

STAR CHART (answer)

by Douglas Ferry

This begins as a “connect the dots” puzzle. You must find groups of letters that spell out eight (relatively) well-known stars and, well, connect the dots. Those stars are: Canopus, Betelgeuse, Arcturus, Aldebaran, Vega, Altair, Sirius, and Achernar. See the diagram below.

Once you have the star shapes, you must consider the background grid and the flavor text hint “area” to deduce that you’re supposed to compute the area of the shapes. The most straightforward method is Pick’s Theorem, but there are others.

The areas you get are: Canopus (21), Betelgeuse (19), Arcturus (21), Aldebaran (12), Vega (21), Altair (17), Sirius (5), and Achernar (5). The astute observer will note that these are all integers between 1 and 26, inclusive. Turn them into letters and you have: Canopus (U), Betelgeuse (S), Arcturus (U), Aldebaran (L), Vega (U), Altair (Q), Sirius (E), and Achernar (E).

This should spell out a word, but in what order? You could just brute force anagram it (and doing so will probably get you the answer) but there is actually another way. If you take the flavor text word “distant” as a hint, you might order the stars by distance from Earth. That order is: Sirius (8.7 light-years), Altair (17 light-years), Vega (25 ly), Arcturus (37 ly), Aldebaran (65 ly), Achernar (140 ly), Canopus (310 ly), and Betelgeuse (430 ly).

And this yields the final answer: “EQUULEUS”, which is a constellation in the Southern sky.

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This map of distant stars covers a small area of the sky

