

Keep Texas Wild



STAR PARTY

The stars at night are big and bright in West Texas.

» DON'T BE AFRAID OF THE DARK!

When it comes to stargazing, the blacker the sky the better! Light pollution can make the cool cosmos of outer space difficult to see. But, even in the city, on a clear and moonless night you can spot 1,000 stars. Gaze up in West Texas, the place with the darkest skies in the continental U.S., and you'll spot many more than that! What will you see? It depends on when you gaze. Different constellations appear in the sky depending upon the time of year. West Texas is also home to the world-famous University of Texas McDonald Observatory. There, scientists called "astronomers" study "astronomy," the science of outer space.

★ STARS OVER TEXAS

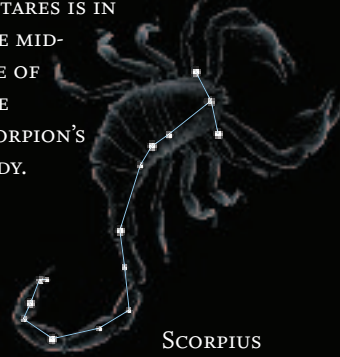
EVERY YEAR THOUSANDS OF STARGAZERS GATHER IN WEST TEXAS FOR THE TEXAS STAR PARTY PROGRAMS. IT'S "LIGHTS OUT!" AFTER SUNDOWN FOR THESE ASTRONOMY FANS SO THEY CAN ENJOY THE DARKEST SKIES POSSIBLE. WHAT DO THEY SEE OVER TEXAS? READ ON AND FIND OUT.

☆ THE LION IS ONE OF THE CONSTELLATIONS OF THE ZODIAC AND IS THE DOMINANT CONSTELLATION OF THE NORTHERN SPRING SKY. IN MYTHOLOGY, HERCULES KILLED THIS LION WITH HIS BARE HANDS.



LEO

☆ THE SCORPION IS A SPRAWLING CONSTELLATION IN THE SUMMER SOUTHERN SKY NEAR THE MILKY WAY. THE BRILLIANT RED STAR ANTARES IS IN THE MIDDLE OF THE SCORPION'S BODY.



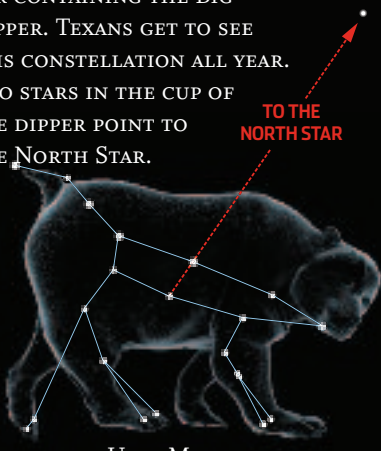
SCORPIUS

☆ THIS PROMINENT CONSTELLATION, WITH THREE STARS IN A ROW MAKING UP THE BELT, IS ONE OF THE MOST RECOGNIZABLE ONES IN THE FALL AND WINTER SKY.



ORION THE HUNTER

☆ THE CONSTELLATION KNOWN AS THE GREAT BEAR IS NOTABLE FOR CONTAINING THE BIG DIPPER. TEXANS GET TO SEE THIS CONSTELLATION ALL YEAR. TWO STARS IN THE CUP OF THE DIPPER POINT TO THE NORTH STAR.



URSA MAJOR

☆ What we call "shooting" or "falling" stars have the official name "meteors." Meteors get made when small bits of rock and debris from outer space whirl into our atmosphere at super speeds. When lots of meteors shoot through the sky around the same time we have "meteor showers." Watch for these two meteor showers: the Perseid meteor shower in August and the Leonid meteor shower in November.

☆ All the stars you see live in the same galaxy that we do — the Milky Way, which contains about 200 billion stars! Ever notice a thick "milky" stream of stars running through the night sky? That's part of an arm of our spiral galaxy.

☆ Of the eight planets in our solar system, you have a good chance of seeing four without a telescope: Venus, Mars, Jupiter and Saturn. Venus shines especially brightly.

☆ Stars are really exploding balls of gases, which blow up and create light. Our very own sun is a star that will keep exploding for another 5 billion years.



☆ Camp close to the world-famous McDonald Observatory, home to the amazing Hobby-Eberly telescope!



Davis Mountains State Park

☆ Stay and stargaze in West Texas, the darkest place in the continental U.S.



Big Bend Ranch State Park

☆ Make a star wheel and learn how to use it at this East Texas park.



Purtis Creek State Park

☆ This North Texas park near the Panhandle has dark night skies that make for extra-special star stargazing!



Copper Breaks State Park

☆ See alligators during the day and outer space through the telescopes of George Observatory at night!



Brazos Bend State Park

☆ STARGAZING IN STATE PARKS

These Texas state parks offer super chances to see super stars!



>> KEEPING IT WILD

Become a Super Stargazer!

1. Wait for a clear and moonless night.
2. Pick a good, dark viewing spot in your yard and put a comfy chair there.
3. Bring this stuff outside so you don't have to go back inside and turn lights on to get them:
 - A blanket and jacket on cold nights
 - A flashlight with red cellophane over the end of it (red disturbs your night vision less)
 - Binoculars
 - A simple star chart
 - A journal to keep track of what you see. Notice how the sky changes over time!
4. Turn your porch and house lights off.
5. It'll take your eyes 20 minutes to get used to the dark – then start spotting special stars!



>> WILD MATH

You know our sun is a star, but did you know that we get a little closer to it in summer?

Yep! And in winter we get a little farther from it. Why? Because of the way Earth tilts on its axis. But, on average, 93,000,000 miles separate us from the sun.

$$\begin{array}{r}
 1 \times 35 \\
 + 2 \div 4
 \end{array}$$



• Write this number in **WORD FORM**:

• Write this number in **EXPANDED FORM**:

• **CHALLENGE:** What would the number be if it were 10 times bigger?

>> WILD ART

Scratch a Constellation

- Color the whole surface of a thick piece of paper with crayons. Use every color **EXCEPT** black. Press hard as you color.
- Color over the whole paper again. This time use **ONLY** black. Press hard as you color.
- Use a pen that no longer writes to scratch away the black crayon and "draw" your favorite constellation into "outer space."



NEXT MONTH:
Ants!

TEACHER RESOURCE

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