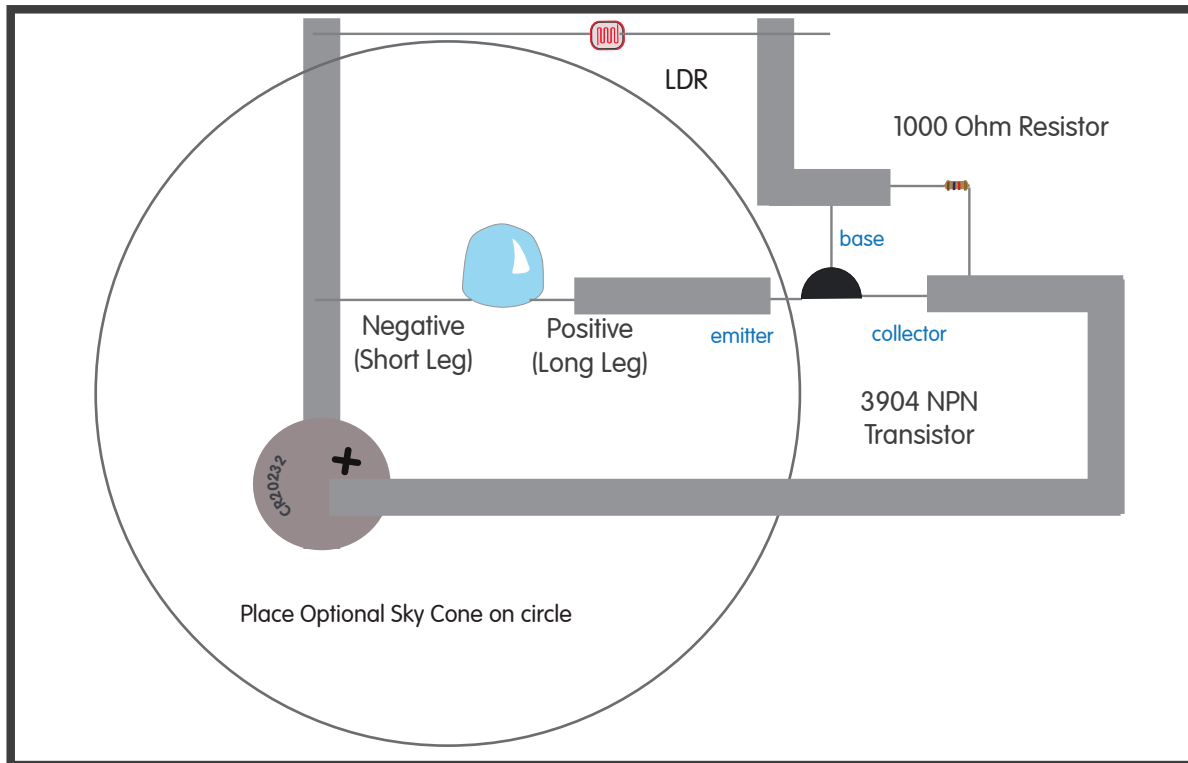


Dark-Detecting Circuit For Sky Cone

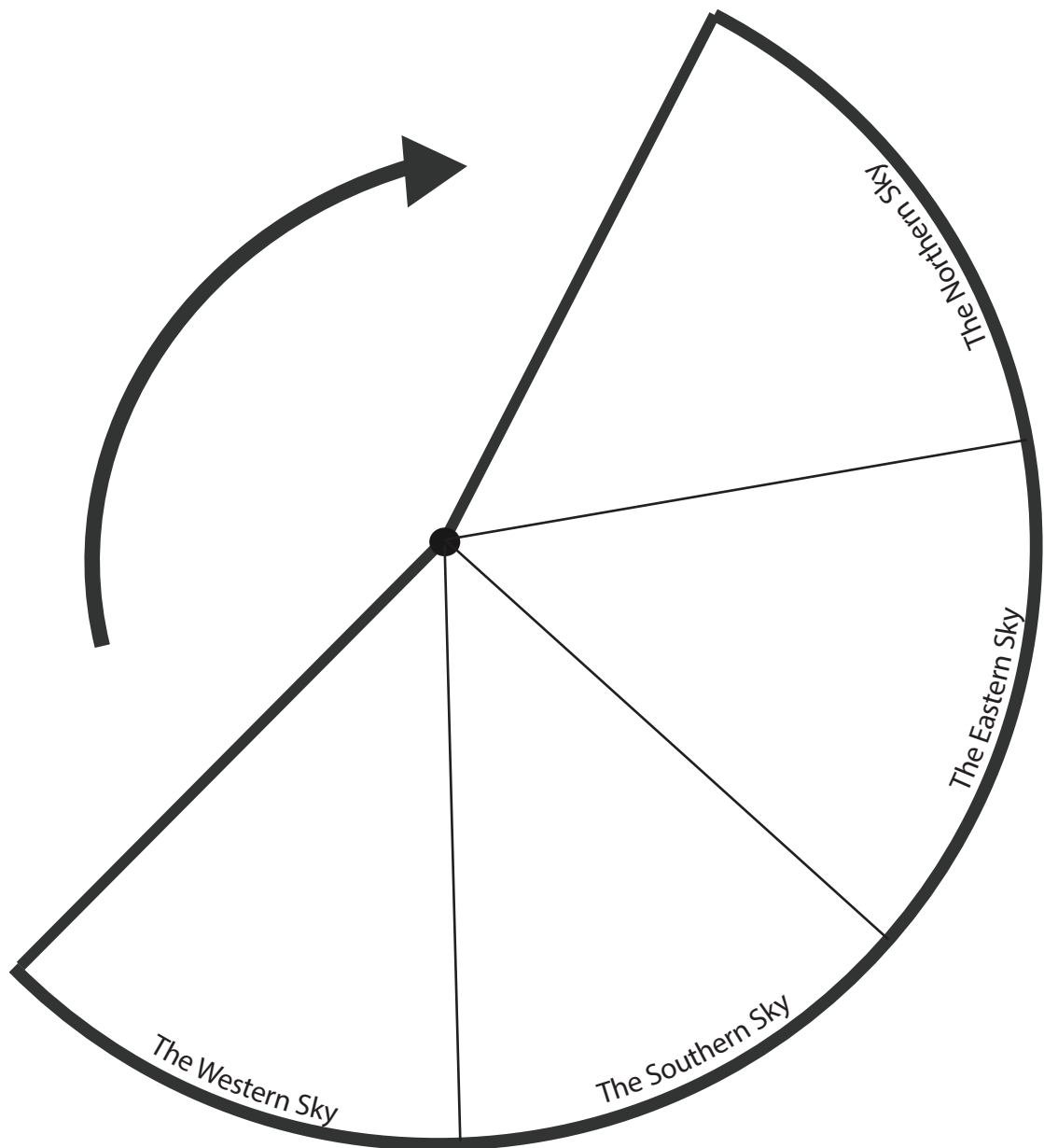
Materials: 1x White LED, 1x CR2032 Battery, 1x 3904 NPN Transistor, 1x 1000 Ohm Resistor, 1x Light Dependent Resistor (LDR), Maker Tape, Circuit Card, Completed Sky Cone



- The general idea behind this circuit begins with understanding how an LDR work. It's still basically a resistor; so it's designed to slow current flow through it. However, the amount that it does this depends on what light is doing around it. More light = Less resistance/ Less light (dark) = More resistance.
- Circuits that use LDRs often have multiple pathways near the outcome; one that passes THROUGH the outcome component and one that goes around it.
- Adjusting the resistance at one pathway forces the electricity to travel different paths under different conditions.

Night Sky Cone (for use with Dark-Detecting Light Circuit)

Research your favorite constellations. Draw their star positions in the portion of the sky cone below they are located in for the season you are completing this activity. Punch out dots for the star positions with a pencil. Cut cone template; wrapping and taping into a cone. Now you can place the sky cone over the top of the white LED of your dark-detecting circuit to create an indoor night sky that also turns on when it's dark!



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