Constellation Maps:

Summer
Constellation Maps: Fall
Constellation Maps:

The **Night Sky** is a seasonal constellation guide. To get started, grab a current **Sky Map** and click on the season. For a printable sky map, click on the navigation bar 'Backyard Stargazing' and then the tab for 'Sky Maps'.

*Have you ever noticed that the night sky in winter looks different than the summer?* We see constellations at different times of the year - **spring, summer, fall, & winter**. This occurs because the Earth is orbiting the Sun. In winter, we see the constellation Orion in the south at night and during the day the Sun is in the sky with the constellation Scorpius. In summer, we see the opposite (we see Scorpius at night and Orion is in the sky during the day). This is why you cannot see Orion or any one constellation all year long...

Unless it is **circumpolar**. There are 5 constellations in the sky (at this latitude) all night long every night of the year – Ursa Major, Ursa Minor, Draco, Cepheus, and Cassiopeia. These are the best constellations to start with because they are visible all year long. Plus, if you don't know your directions you will want to start with Polaris (the North Star).

**The Spring Night Sky**

The sky map is set for mid-March (10 pm) or mid-April (9 pm) or mid-May (8 pm).

**LOOKING SOUTH**

**Leo** the lion is the most prominent constellation in spring. Look for the stars in Leo’s head to look like a backwards question mark. Imagine Leo is looking to the right. The triangle makes Leo’s tail and hind end. The brightest star which would be the star at the bottom of the question mark is called **Regulus**. Leo is looking at **Cancer** the crab. There is no significantly bright star in Cancer.

To find **Bootes** and **Virgo**, remember the saying ‘Arc to Arcturus and Speed on to Spica’. This saying starts with the arc of the Big Dipper’s handle. Look to the overhead, or zenith, for those 7 bright stars in the constellation Ursa Major to make the spoon.

Draw an imaginary curved/arched line between the three stars in the handle of the dipper. Then continue that curved line into the sky and ‘Arc to **Arcturus**’. Arcturus is an orange colored star in the constellation Boötes. It is also the third brightest star in the night sky. Boötes looks like a kite or ice cream cone in the sky. Continue the curved line from Arcturus to reach the bright star **Spica** in the constellation Virgo.

**LOOKING WEST & EAST**

**Hercules** is rising in the east and bringing in the summer constellations. Click on the tab for the summer. **Orion** is setting in the west with the winter constellations. Click on the tab for winter.

**LOOKING NORTH**

The **Big Dipper** in the constellation Ursa Major is high overhead. It appears to be pouring something out. Click on the tab for the rest of the circumpolar constellations.

**The Summer Night Sky**

The sky map is set for mid-June (10 pm) or mid-July (9 pm) or mid-August (8 pm).

**LOOKING SOUTH**
Constellation Maps:

High in the summer sky is the **Summer Triangle**. The three stars in the triangle are some of the brightest stars in the night sky. **Vega**, the fifth brightest star in the night sky, belongs to the constellation **Lyra**. Below Vega is the twelfth brightest star called **Altair** which is part of the constellation **Aquila**. The third star in the triangle is **Deneb**. Deneb (nineteenth in brightness) is part of the constellation **Cygnus**. The stars in Cygnus make up the ‘Northern Cross’ with Deneb at the top of the cross. Look for the cross inside the triangle.

Low in the summer sky is the constellation **Scorpius**. More than any other constellation the scorpion resembles its name. The brightest star is a reddish star called **Antares**. Follow the trail of stars from Antares to the ground/horizon to make a hook in the sky to resemble the scorpion’s tail.

At the end of the hook for the scorpion’s tail, you will find the constellation **Sagittarius**. Even though there is no prominent star, the stars make the shape of a teapot. Look near the head of the scorpion to find the constellation **Libra**. Again, there is no prominent star, the stars make the shape of a kite.

**LOOKING WEST & EAST**
**Pegasus** is rising in the east and bringing in the fall constellations. Click on the tab for the fall. **Leo** is setting in the west with the spring constellations. Click on the tab for spring.

**LOOKING NORTH**
The **Big Dipper** in the constellation Ursa Major is in the northwest. The handle is pointed upwards with the bowl closest to the ground/horizon. Click on the tab for the rest of the circumpolar constellations.

**The Fall Night Sky**
*The sky map is set for mid-September (10 pm) or mid-October (9 pm) or mid-November (8 pm).*

**LOOKING SOUTH**

**LOOKING WEST & EAST**
**Taurus** is rising in the east and bringing in the winter constellations. Click on the tab for the winter. **Cygnus** is setting in the west with the summer constellations. Click on the tab for summer.

**LOOKING NORTH**
The **Big Dipper** in the constellation Ursa Major is low on the ground/horizon in the north. Click on the tab for the rest of the circumpolar constellations.

**The Winter Night Sky**
*The sky map is set for mid-December (10 pm) or mid-January (9 pm) or mid-February (8 pm).*

**LOOKING SOUTH**
Constellation Maps:

The brightest constellation in winter is **Orion**, the hunter. Look for the stars to make the shape of a person in the sky with 2 shoulder stars, 2 leg stars, and three stars in a row to make a belt in the middle.

Draw an imaginary line through the belt stars to the lower left and you will reach the brightest star in **Canis Major** called Sirius. You cannot miss it. **Sirius** is the brightest star in the night sky.

Sirius also belongs to the **Winter Triangle**. The Winter Triangle is made with stars belonging to Orion and his two dogs – Sirius (Canis Major) and **Procyon** (Canis Minor). Procyon is the brightest star in **Canis Minor** which is found to the left of Orion. To complete the triangle, use the top left shoulder star in Orion. This star is a reddish star named **Betelgeuse** (Beatle-juice).

Above the Winter Triangle, look for the **Gemini** twins – the two bright stars named **Pollux** and **Castor**. Pollux is brighter and has a yellowish color where Caster appears white.

Draw an imaginary line through Orion’s belt stars again, but this time go to the upper right. You will reach **Taurus**. The brightest star in Taurus is an orange colored star called **Aldebaran**. Extend the line beyond Aldebaran to reach the **Pleaides**. The Pleaides is a beautiful star cluster that is also known as the Seven Sisters.

**LOOKING WEST & EAST**

**Leo** is rising in the east and bringing in the spring constellations. Click on the tab for the spring. **Pegasus** is setting in the west with the fall constellations. Click on the tab for fall.

**LOOKING NORTH**
The **Big Dipper** in the constellation Ursa Major is in the northeast. The handle is pointed towards the ground/horizon. Click on the tab for the rest of the circumpolar constellations.