The MICAN shows a constellation pattern while viewing the night sky without the need for other lights and sky maps.

With some general knowledge of seasonal constellations you can make single or multiple constellation pattern(s) fitted to the MICAN.
**Materials:**
39 Ounce coffee jug
A small flash light that will fit easily into the coffee jug
Piece of wax paper doubled to about a 3 inch square
Rubber band
About 2 square feet of aluminum foil
Rubber cement
Some strips of Velcro about ¼ to ½ inches wide and long enough to fit around your light source and (if you are adding birds and whistles, a battery pack, see below)
Small nuts and bolts or some way to anchor the Velcro strips inside the coffee jug
Access to a computer to print out screen shots of the night sky from a constellation web site. I used:

http://www.astro.wisc.edu/~dolan/constellations/
http://www.astroverser.com/interactive-night-sky-map.php
http://www.fourmilab.ch/cgi-bin/Yoursky?z=1&lat=38.3503&ns=North&lon=81.6311&ew=West
http://www.smokymtnastro.org/

Xacto knife
Scissors
Screw driver
Cardboard of thickness similar to a breakfast cereal box (I used green hanging folders)

**Materials I added to my MICAN to give it some Birds and Whistles:**

Battery case, I used the case from a portable string of Christmas lights that would hold two 1.5 volt AA batteries. The kind of Christmas lights high school band kids wear on their instruments or a person can wear on a sweater or hat.
Simple electric switch. I used a regular wall light switch.
About 2 feet of light gage flexible insulated wire
A pop rivet set
Bit of talent with a soldering iron
Cut the middle out of the lid of the coffee jug and trim it smooth. Leave the inside ridge that snaps to the top of the jug. This helps to hold and make a good snap type fit with the star charts you will be making. The plastic is tough so have an adult help and be very careful. Those xacto knives and box cutters are EXREMELY SHARP!!

Use the jug top ring you just cut upside down and trace a circle on card board. Cut the circle out just inside the traced circle. It may take a few trials but find the place to cut the circle so it has a snap fit into the ring top.
You can download and enlarge a single constellation or make the whole night sky.

Print off any constellation array you want and enlarge or shrink it and glue to the round cardboard disks you cut out earlier I used old file folders.
Use a 1/16 drill bit and put the glued star chart on a piece of wood board and with your hand twist the drill bit over each star in the constellation until you have made a clean hole.

Cut the aluminum foil into workable size strips - 2 inches or so wide-. Paint one side with rubber cement and then line the inside of the MICAN. This reflects the light source and keeps the whole coffee jug from glowing.

Use pop rivets or small screws or nuts and bolts to anchor Velcro strips inside to hold the light source and battery pack. Here you can avoid all the Rube Goldberg stuff I did and simply anchor a small flashlight with one of the Velcro strips.
Use a rubber band to hold the wax paper over the light source to diffuse and make the light shine equally through the star holes.

Add a simple light switch - like the wall switches in your home. Cover the light source with wax paper to act as a diffuser.

Cut a square hole for the switch and small holes to mount the light switch. This convenient on/off switch helps conserve the batteries.
The whole assembly ready for adding the top: in the top photo, battery pack is at left, light source at top, and switch at bottom. Note I added a bit of aluminum foil around the area where the switch joins the jug side to keep light from seeping out through the hole cut for the switch.
This is a pattern of the Polar Constellations. Each season has a set of visible constellations but the polar constellations are at least partially visible in every season. With the MICAN you can make many patterns for viewing any number of constellations and for any time of year.

HOW TO FIND NORTH AT NIGHT