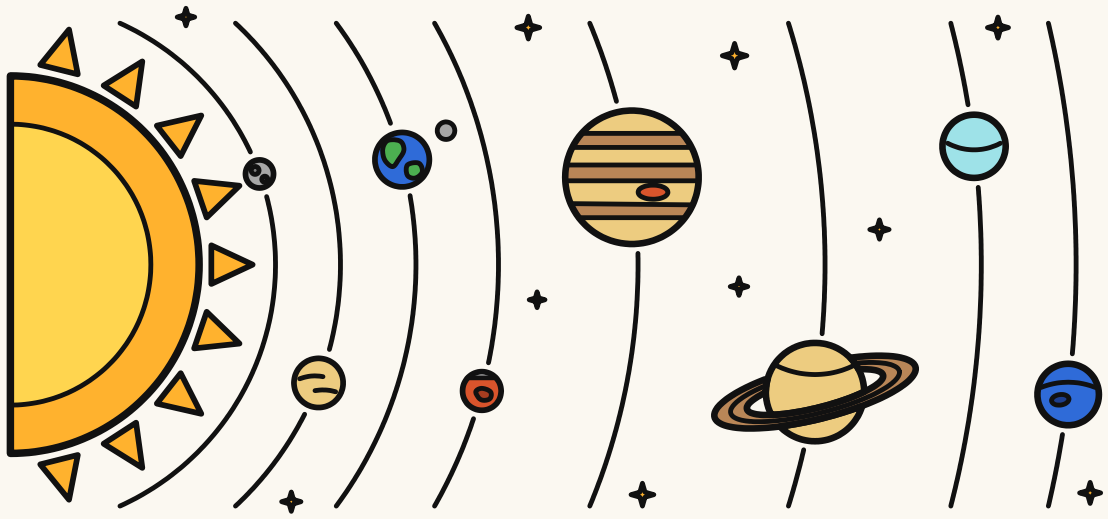
How to Draw the Solar System

12 easy steps for beginners



What you'll need

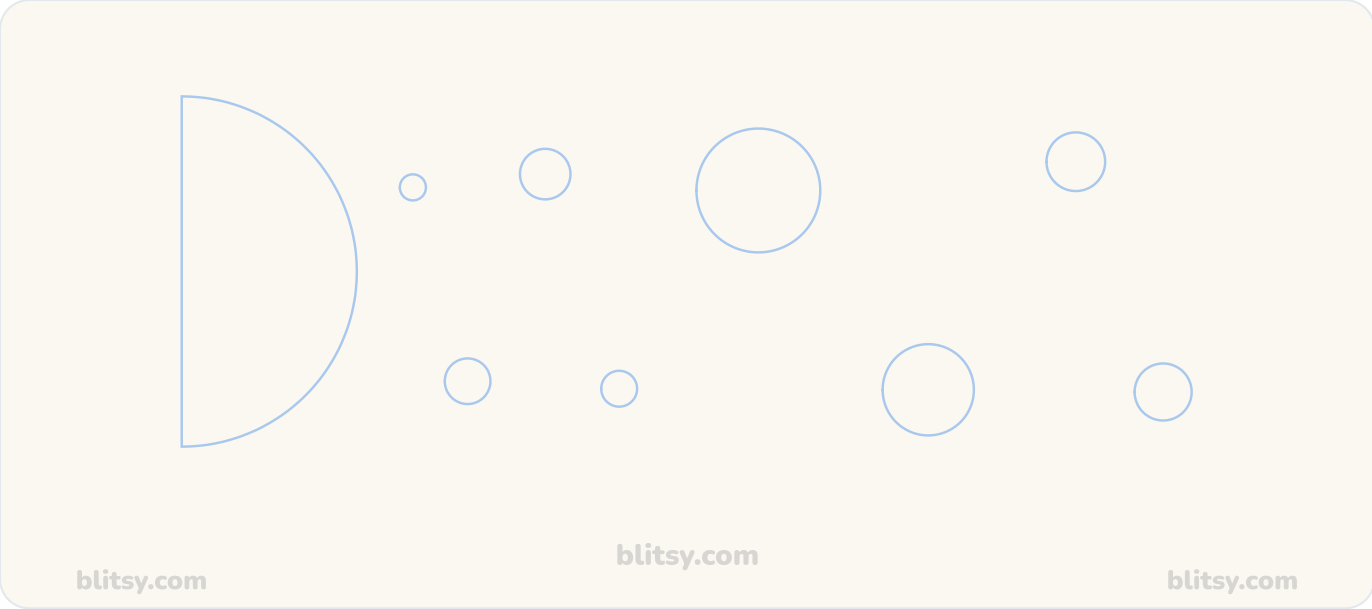
- A pencil
- An eraser
- A black fineliner
- Eight colored pencils
- Wide paper

How to use this guide

New lines for each step are shown in **blue**; lines you already drew are gray. Draw lightly first, then ink and erase near the end.

Read the full tutorial online →

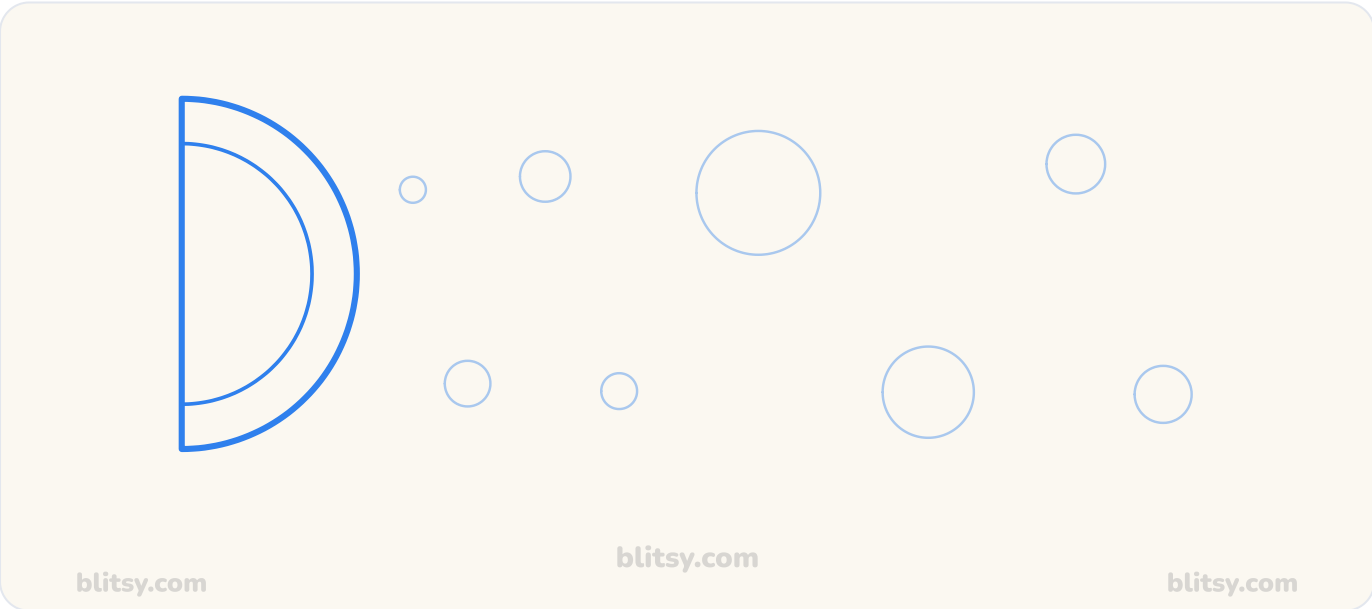
STEP 1 Mark the Sun and the planet spots



Turn your paper sideways. On the left edge, draw a big half circle that takes up about two thirds of the page height. Then sketch eight faint circles moving to the right, zigzagging a little up and down. Mercury is the tiniest, Jupiter the biggest, Saturn next, then Uranus and Neptune about the same. Keep these light, since you'll erase them later.

💡 **Tip:** Plan the spacing first: leave the most room between Mars and Jupiter.

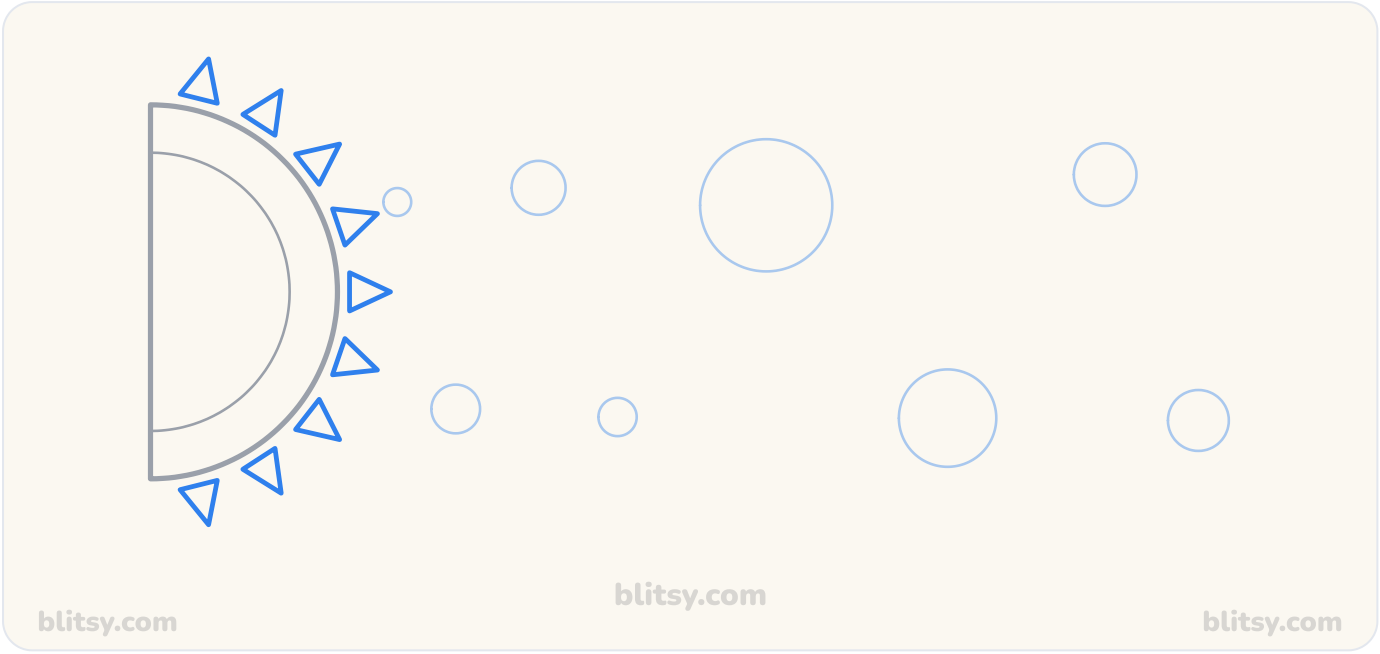
STEP 2 Draw the half Sun



Trace the big half circle with a firm line and close it with a straight edge on the left of the page. Inside it, draw a second, smaller curve about three quarters of the way out. That inner curve lets you color the middle a paler yellow later, so the Sun looks like it glows. I draw only half the Sun, because a whole one would push the planets off the page.

💡 **Tip:** Pull curves toward your body. Turning the paper a little helps more than twisting your wrist.

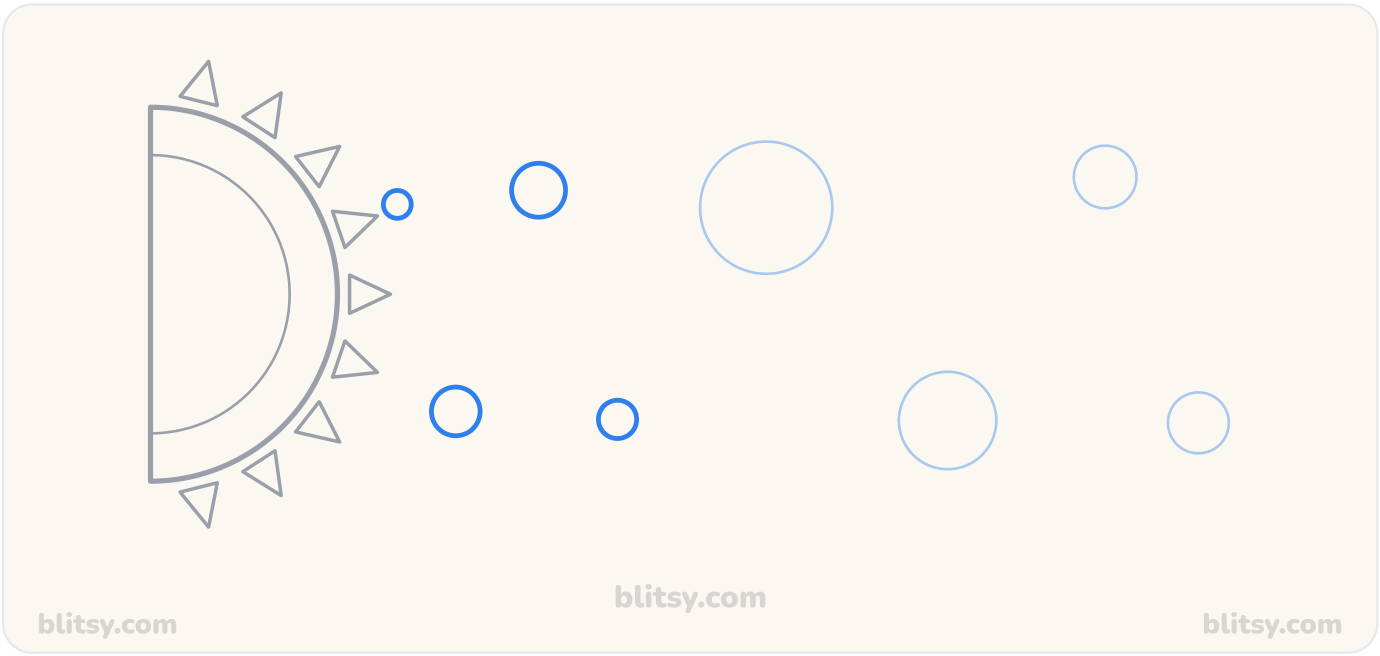
STEP 3 Add pointed sun rays



Around the outside of the Sun, draw nine small triangles that point outward like spikes on a crown. Leave a small gap between each triangle and the Sun's edge. Space them evenly. Small rays work better than long ones here, since long rays would crash into Mercury's path.

💡 **Tip:** Draw the middle ray first, then one at the top and one at the bottom, then fill in between.

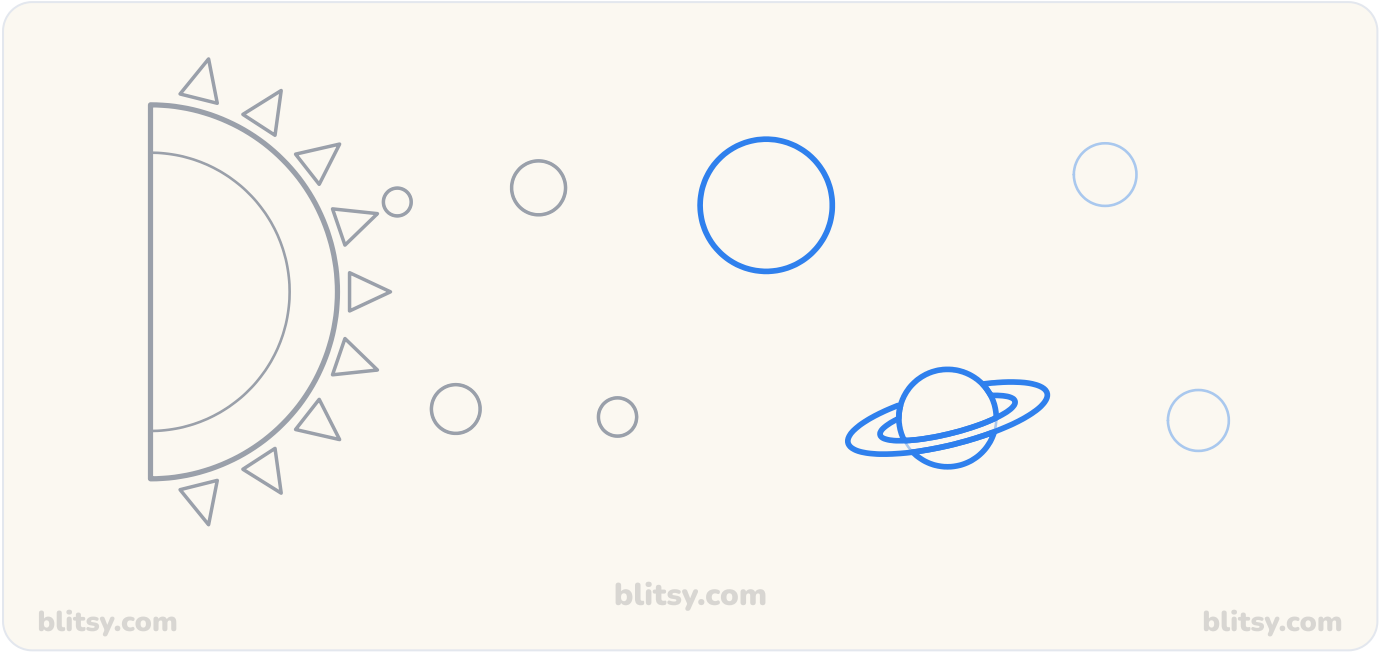
STEP 4 Draw the four rocky planets



Go over the first four guide circles with a clean line. These are the small rocky planets closest to the Sun: Mercury and Venus first, then Earth and Mars. Most beginners draw them all the same size, but they aren't. Make Earth a touch bigger than Venus, Mars clearly smaller than Earth, and Mercury the smallest of the eight.

💡 **Tip:** Trace a small coin for Earth, then judge the others against it by eye.

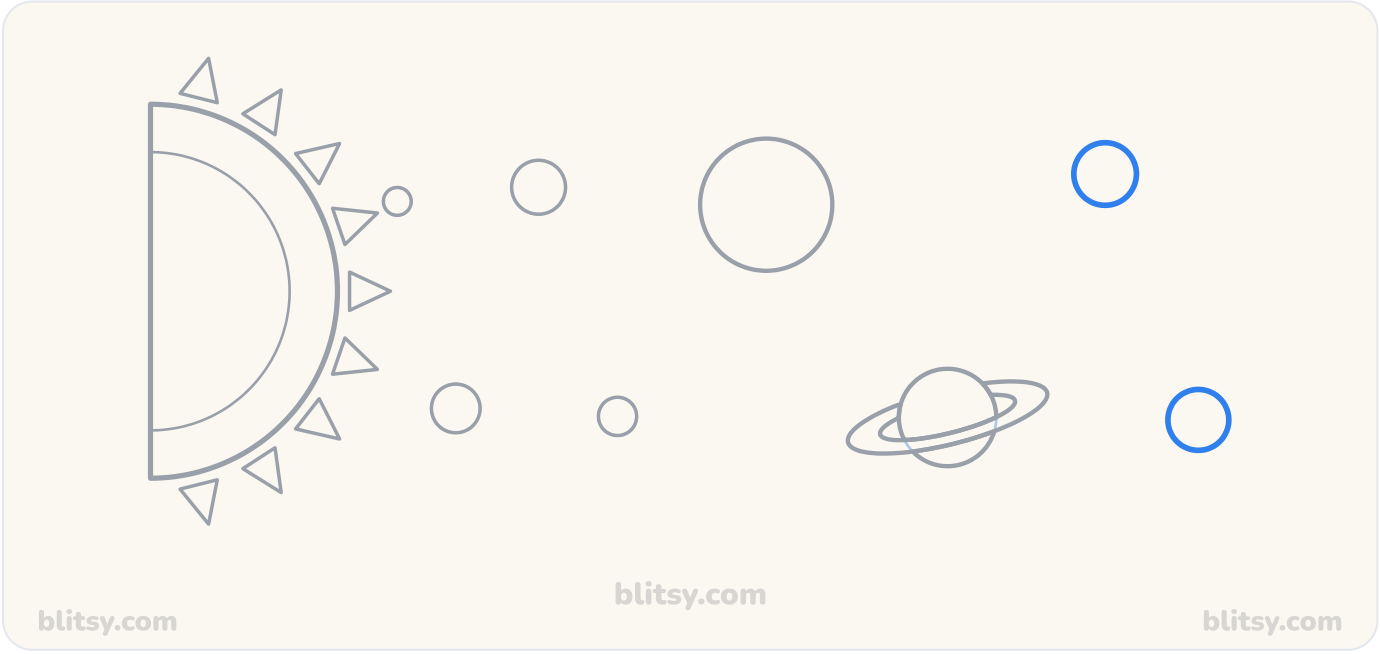
STEP 5 Draw Jupiter and ringed Saturn



Jupiter is the biggest planet, so give it the largest circle, a bit above the middle line. Saturn sits lower and to the right. Draw its round body first, then a long tilted oval ring around it with a second oval inside. Here's the part that confuses people: erase the ring where it passes behind the top of the planet, and let the front of the ring cross over the bottom.

💡 **Tip:** The ring should be roughly twice as wide as Saturn itself. Narrower looks like a hat brim.

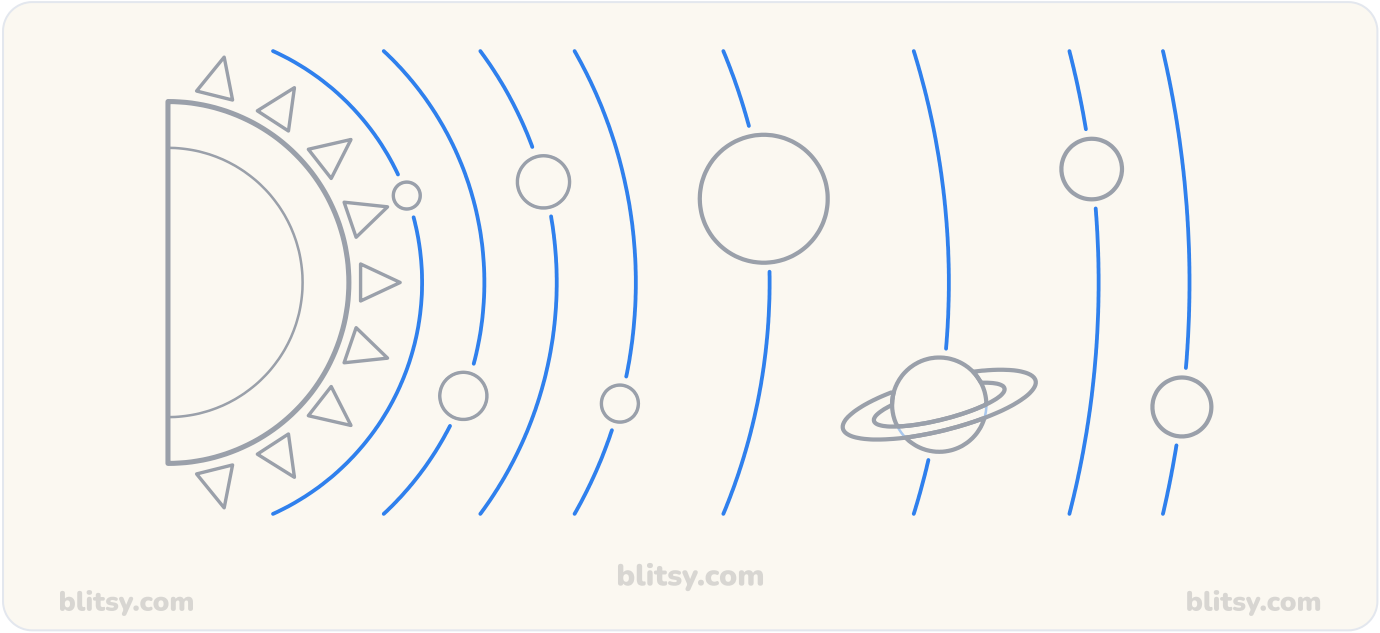
STEP 6 Add Uranus and Neptune



The last two planets are ice giants. They're smaller than Saturn but much bigger than Earth, and close to each other in size. Put Uranus high and Neptune low near the right edge, so the zigzag keeps going. Neptune is the farthest planet, so it gets the last spot.

💡 **Tip:** Leave at least a finger's width between Neptune and the paper's edge.

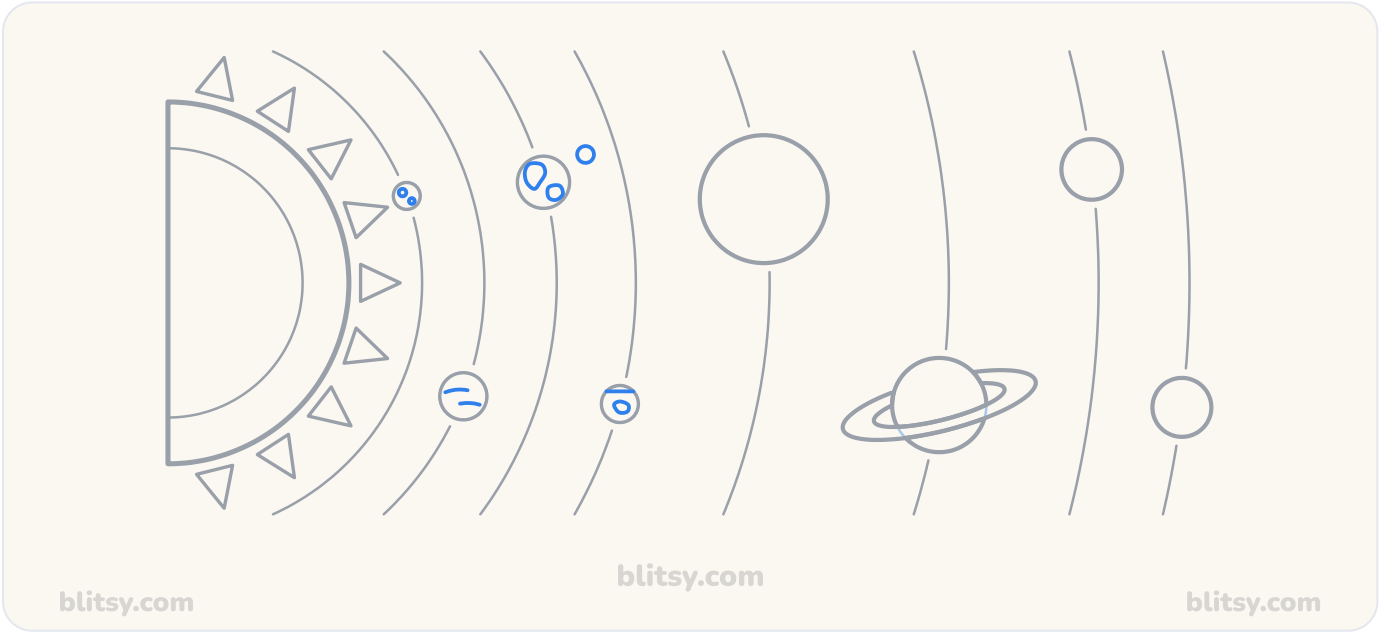
STEP 7 Draw the curved orbit lines



Now draw a long curve through each planet, every curve bending around the Sun like ripples in a pond. Each line is that planet's orbit, the path it travels around the Sun. Stop the line just before it touches a planet and start it again on the other side. I find that tiny gap keeps the planets easy to read after inking.

💡 **Tip:** Draw each orbit in two or three short strokes rather than one long one.

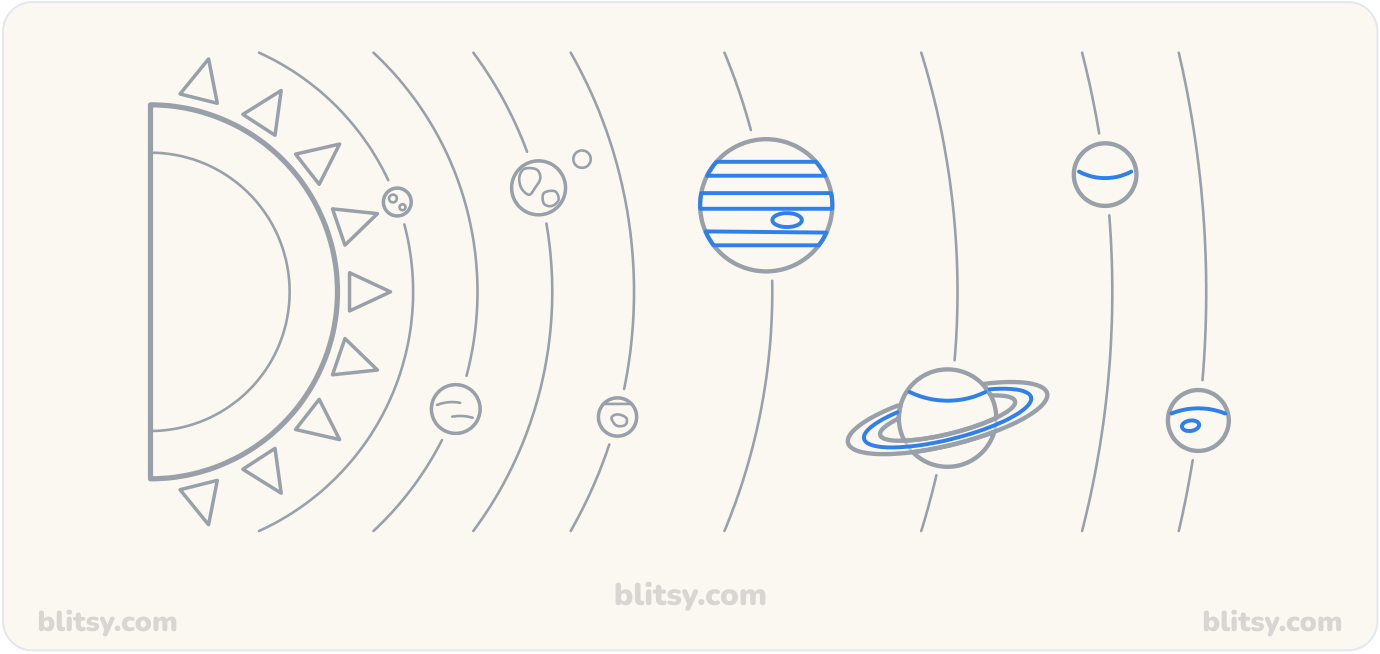
STEP 8 Add the Moon and surface marks



Up and to the right of Earth, draw a small circle for the Moon. Give Mercury two little crater circles. Inside Earth, sketch two rounded blobs for land. Venus is wrapped in thick clouds, so two short curved lines are enough. On Mars, draw a line across the top for its white polar ice cap and one dark patch.

💡 **Tip:** On tiny planets, fewer details look neater. Two craters beat ten.

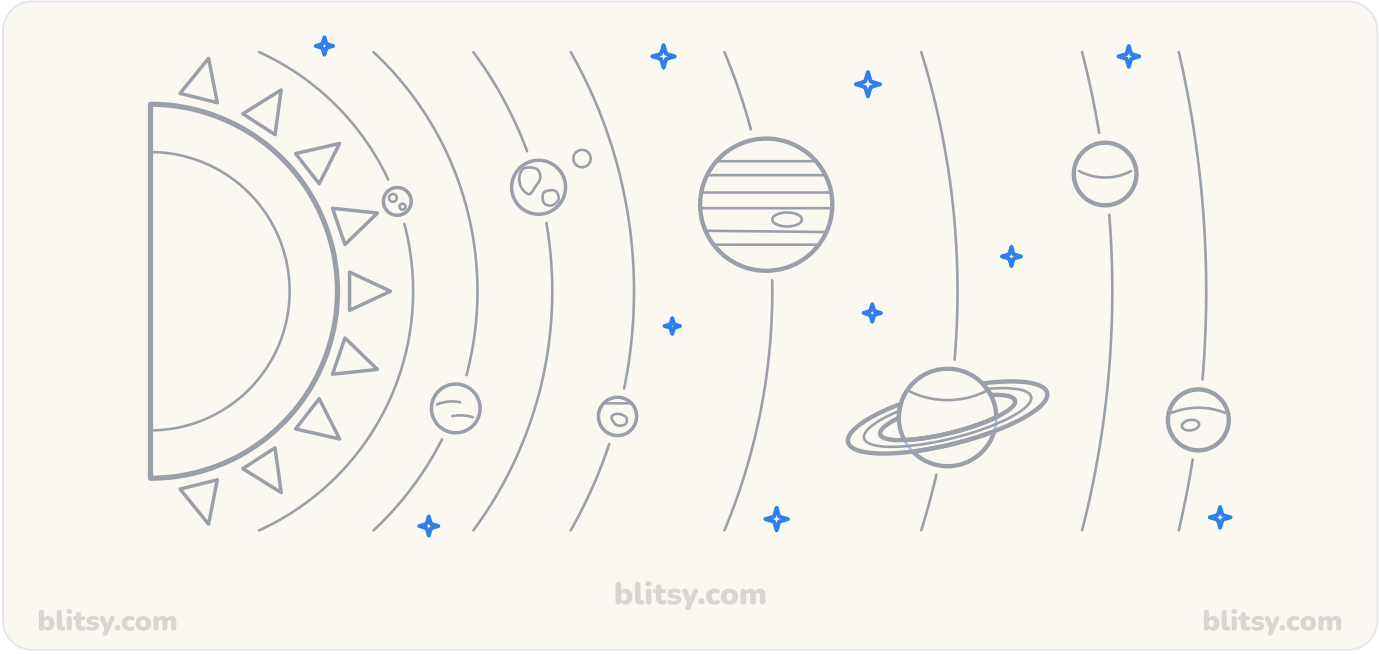
STEP 9 Mark the giant planets



Across Jupiter, draw three pairs of straight lines for its cloud bands, then a small oval between two bands for the Great Red Spot, a giant storm. Add a thin line along the middle of Saturn's ring. Give Saturn and Uranus each one soft curved band. On Neptune, add a light streak and a small dark storm spot.

💡 **Tip:** Keep Jupiter's bands parallel. Wavy stripes make the planet look bumpy.

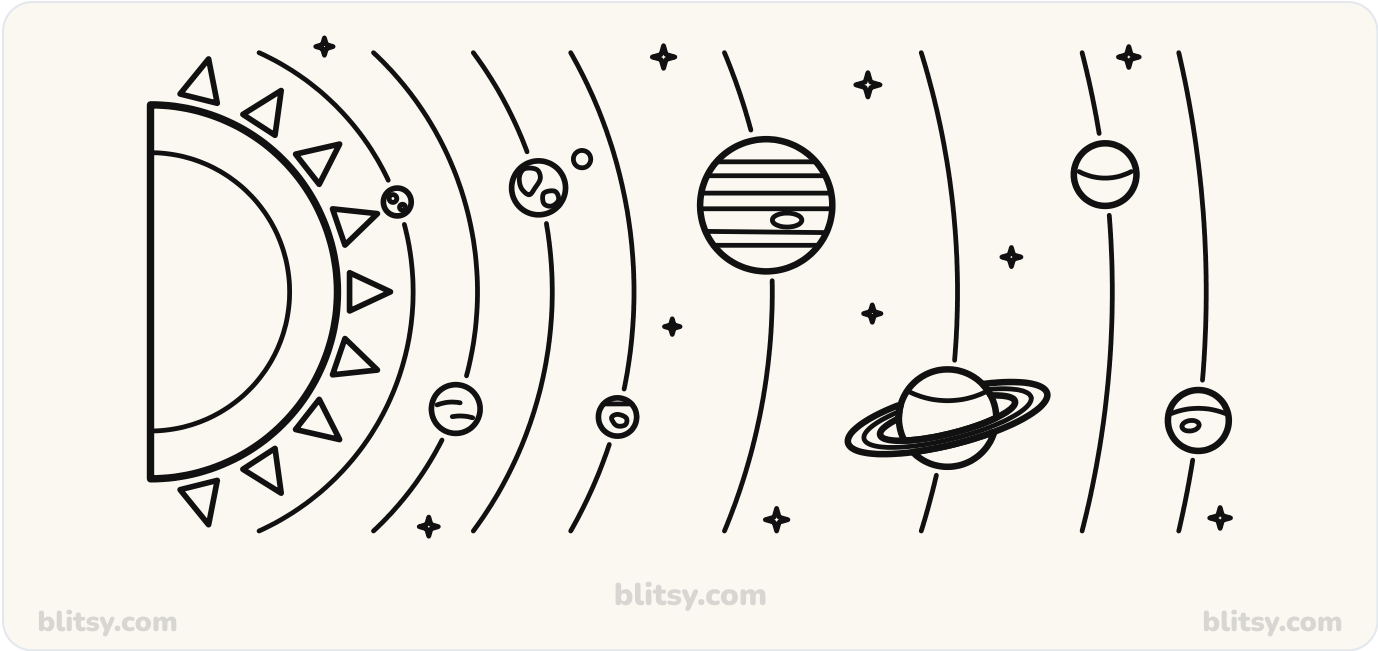
STEP 10 Sprinkle a few stars



Fill some of the empty space with small four-pointed sparkles. Ten is plenty. Put them in the gaps between orbits and above and below the planets, never touching a line. Real stars sit far outside the solar system, so here they're only decoration.

💡 **Tip:** Vary the star sizes a little. Identical stars in a grid look like wallpaper.

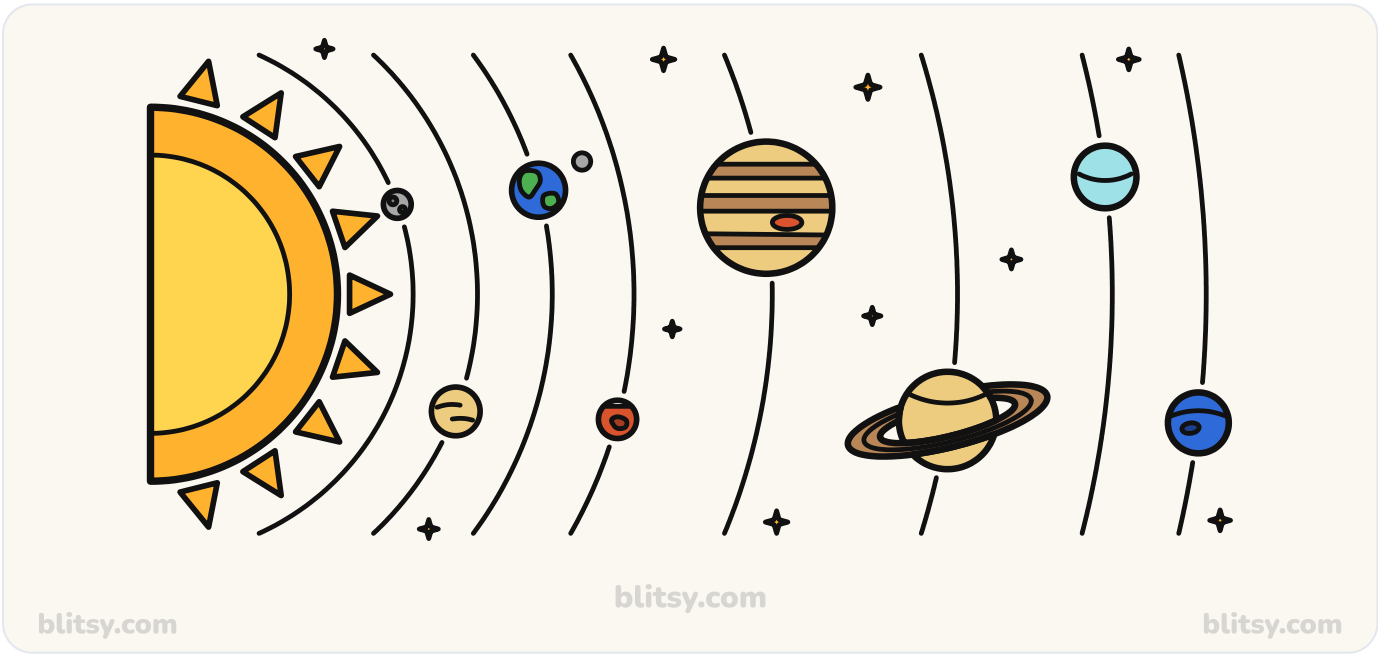
STEP 11 Ink the lines and erase the guides



Trace every keeper line with your fineliner. I start with the Sun and the big planets while my hand is fresh, then the orbits, then the small details and stars last. Let the ink dry for a minute. Then erase the faint guide circles.

💡 **Tip:** Rotate the page as you ink the orbits so your hand never smears wet lines.

STEP 12 Color the planets



Use yellow orange for the Sun and its rays, plus the stars, with paler yellow in the middle. Make Mercury and the Moon gray. Venus takes light gold, and so do Jupiter and Saturn, with tan for Jupiter's bands and Saturn's rings. Earth gets blue oceans and green land. Color Mars and the red spot red orange, Uranus light blue and Neptune a deep blue.

💡 **Tip:** Leave the space white, or color it dark blue after the planets are done.