

## Activity Two - Planisphere

You will need:

- Scissors
- Coloured pens or pencils
- Glue stick
- Split pins
- Planisphere templates (at the end of the instructions)
- A compass (optional, but useful to set the planisphere more accurately)

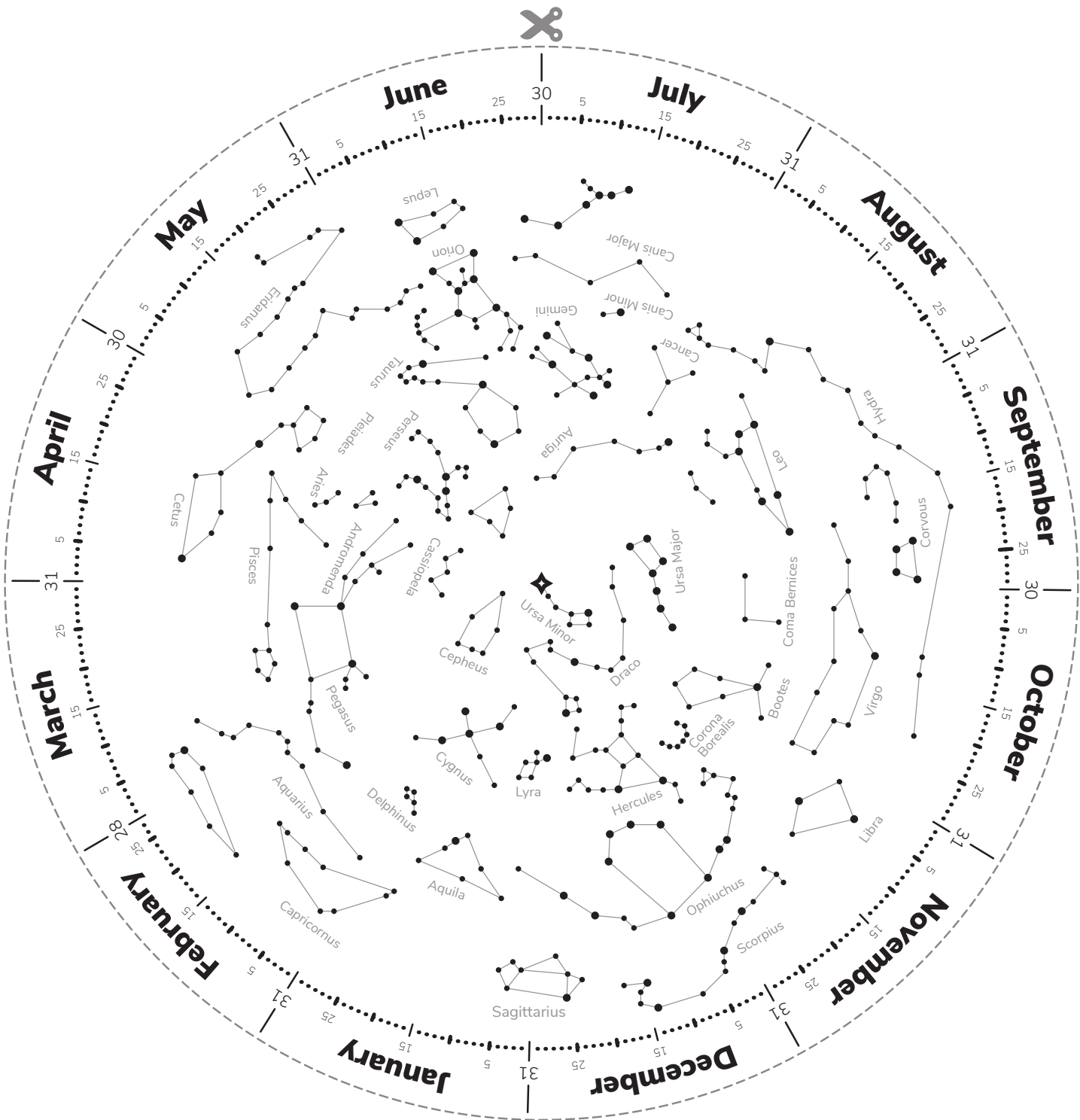
### Instructions to make the planisphere:

1. Cut out the horizon templates for both hemispheres from the planisphere templates. You'll need to cut out the shaded areas in the middle of each template to make the spy window.
2. Fold the tab on the left of each horizon template back behind the template
3. Glue both tabs, line the horizon templates up with the illustration facing outwards, and use the glued tabs to stick the horizon templates back to back. You should now have a double sided horizon template, which is open all the way through the middle.
4. Use a split pin to make a small hole through the very middle of the double sided horizon template (in the middle of the circle on the bar across the centre of the template).
5. Take your star map, and use a pencil to write a small 'N' for north and 'S' for south on the front, before cutting them out. The letters will make sure you don't get mixed up!
6. Line your star maps up back to back, so that the months line up. It may be helpful to hold the maps up to a light or a window, so you can see through the paper to match up the lines.
7. Pick a month, and place a dot of glue behind that month, on the back of the map. You can then match the month you chose on both maps, to give you a matched up starting point to glue the maps together.
8. Glue your maps together, to create a double sided map – one side is the northern hemisphere, the other side the southern hemisphere.
9. Use the split pin to make a hole in the middle of your star map – it should go right through the north star (Ursa Minor), which is in the middle of the side marked 'N'.
10. Slide your star map into the horizon template. The side with the 'N' on should be under the northern hemisphere horizon template.
11. Line up your star map, so that the line between the months and the stars lines up with the curved top of the horizon template. The names of some months, and the little numbers underneath, should poke out of the top of the horizon template.
12. Attach the whole planisphere together by pushing a split pin through the holes you made in both pieces earlier. If you're in the northern hemisphere, this split pin now represents the north star.

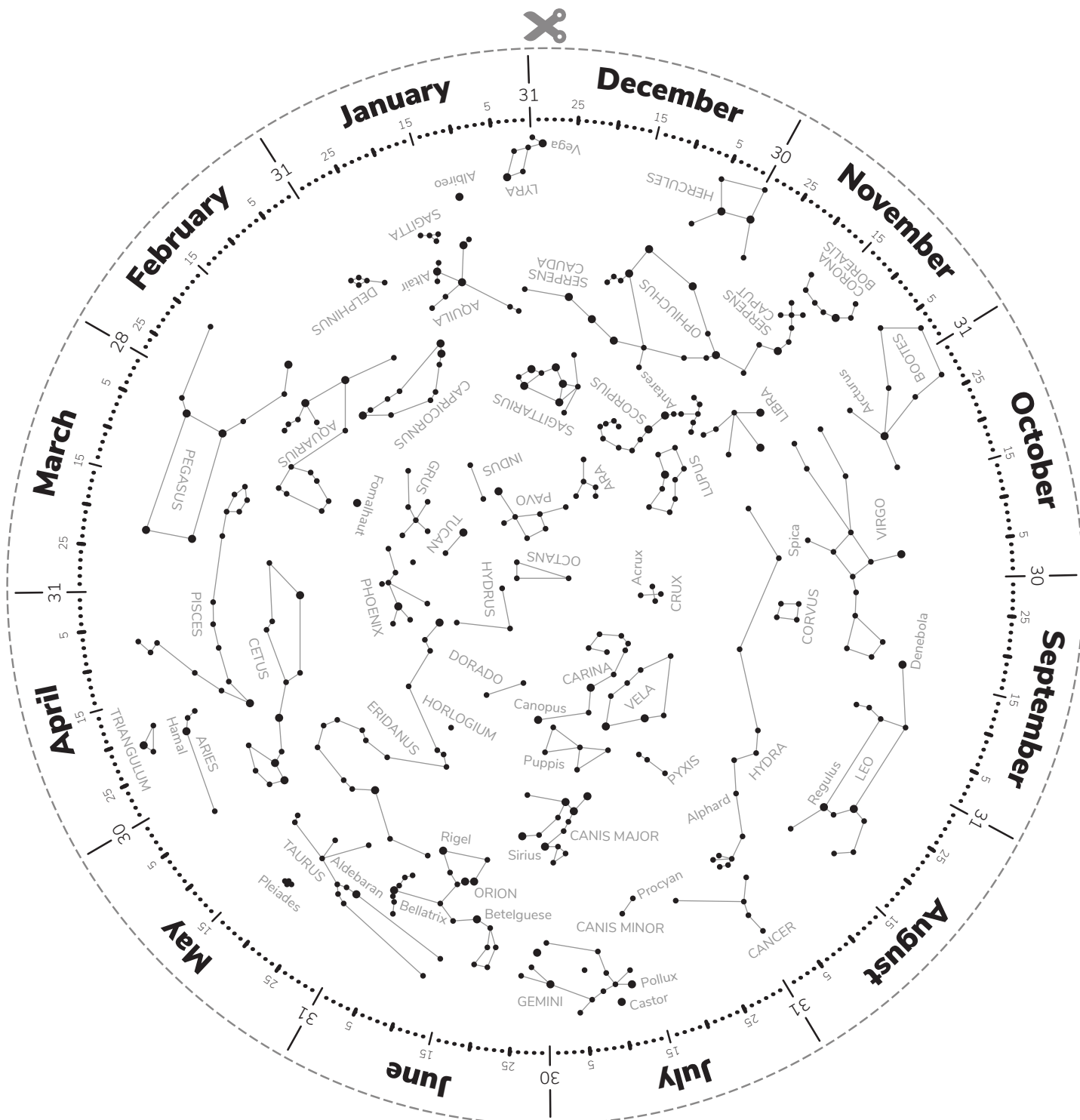
**Instructions to use the planisphere:**

1. Choose the side of the planisphere that matches where you live. If you're in the UK, you're in the northern hemisphere.
2. Find the right month (and date) on the outside of the star map, and line it up with the time on the horizon template.
3. The stars visible in the oval window on your star map are the ones visible in the night sky at that time.
4. Set it for today, and head outside to see what you can spot in the night sky.
5. Make sure the planisphere is set to the right date and time. Start by looking north, and line the planisphere up so north is at the bottom. If you move round, move the planisphere so the direction at the bottom of the horizon template matches the direction you're facing.

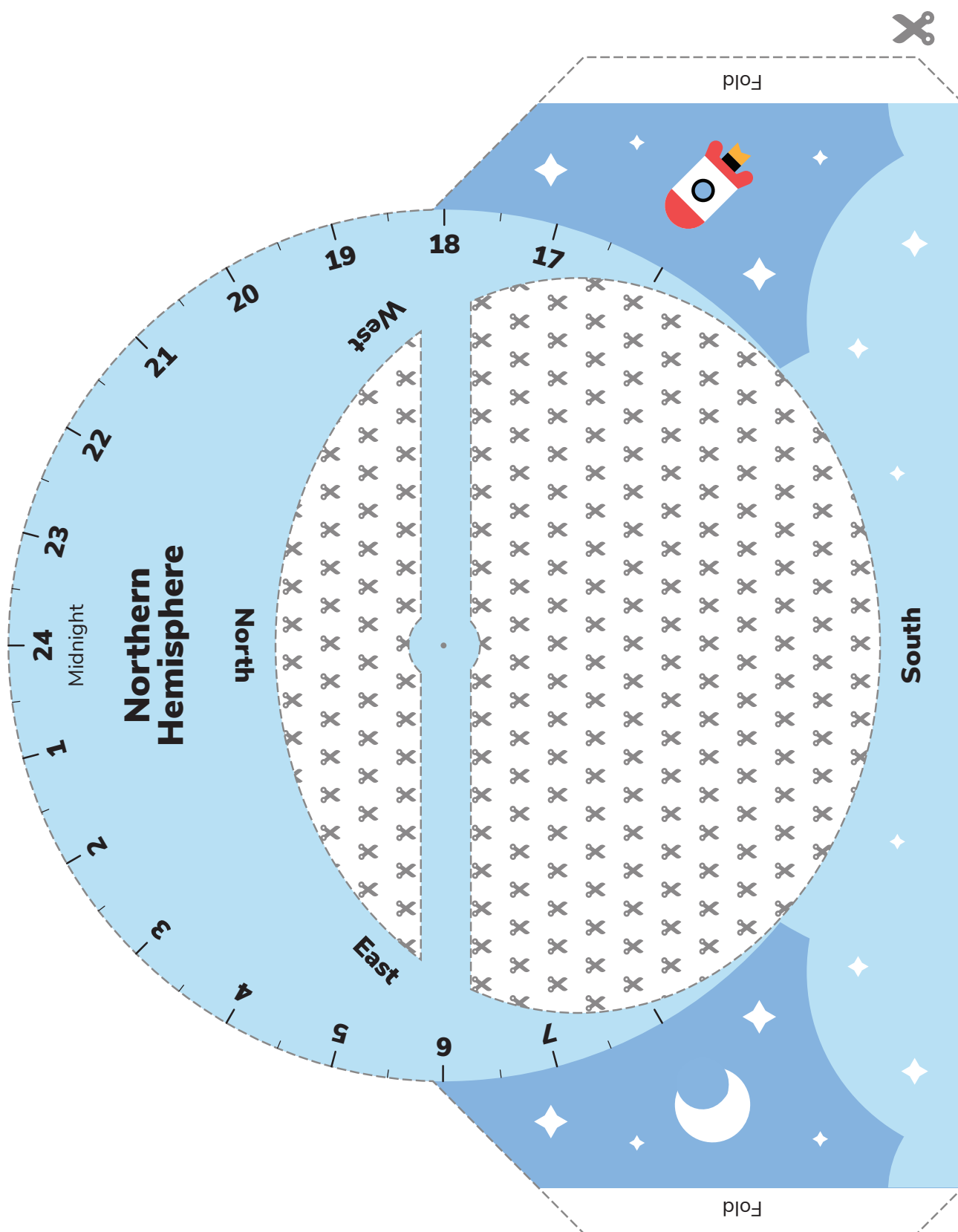
# Northern hemisphere (star map)



# Southern hemisphere (star map)



# Northern hemisphere (horizon)



# Southern hemisphere (horizon)

