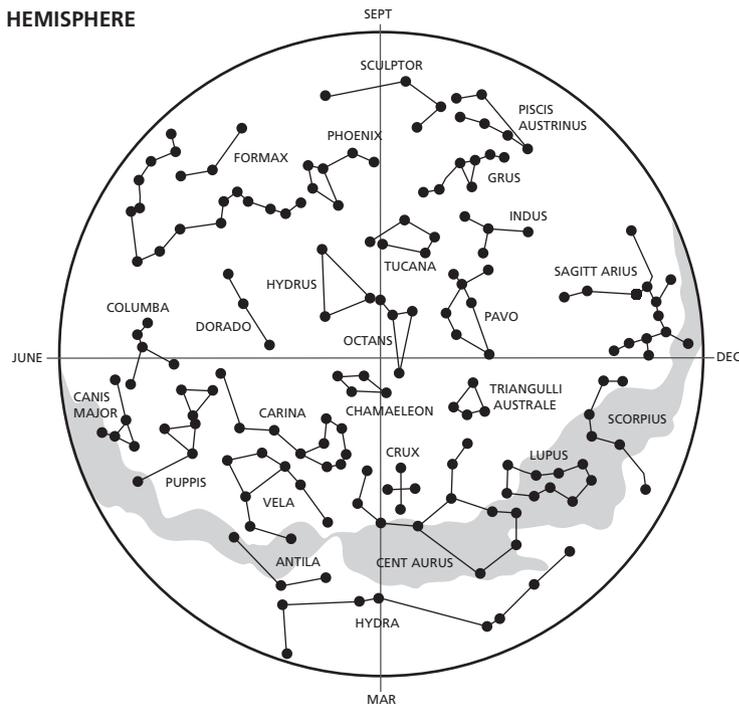
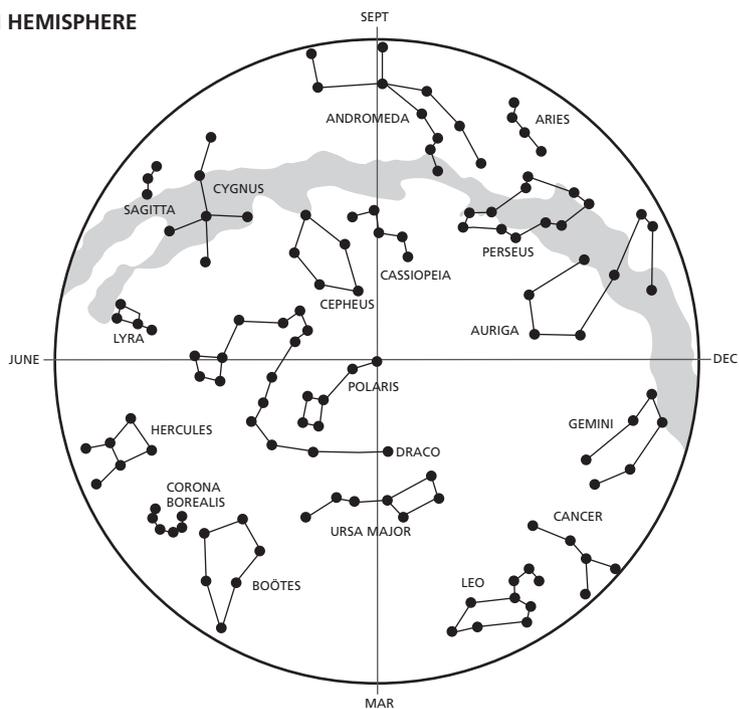


## SOUTHERN HEMISPHERE



## NORTHERN HEMISPHERE



**WARNING:**  
CHOKING HAZARD – Small parts  
Not for Children under 3 years.



# CREATE A NIGHT SKY PROJECTION KIT

LIGHTS OFF. IT'S TIME TO TRANSFORM YOUR BEDROOM INTO A STARRY NIGHT SKY WITH THIS AMAZING CARDBOARD STAR PROJECTOR.

### A. SAFETY MESSAGES

1. Please read through these instructions before you start.
2. This kit is intended for children aged over 8.
3. Adult assistance and supervision required.
4. This kit and its finished product contain small parts which may cause choking if misused. Keep away from children under 3 years old.
5. Wires may contain sharp points, adult assistance is required during connection.
6. Never touch the contacts inside the battery case to prevent a possible short circuit.
7. Adult supervision is required when piercing the holes on the night sky dome templates.

### B. USE OF BATTERIES

1. Requires 4 x 1.5V "AA" batteries (not included).
2. For best results, always use fresh batteries.
3. Make sure you insert the batteries with the correct polarities.
4. Remove the batteries from the kit when not in use.
5. Replace exhausted batteries straight away to avoid possible damage to the kit.
6. Rechargeable batteries must be removed from the kit before recharging.
7. Rechargeable batteries should be recharged under adult supervision.
8. Do not attempt to recharge non-rechargeable batteries.
9. Do not mix old and new batteries.
10. Do not mix alkaline, standard (carbon-zinc), or rechargeable (NiCad or NiMH) batteries.
11. Make sure that the supply terminals in the battery case are not short circuited.
12. To install / replace the batteries, open the cover of the battery compartment of lamp, insert 4 x 1.5V "AA" batteries into the compartment and close the battery compartment door.

### C. Contents

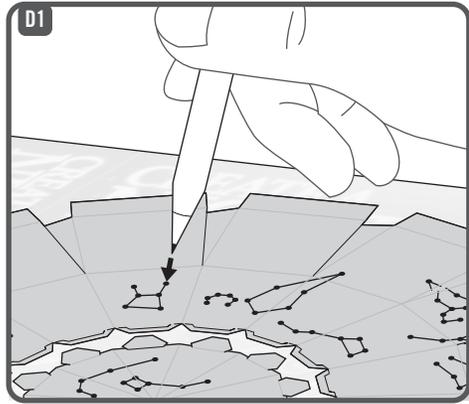
Night sky domes of northern and southern hemispheres (each made up of a dome and a cover), 1 lamp with switch, 4 x dome supports, strips of adhesive tape and detailed instructions including star charts of both hemispheres. (All constellation names in this kit are printed in English only.) Also required (but not included in the kit) a fine point pencil / nail, 4 x 1.5V "AA" batteries.

### Questions & Comments

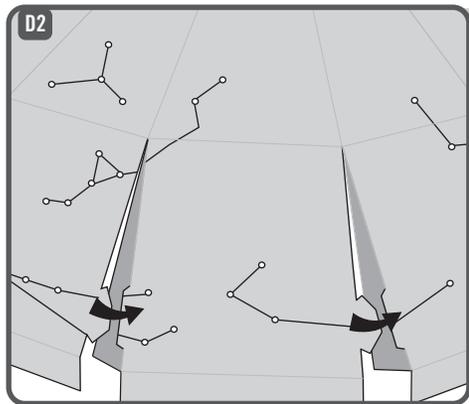
We value you as a customer and your satisfaction with this product is important to us. If you have comments or questions, or you find any part of this kit missing or defective, please do not hesitate to contact our distributor in your country. You will find the address printed on the package. You are also welcome to contact our Marketing Support Team: Email: [infodesk@4m-ind.com](mailto:infodesk@4m-ind.com), Fax (852) 25911566, Tel: (852) 28936241, Web site: [WWW.4M-IND.COM](http://WWW.4M-IND.COM)

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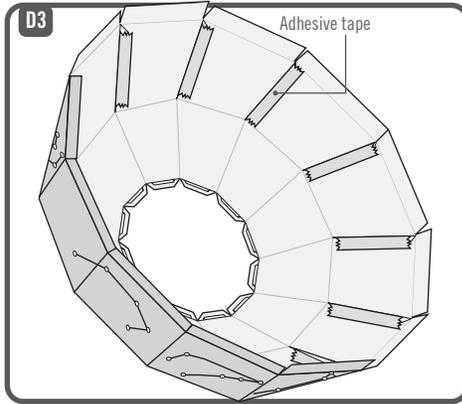
## D. INSTRUCTION



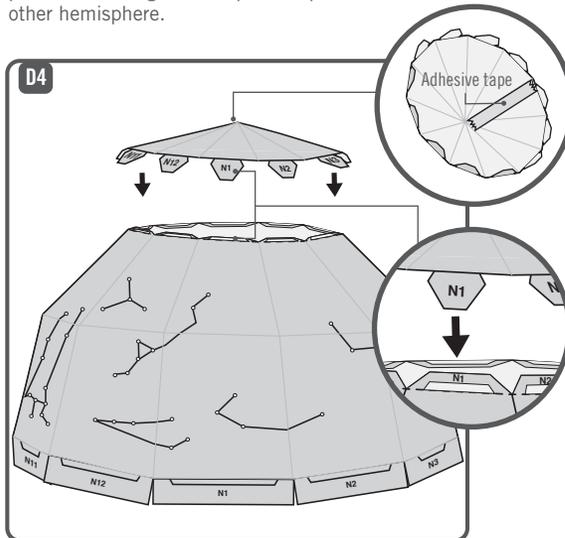
**D1.** There are two projection dome templates included in this kit, one for the night sky of the northern hemisphere and one for the night sky of the southern hemisphere. Flatten the package box and place a template on top of it. Gently pierce holes in the position of the stars with a fine pointed pencil or a small nail. (Warning: Adults supervision is required when piercing the holes on the night sky dome templates.) Push the pencil or nail gently so that you make a very small hole. The package is made of corrugated card. Resting on it will make piercing the holes easier. Do not make the holes too large initially. You can always make the holes a little larger later to let more light through, but if you make the holes too large now you will not be able to make them smaller. Complete the stars of each constellation in turn. (It is worth practising piercing holes in an old piece of card before you start on the templates).



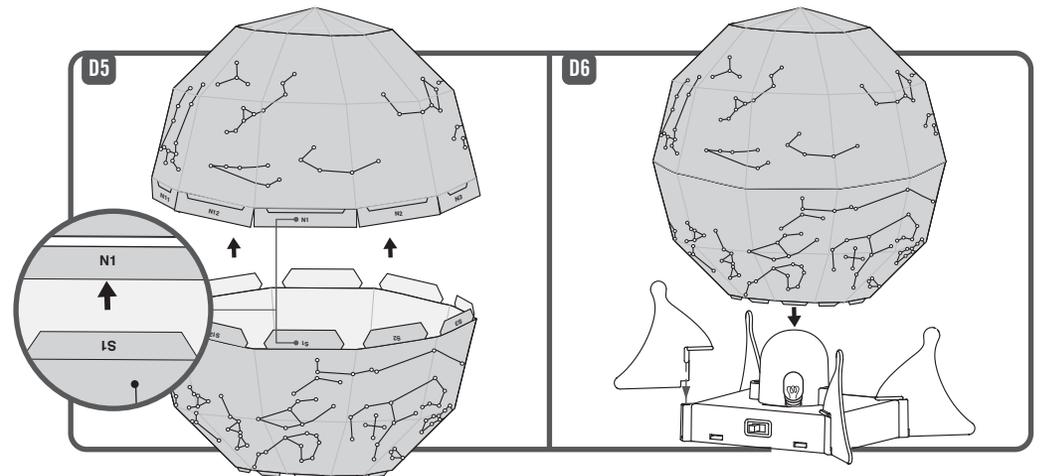
**D2.** After you have pierced all the holes, gently crease the dome along the fold lines. The dome is made of twelve connected panels when flat. Carefully assemble the dome by inserting the tab in each panel into the slot in the adjacent panel (see diagram). You should finish with a three-dimensional dome like a hemisphere.



**D3.** Turn the dome over. Reinforce the dome by adding the strips of adhesive tape between the panels (see diagram). Repeat step D1- D3 for the other hemisphere.



**D4.** Select which hemisphere you would like to project (northern or southern). Select the dome cover for this hemisphere. (There are codes printed on the tabs of each template. Southern hemisphere template codes start with "S"; northern hemisphere template codes start with "N".) Pierce holes in the selected dome cover as in step D1. Crease along the fold lines on the cover and gently pull the cover into shape. Add adhesive tape to hold it in shape. Insert the tabs on the cover into the slots in the hemisphere, making sure the numbers on the panels match. You can reinforce the finished dome by adding adhesive tape behind the tabs (as in step D3).



**D5.** Connect the two hemispheres by inserting the tabs on one hemisphere into the slots on the other, with your selected hemisphere on the top. Make sure you match the numbers on the panels. This will form a globe-shaped dome with an opening at the base.

**D6.** Insert 4 x 1.5V "AA" batteries into the battery chamber of the lamp. Make sure the battery terminals are the correct way round. Place the lamp on a table in the centre of your bedroom. Slot the dome supports into the corners of the lamp. Turn the lamp on. Place the projection dome onto the lamp so that the bulb projects through the opening in its base. Now turn the room lights off. The projector displays a spectacular starry night sky on your ceiling and walls. Let your imagination run wild into outer space, millions of light years from Earth! Though the projected patterns of stars may not be exactly the same as the real night sky, you can identify the constellations using the two star maps included in the instructions. Try learning the shape and positions of the constellations so that you will be able to spot them in the night sky.

## E. FUN FACTS

- A device that projects a map of the night sky is called a planetarium.
- A dedicated planetarium is a dome-shaped room with a star projector at the centre. Viewers sit inside to view the map of the night sky projected onto the inside of the dome.
- All the stars we see in night sky are in our galaxy, which is called the Milky Way.
- There are about 100 billion stars in the Milky Way, but even on a dark, clear night, we can see only a few thousand of them with the naked eye.
- The stars are giant balls of glowing gas that give out light and heat. Some are several times larger than our Sun.
- The nearest star to us (apart from the Sun) is Proxima Centauri. It is so far away that its light takes more than four years to reach us.
- According to the International Astronomical Union, there are 88 official constellations.
- Most of the constellations were invented thousands of years ago by ancient peoples, including the Greeks and Romans.
- In ancient times farmers used the positions of the constellations to tell what time of year it was, so that they could plant and harvest crops at right time.
- The constellations are not groups of stars that are close to each other. The stars only appear in the same area of sky when seen from the Earth.
- Astronomers use the constellations as a way of finding way around the night sky, so that can find the stars and other space objects they are interested in.
- Different constellations are visible in the night sky at different times of year. For example, in the northern hemisphere, Orion is always visible in the night sky in winter.
- The signs of the Zodiac are the constellations that that Sun appears to move through as the year passes.

