

ACTIVITY!

ACTIVITY: **Build a Personal Stardome****SUPPLIES**

- ✧ dark umbrella
- ✧ measuring tape
- ✧ chalk
- ✧ star pattern template (nomadpress.net/resources)
- ✧ glow-in-the-dark paint
- ✧ damp cloth



For thousands of years, people have used constellations as a compass, calendar, and clock. By making and using a personal stardome, you can learn to identify eight constellations. You can also learn to tell direction using one easy-to-find constellation.

1 Open the umbrella. Put one end of the measuring tape near the center post inside the umbrella. Stretch it along a metal rib to an outside edge. Write down the distance.

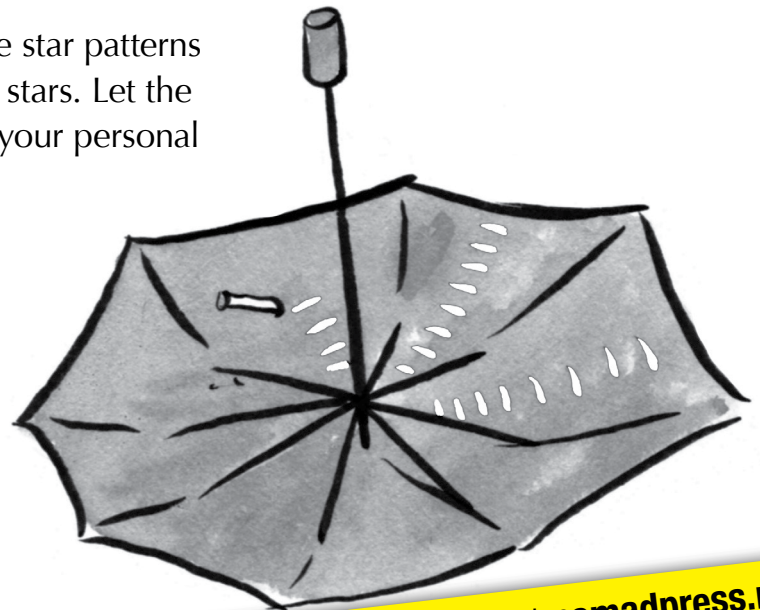
2 Divide this distance by eight.

3 Using this number, the tape measure, and chalk, mark eight dots at the same distance along each rib. Connect the dots to make eight even circles.

4 Use the glow-in-the-dark paint to label each pie-shaped wedge between two ribs. Labels should be A, B, C, D, E, F, G, and H.

5 Use chalk to copy the star patterns. If you make a mistake, erase it with a damp cloth.

6 When you like how the star patterns look, paint over the chalk stars. Let the paint dry before closing your personal star dome.



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CONSTELLATION PATTERNS	
Wedge A	Orion: the Hunter
Wedge B	Polaris: the North Star Cassiopeia: the Queen Pegasus: the Winged Horse
Wedge C	Pegasus: the Winged Horse
Wedge D	Lyra: a Stringed Instrument
Wedge E	Corona Borealis: the Northern Crown
Wedge F	Ursa Major: the Big Dipper
Wedge G	Ursa Major: the Big Dipper
Wedge H	Gemini: the Twins Canis Major: the Big Dog

USING YOUR STAR DOME: Open your star dome near a chair. Put wedge B so you can see it over the top of the chair. Crouch down and tilt the handle until you see the Big Dipper barely above the top of the chair. This is what the night sky would look like around September 1 at 8 p.m. in the Northern Hemisphere. Slowly turn the handle counterclockwise to the left. The stars near the center will always be visible when you look at the night sky to the north. The stars near the edge will appear to rise and set. These are the ones that look like they go straight above your head outside. In a 12-hour night (8 p.m. to 8 a.m.), you would be able to see almost five sections of stars.

