



STARS

PowerPoint & Notes Set



What is a Star?

- A star is a ball of hot gas that gives off light.
- In the sky, stars look like tiny dots of light.
- Stars are not tiny at all. They only look tiny in the night sky because they are so far away.



Stars in the Night sky

- There are billions of stars in the universe.
- How many can we see in the night sky?

There are about 9,000 stars visible to us in the night sky.

Since you can only see half of the sky at a time, you can see about 4,500 stars each night.



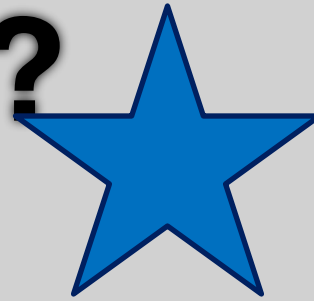
Star Size



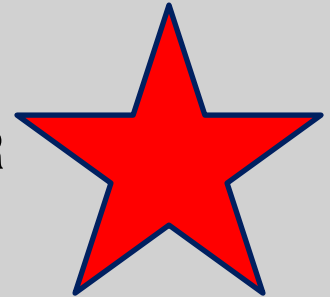
- Stars come in many different sizes.
- Stars can be as small as 20 kilometers across.
- There are some stars that are 100 to 200 times larger than the Sun.

What does Their Color Mean?

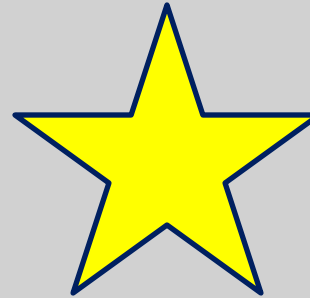
- The color of a star tells us the temperature of the star.
- The star appears blue if it is hotter.
- The star appears red if it is cooler in temperature.
- Medium temperature stars are yellow.



HOT TEMP



COOLER
TEMP



MEDIUM
TEMP

The Sun



- The Sun is a star.
- The Sun is the largest object in the Solar System.
- Compared to other stars, the Sun is not very big.
- The Sun looks so large because it is so much closer to Earth than any other star.

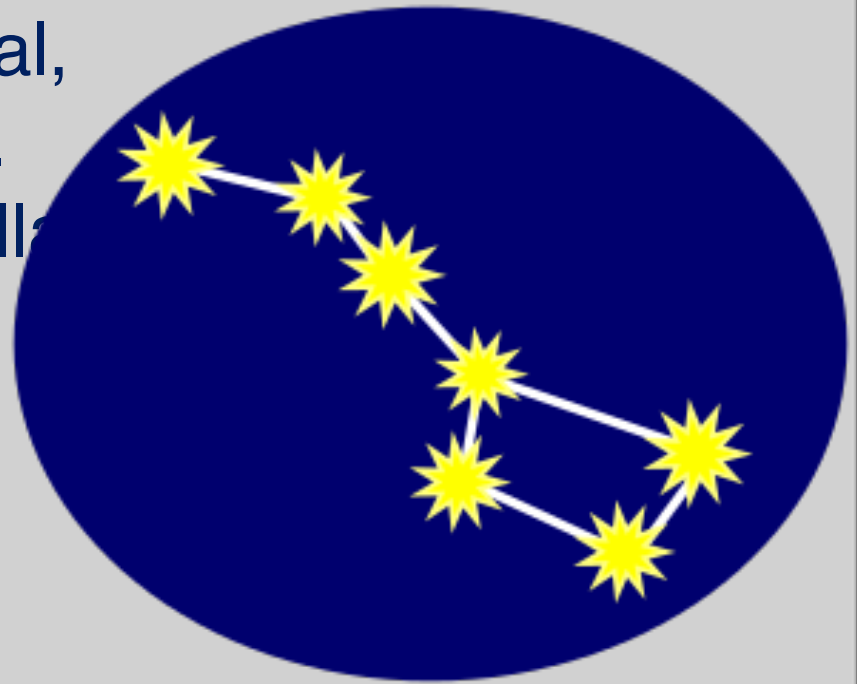
The Sun

- The Sun gives us light and heat.
- Without the Sun, living things could not survive on Earth.



Constellations

- A constellation is a group of stars that makes a pattern shaped like an animal, person, or an object.
- There are 88 constellations.



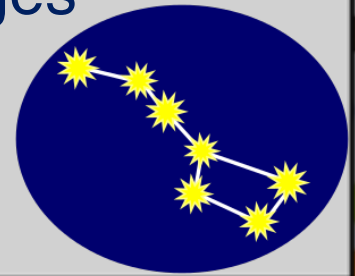
Popular Constellations

- Orion
- Ursa Major
- Ursa Minor
- Draco
- Pegasus
- The Zodiac



Constellations Vs. Planets

- At night, the stars appear to move across the sky. As Earth rotates, the part of the sky that you see changes.
- The shape of the constellation does not change, but their place in the sky does.
- This is different than planets because planets orbit the Sun.
- A planets position in the sky changes as it orbits.



Stars Vs. Planets

Stars	Both	Planets
<ul style="list-style-type: none">• Stationary (Do not move)• Produce their own light• Can have orbiting planets• Large objects in the universe• Are made of gases	<ul style="list-style-type: none">• Are round in shape• Come in different colors• Come in different sizes• Appear as points of light in the night sky• Objects can orbit them	<ul style="list-style-type: none">• Orbit a star• Do not produce light• Can have orbiting moons• Are made of solids, liquids, and gases