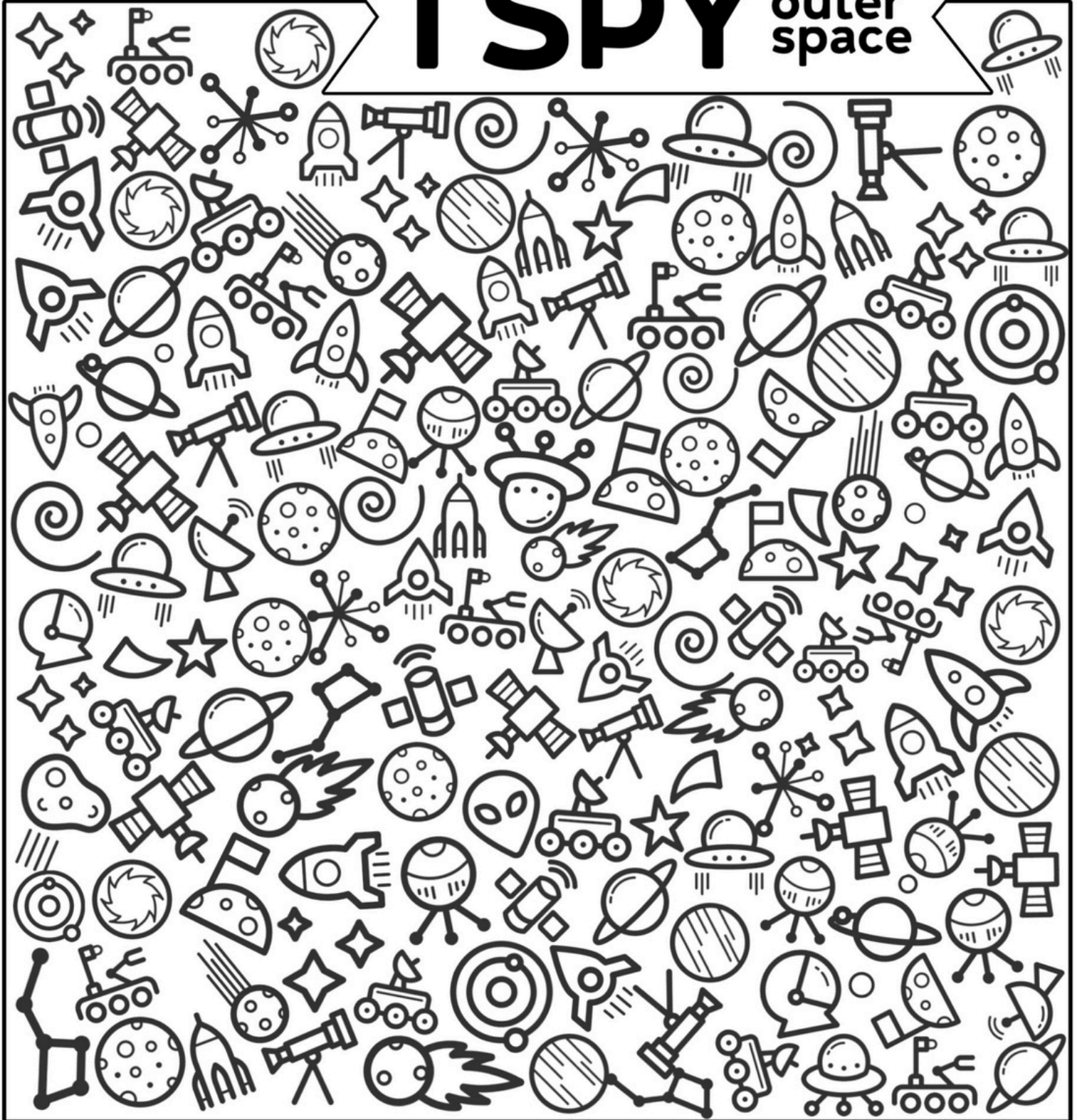


I SPY outer space



- | | | | | | | | | | | | | | | | | | | | |
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| 2 | | 4 | | 4 | | 5 | | 4 | | 5 | | 7 | | 4 | | 6 | | 5 | |
| 1 | | 6 | | 7 | | 1 | | 3 | | 6 | | 7 | | 4 | | 7 | | 5 | |
| 3 | | 3 | | 4 | | 6 | | 2 | | 7 | | 5 | | 9 | | 6 | | 3 | |

Sac County Conservation
KneeHigh Naturalist

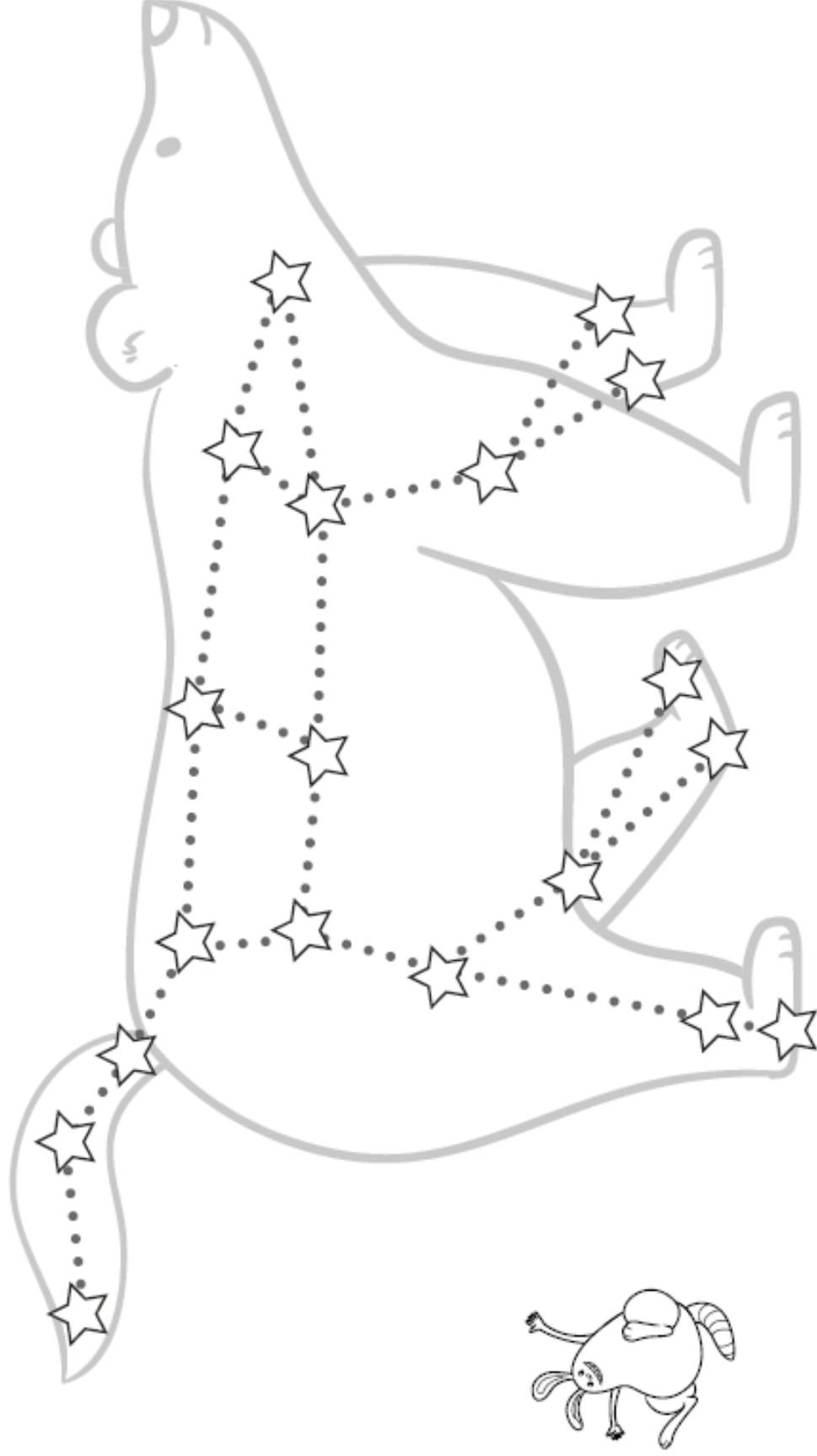
Star Kit

Star Activities

GO OUT AND LOOK AT THE STARS! CHECK OUT THE ENCLOSED STAR MAP TO GET A BETTER IDEA OF WHAT YOU MIGHT BE ABLE TO SEE TONIGHT AND THEN GO OUTSIDE TO LOOK FOR IT. IF YOU CAN, TRY TO GO SOMEPLACE WHERE THERE ARE FEWER LIGHTS AND TRY NOT TO USE FLASHLIGHTS. IT WILL TAKE YOUR EYES ABOUT AN HOUR TO ADJUST TO THE DARK! SO THE LONGER YOU CAN BE PATIENT AND WAIT, THE MORE THINGS YOU WILL SEE.



URSA MAJOR



For more games and activities visit
pbskids.org/readyyetgo

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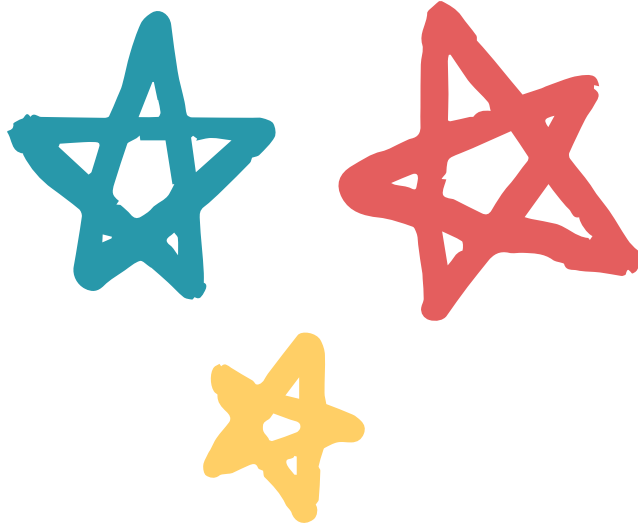
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Star Activities

BUILD YOUR OWN SOLAR OVEN! ATTACH THE TIN FOIL TO YOUR SOLAR OVEN BY PLACING IT ON THE BACK AND WRAPPING IT AROUND THE SIDES. . BEND THE TINFOIL SLIGHTLY DOWN SO THAT AS THE SUN HITS IT, IT WILL REFLECT INTO YOUR SOLAR OVEN. *NOT PROVIDED* YOU COULD GET MARSHMALLOWS AND ATTEMPT TO COOK THEM IN YOUR OVEN OR EVEN THEN PLACE YOUR SOLAR OVEN SOMEWHERE SUNNY. MAKE SURE YOUR TIN FOIL IS FACING TOWARDS THE SUN SO IT REFLECTS INTO THE OVEN, AND NOT AWAY SO IT CREATES A SHADOW. LEAVE IT SIT FOR 30 MINUTES TO AN HOUR



**The sun is a star
we can see
during the
day time!**



Twinkle Twinkle Giant Star

SUNG TO: "TWINKLE, TWINKLE, LITTLE STAR"

**TWINKLE, TWINKLE, LITTLE STAR, I KNOW WHAT YOU REALLY ARE:
A GIANT BALL OF GLOWING GAS, ONE OF BILLIONS IN A MASS!
TWINKLE, TWINKLE, LITTLE STAR, OH, HOW BIG YOU REALLY ARE!
TWINKLE, TWINKLE, GIANT STAR, LARGER THAN THE EARTH BY
FAR!**

**SINCE YOUR DISTANCE IS A LOT, YOU LOOK LIKE A TINY DOT.
TWINKLE, TWINKLE, GIANT STAR, VERY BRIGHT, YET VERY FAR!
STARS ARE TWINKLING, EVERY ONE, SOME ARE BIGGER THAN THE
SUN!**

**JUST A TWINKLE IN THE SKY, JUST BECAUSE YOU'RE OH, SO HIGH!
TWINKLE, TWINKLE, LITTLE STAR, OH HOW BIG YOU REALLY ARE.**

Suggested Reading

Little Kids First Big Book of Space

by Catherine D. Hughes

**A Child's Introduction to the Night
Sky: The Story of the Stars, Planets,
and Constellations--and How You Can
Find Them in the Sky**

by Michael Driscoll

Zoo in the Sky: A Book of Animal Constellations

by Jacqueline Mitton

STARS

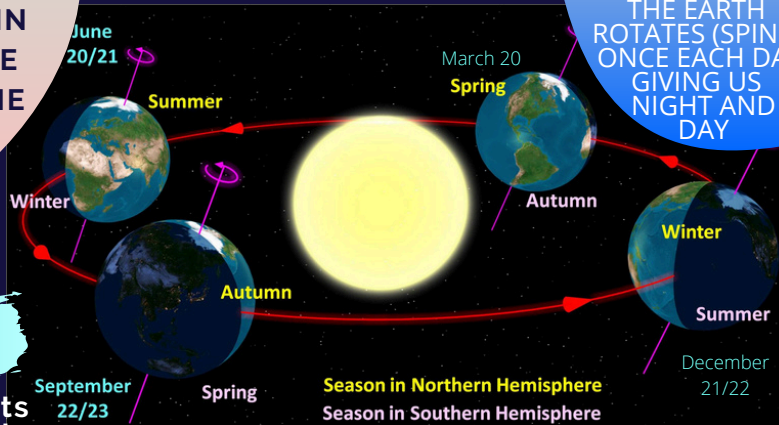
STARS APPEAR TO MOVE IN THE SKY BECAUSE WE ARE MOVING! AS WE ORBIT THE SUN IT CHANGES THE STARS WE CAN SEE.

THE EARTH ROTATES (SPINS) ONCE EACH DAY GIVING US NIGHT AND DAY



Wandering Stars

Early astronomers called planets wandering stars. As they orbit the sun they travel across our sky in different places.



Nebula
IS WHERE NEW STARS ARE FORMED.



IT TAKES JUST OVER 8 MINUTES FOR LIGHT TO TRAVEL FROM THE SUN TO EARTH

STARS APPEAR TO TWINKLE AS THEIR LIGHT IS BENT WHILE TRAVELING THROUGH OUR ATMOSPHERE



Astronomer's Tool

A border in the sky to help find objects in space.

Constellation

The earliest constellation stories are believed to have been from over 17,000 years ago

Based on A Combination of Mythologies (Cultural Stories)

Set by the IAU in 1930

88

official constellations

Sad about Pluto? IAU is the one who decides what makes a planet a planet. Pluto is now a dwarf planet.

THE INTERNATIONAL ASTRONOMICAL UNION IS THE ENTITY THAT OFFICIALLY NAMES ALL SPACE OBJECTS.

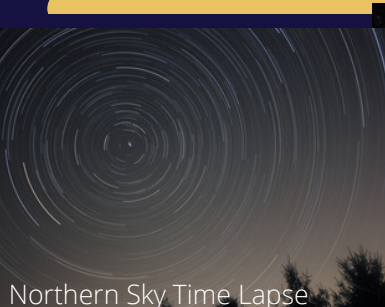
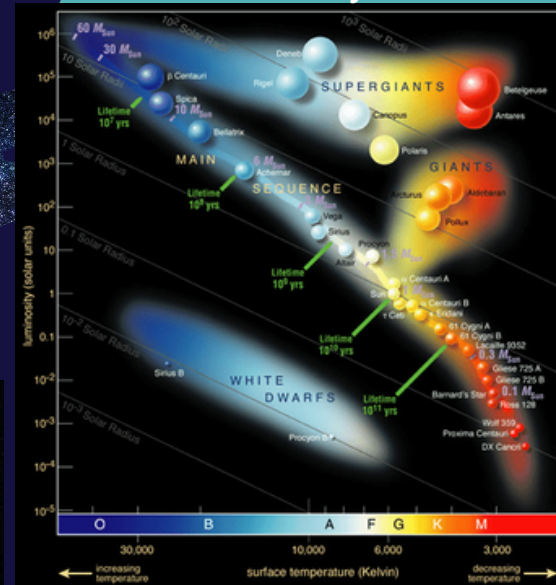
Stars can be different colors depending on how hot they are.

Asterism

An Asterism is a widely known picture in the sky. An example would be the Big and Little dippers. They are a part of the official constellations of Ursa major and Ursa Minor.

Milky Way

The Milky Way is the galaxy we are in. It's full of stars, planets, dust, comets, and much much more! Sometimes you can see it in the sky and it looks like a cloudy band.



Northern Sky Time Lapse



SOME OF THE CONSTELLATIONS IN THE NORTHERN SKY STAY THE SAME ALL YEAR LONG BECAUSE THE EARTH IS TILTED IN THAT DIRECTION. THESE ARE CALLED **Circumpolar Constellations**

THERE ARE **6** CONSTELLATIONS THAT NEVER GO BELOW THE IOWA HORIZON.