



Night hike to the stars

AT A GLANCE



Place

Outdoors, in the evening, little light



Key idea

Getting to know the night sky and finding north without a compass



Effort

Materials 5 min · Preparation 20 min



120 minutes



6–16 young people



12–16 years



clear evening



Materials

- ☐ torches with red film (red light disturbs the eyes less)
- ☐ star chart or star app
- ☐ sleeping mats
- ☐ thermos flask of tea
- ☐ high-visibility vests for road sections



Schedule

- | | |
|----------------|--|
| 0–30' | Setting off – Quiet walk to a dark spot, listening to the sounds of the night on the way. |
| 30–60' | Finding stars – The Plough (Big Dipper), the Pole Star, Cassiopeia. |
| 60–80' | Lying and wondering – Lie on sleeping mats and stay silent for 5 minutes. |
| 80–95' | Devotion – So many stars (Genesis 15:5) – God knows each one. |
| 95–120' | Walk back – Back with tea, counting the last shooting stars. |



Night hike to the stars

How it works – simply explained

- 1 Look for the Plough: seven bright stars like a cart with a handle.
- 2 Take the two stars at the back of the cart.
- 3 Extend the distance between them about five times upwards.
- 4 There shines the Pole Star. It is almost exactly in the north.
- 5 Turn towards it – now you know where north is.

 **Example:** "Can you see the two stars at the back of the cart? Now go five times as far upwards – that single bright star is the Pole Star."

Safety

- Walk the route in daylight beforehand.
- Tell parents the times.
- High-visibility vests and lights on roads.
- Count heads before setting off and before the walk back.

Variations

- Start earlier in winter, later in summer.
- Invent your own constellations.

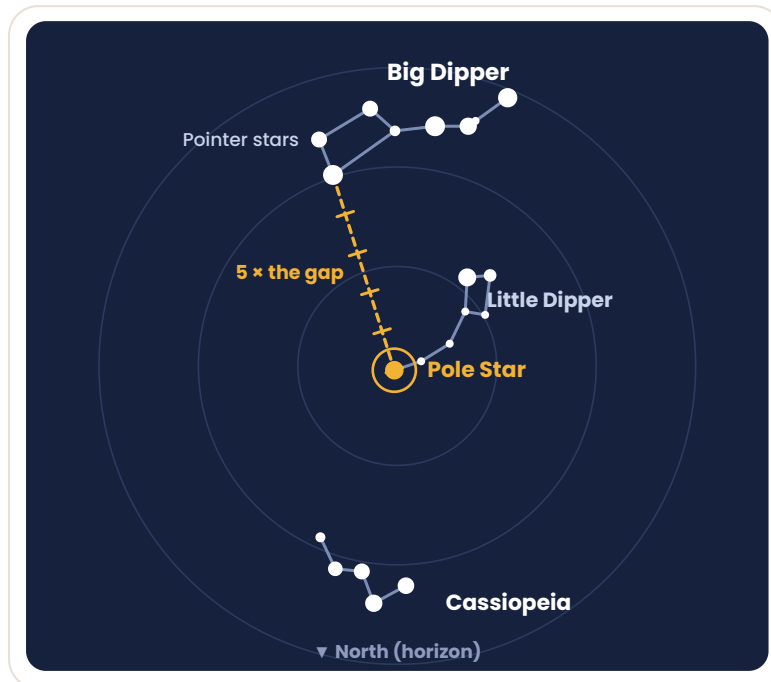
Something to think about

How does it feel to be so small under so many stars?



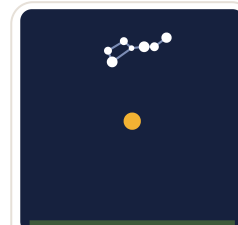
APPENDIX

Star chart: Big Dipper (Plough) and Pole Star

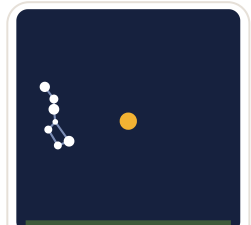


Facing north · spring evening

Where the Dipper is at about 10 pm



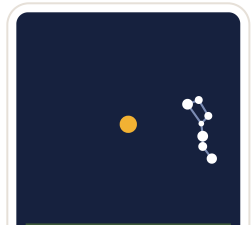
Spring



Summer



Autumn



Winter

During the night and the year the Dipper turns once around the Pole Star – the Pole Star stays almost in the same place.

Measure with your hand (arm fully stretched)

little finger	about 1°
3 fingers	about 5° – the gap between the pointer stars
fist	about 10°
3 fists	from the upper pointer star to the Pole Star

Tasks to tick off

- ☐ Find the 7 bright stars of the Big Dipper and trace them with your finger.
- ☐ Find the two pointer stars at the end of the bowl and measure the gap with your hand.
- ☐ Extend the line about five times: there is the Pole Star. Everyone point north together.
- ☐ The Pole Star is the end of the handle of the Little Dipper. How many of its stars can you see?
- ☐ On the other side of the Pole Star, look for the "W" of Cassiopeia.
- ☐ Eye test: next to the middle star of the handle (Mizar) there is a faint companion (Alcor). Who can see it?