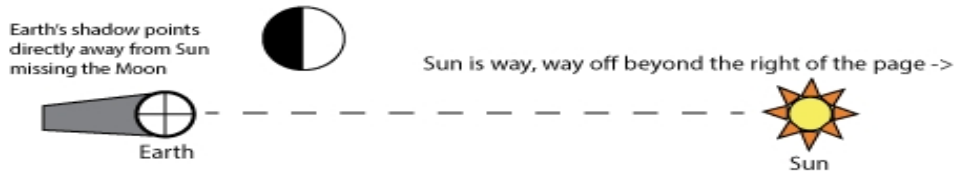
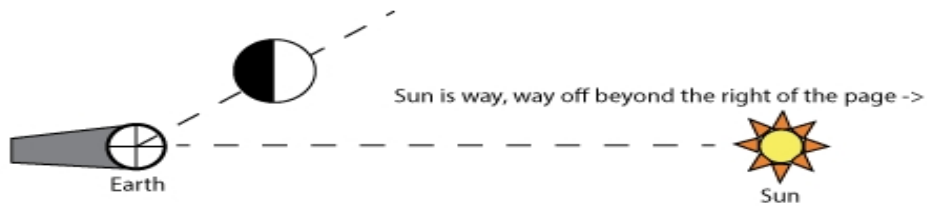


Orrery to ground view: Waxing Crescent example

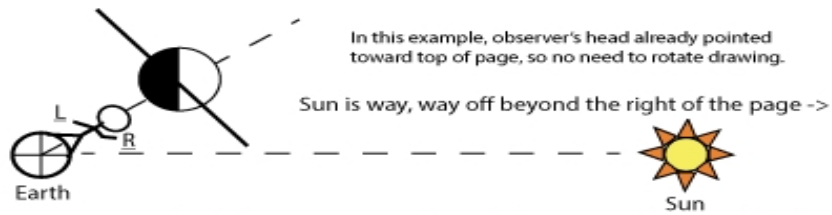
Step 1: Viewed from high above Earth, shade half the Moon with lit half facing the Sun



Step 2: Draw line from Earth center to Moon



Step 3: Place observer on Earth in direction of the Moon. The person is raising his **RIGHT** hand. **If** observer's head is pointed toward the bottom of the page in your drawing, rotate Earth-Moon-Sun drawing 180°. Draw line perpendicular (90°) to Earth-Moon line.



Step 4: Focus attention on half of Moon facing Earth. (Side facing away from Earth has been grayed out.) If less than half of side facing Earth is lit => crescent (or new). If more than half of side facing Earth is lit => gibbous (or full)

