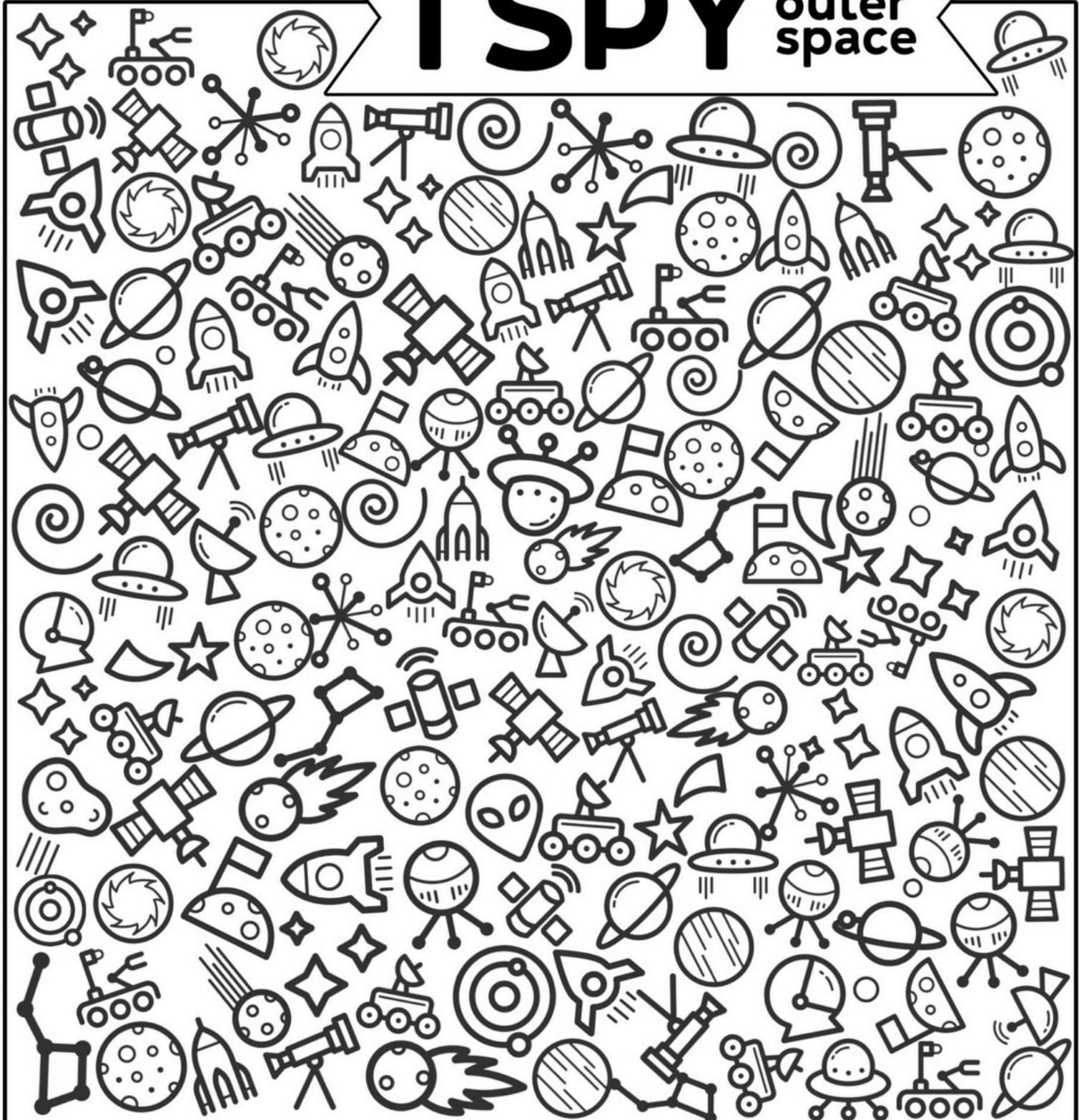


# I SPY outer space



2	⌚	4	⭐	4	💣	5	●	4	🔭	5	🔥	7	✨	4	✳️	6	🛸	5	🚀
1	eteor	6	lander	7	moon	1	alien	3	satellite	6	rocket	7	lander	4	city	7	telescope	5	satellite
3	target	3	meteor	4	satellite	6	planet	2	alien	7	satellite	5	rocket	9	lander	6	coil	3	satellite

Sac County Conservation  
KneeHigh Naturalist ☆

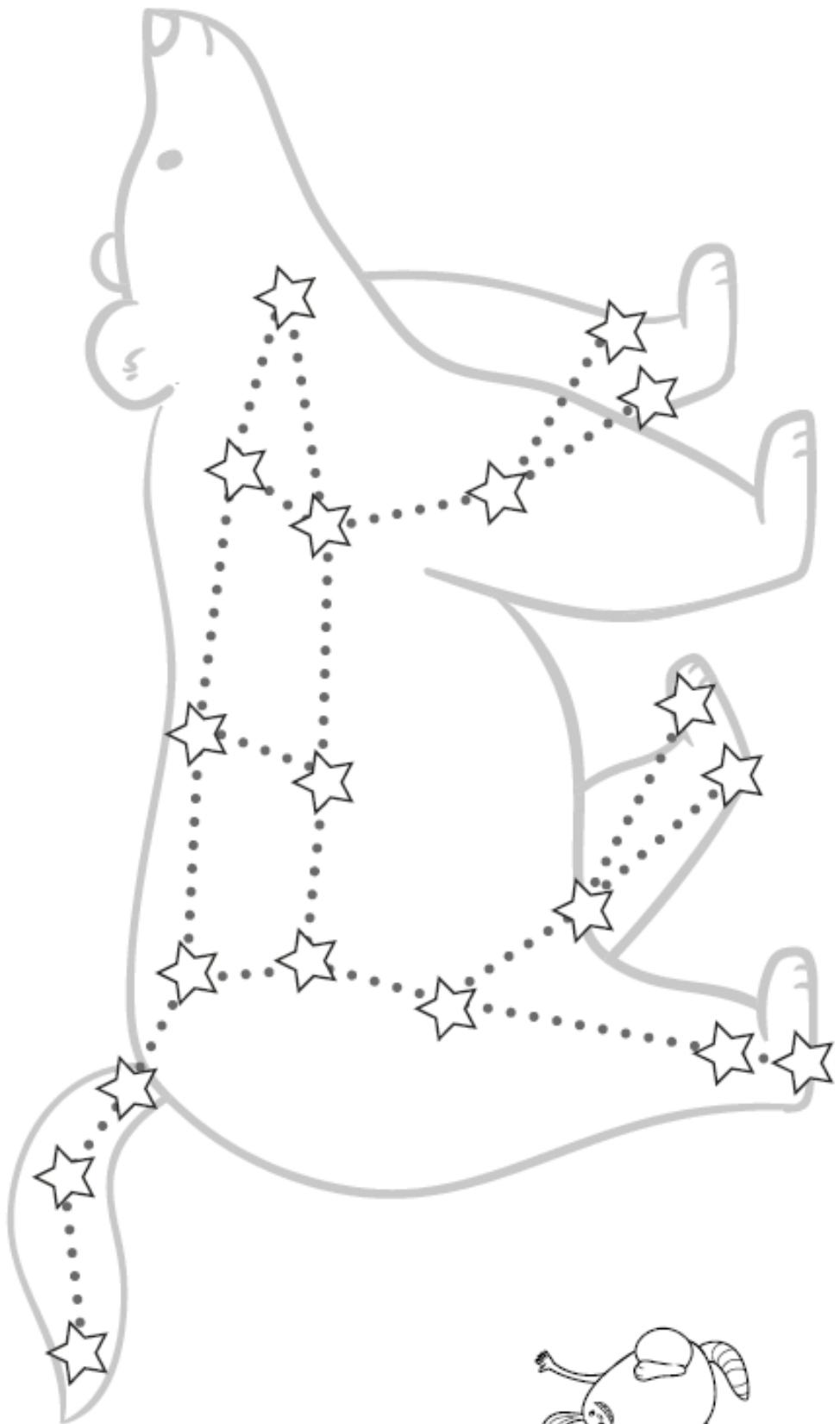
# Star Kit

# 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/readyjetgo](http://pbskids.org/readyjetgo)

WIND DANCER  
F I L M S

© Public Broadcasting Service. All rights reserved.  
Copyright 2018 Jet Propulsion, LLC. Ready Jet Go! and A Kids Place Is Exploring Space  
are registered trademarks of Jet Propulsion, LLC.

Series funding provided by:

KUMON'

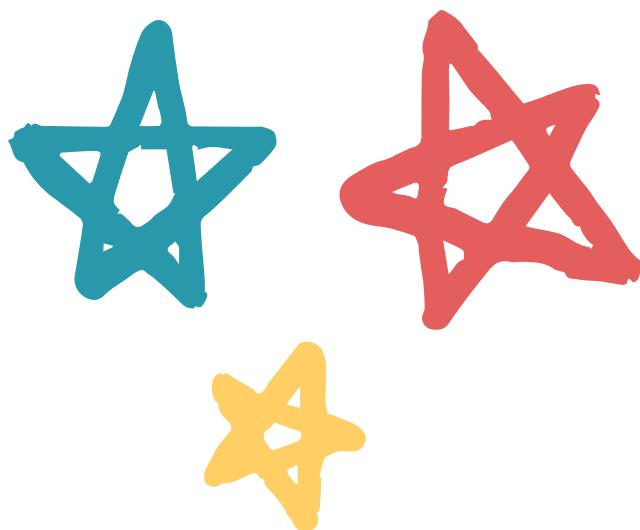
ABCmouse.com®

# 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**

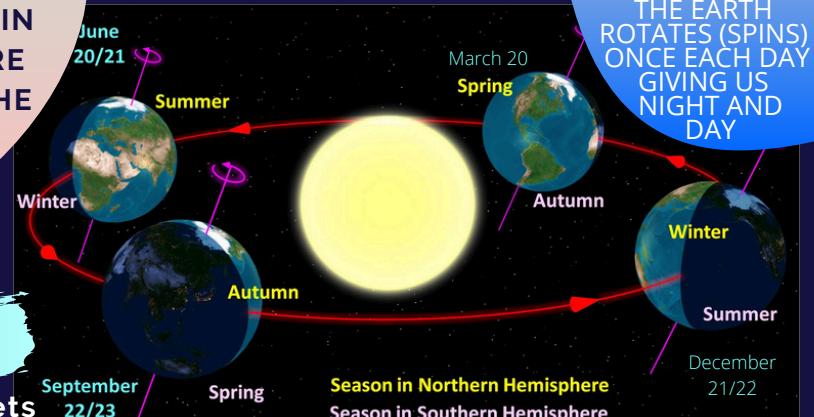
**by Michael Driscoll**

**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.



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

Based on A Combination of Mythologies (Cultural Stories)



Astronomer's Tool

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

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

# Constellation

88 official constellations

Set by the IAU in 1930

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

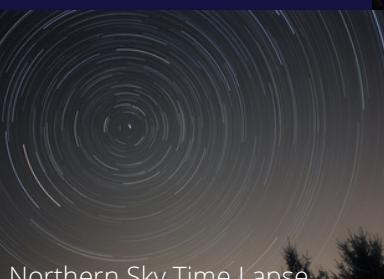


THE INTERNATIONAL ASTRONOMICAL UNION IS THE ENTITY THAT OFFICIALLY NAMES ALL SPACE OBJECTS.

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

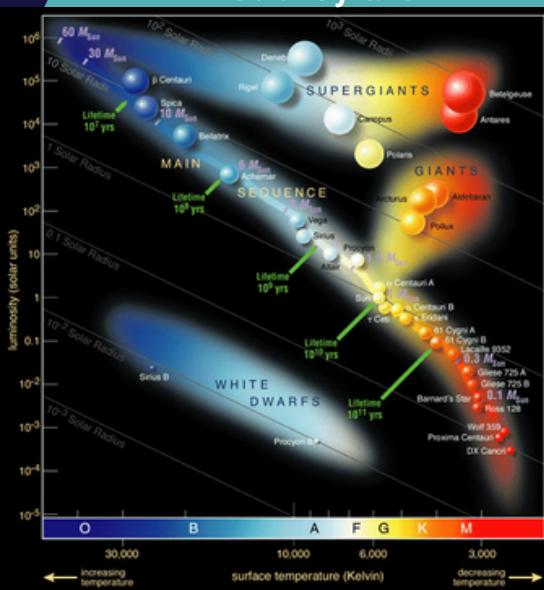
## Asterism

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.



Northern Sky Time Lapse

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



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**