaxy's most striking feature is a large band of dust that bisects a puffy galactic disk, indeed reminiscent of a giant celestial hamburger. All three galaxies lie relatively close to one another in space, about 35 million light-years from the earth.

In Greek mythology, Leo is associated with the Nemean Lion who Hercules had to slay as part of his twelve Labors that were required of him to atone for killing his family. This lion was slaughtering local

residents and could not be killed because his skin was impenetrable to any weapons. Hercules, therefore, had to wrestle the beast with his bare hands and strangle it to death. He saw the protective qualities of the skin and used the lion's own claw to cut it from its body and use it as a cloak to protect him through the rest of his labors.

New moon will occur on April 22. This will locate the moon on the same side of the sky as the sun, making it the optimal time to observe faint objects due to the lack of interfering moonlight.

The Lyrid meteor shower will be active from April 16-25. These bright trails of dust are best viewed when they peak on the evening of April 21 and early morning of April 22. This year about 15-20 meteors per hour are expected. Comet Thatcher, which won't return to the vicinity of the earth again until 2276, is responsible for this meteor shower.

A Sagittarius Jupiter and a Capricornus Saturn form a planetary duo as they stick by each other low in the



NGC 3628 is an edge-on spiral galaxy in the constellation of Leo that looks all the world like a giant celestial hamburger.

sky during the early morning hours. Also visible in the morning is Mars, which had a close encounter with Saturn on April 1 and a last quarter moon on April 15.

Meanwhile, Venus continues to dominate the evening sky with its almost blinding brilliance. On April 3 it passed just south of the Pleiades star cluster in Taurus.

## **Commentary...** Free crossword puzzles offer a fine diversion

### By Kema Clark Columnist

Finding free crossword hours or even days. puzzles online has been great in this new world of stay-at-home. The puzzles keep your mind going and get your thoughts off disaster for a while.

Go to https://www. arkadium.com/free-onlinegames/crosswords/ and you'll see pictures of the different free games available.

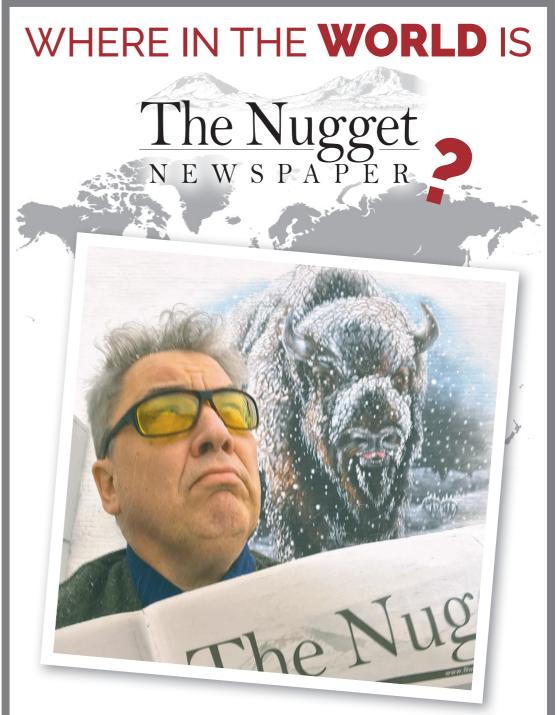
Some don't say "free" in the title of the game, but all that I've opened have been no cost.

Click on one of the games, click on the arrow to hear a few seconds of an ad, click on "skip ad" when immediately, but make sure it pops up, then start a game immediately. Click on a line and type in your answer using your keyboard. You can click a numbered space twice to go from "across" to "down" so you can fill in the spaces exactly like you do with a pencil. Except you don't have to worry about your eraser running out.

game at one time since you can enter a word and don't need to look at it again for

WWF also has a "play with bots" option that's fun. You're playing against a computer, but they have some funny names so you feel like you know them. I won against Planter Pot Pia but lost to Communal Gardener Jim. It's fun to complete a game quickly, because the bot thinks at lightning speed and posts a word immediately.

The WWF games with bots start off easy and get harder as you go through. When you win a game, you can go to the next one you don't "pay to play." Just



You also may be interested in Scrabble-type games.

With Friends (WWF) on Facebook and it's similar to Scrabble. You can play against FB friends, but you don't have to play a full

say no. Come back in a few hours and the next game will be available to play for free.

You can also go to https:// www.scrabblegames.info/ play/scrabble-online and play against bots. I like playing Scrabble online, but it's a pain to drag and drop the letters, then press play to see if what you just made up is a real word. Not that I would ever try to enter a fake word.

Good luck and posi-I've been playing Words tive thoughts to all. I hope you get some fun out of the games and continue to take it day-by-day until we make it through to the end of COVID-19.

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