

Hello, little sky explorer!

Color the scene. Point to the star and the Moon.

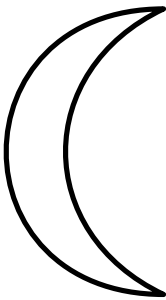
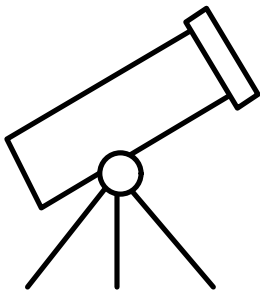
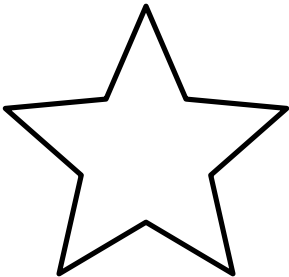
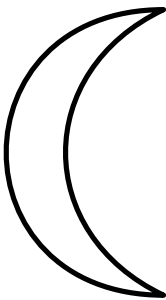
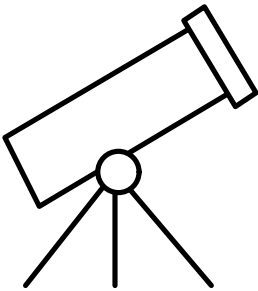
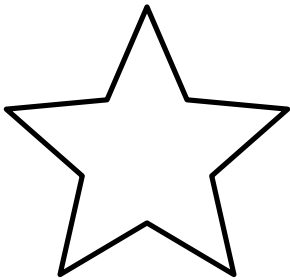


What would your pretend sky look like?

This is imaginary sky art, not a real observing chart. Never look at the Sun through a telescope.

Sky picture pairs

Find each matching pair. You may draw a line to join it.



The pointed star is a picture symbol. Real stars are huge glowing balls of gas, not pointed shapes.

Count the star pictures

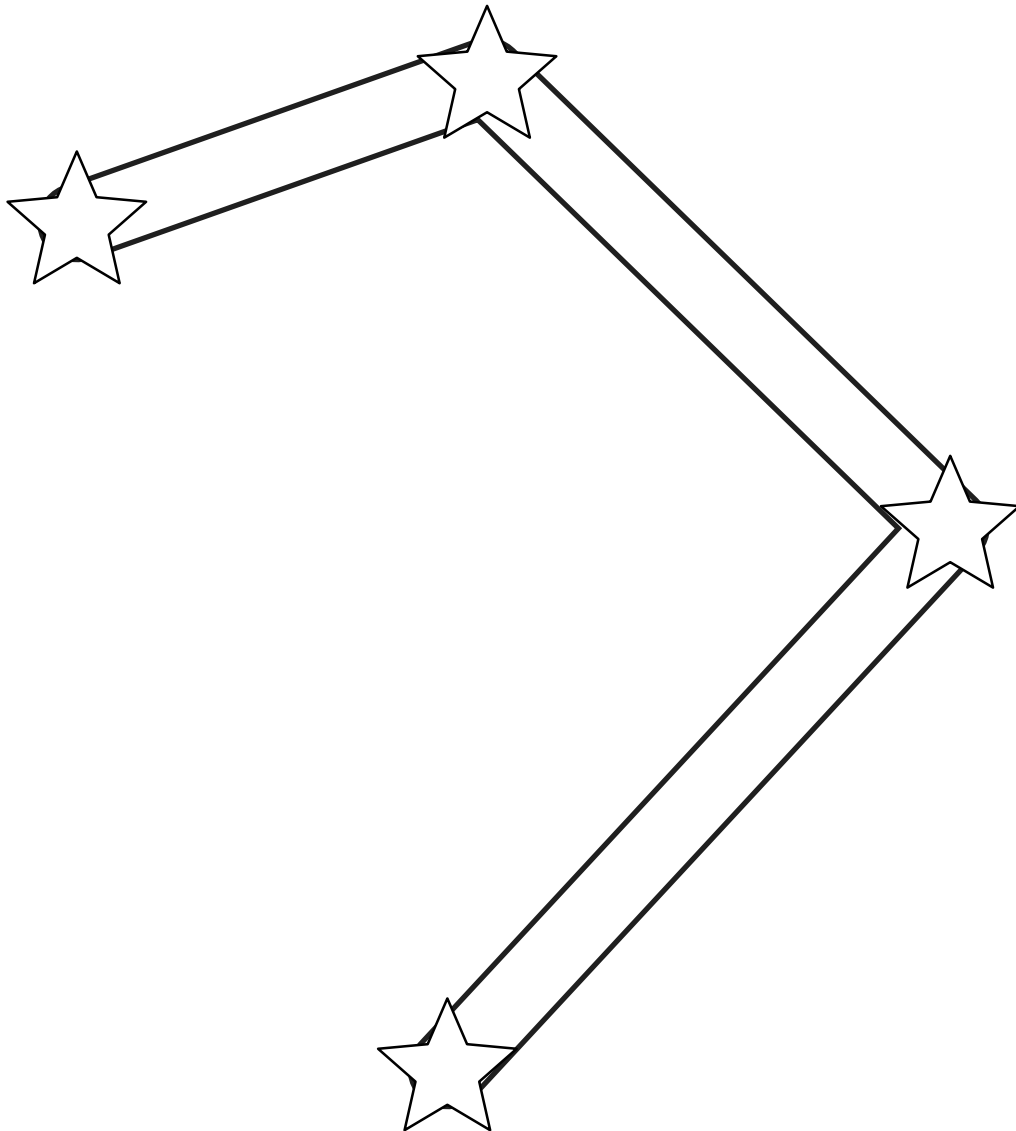
Touch each star once. Find the same number of dots.



Count one, three, and five star symbols. The dot groups are in a different order.

Trace an invented star path

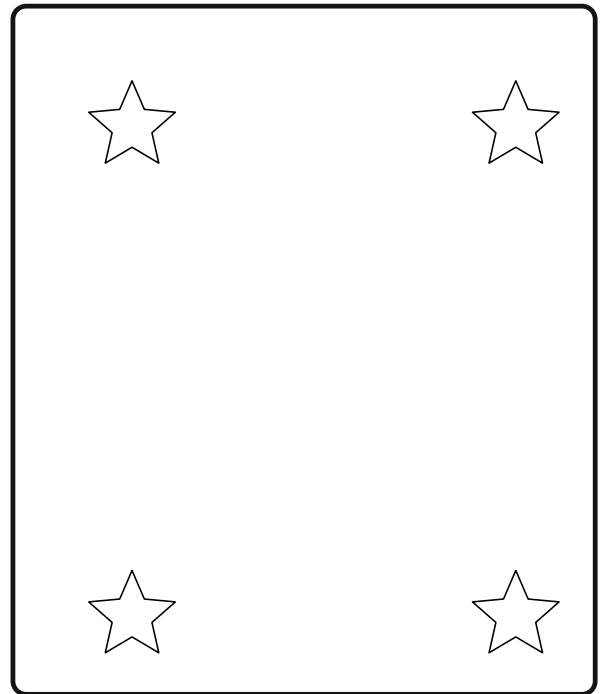
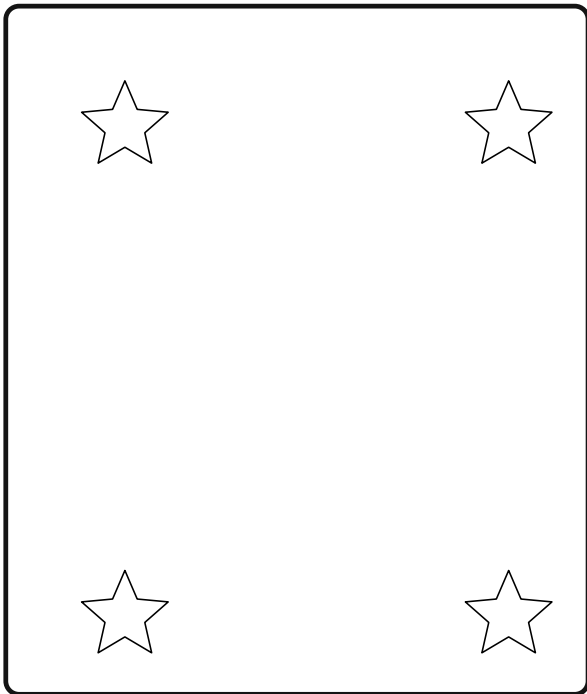
Follow the path from star to star. What does it remind you of?



This pattern is invented. People in different cultures connect and name star patterns in different ways.

Same stars, two pictures

Join the stars on each side in a different way.

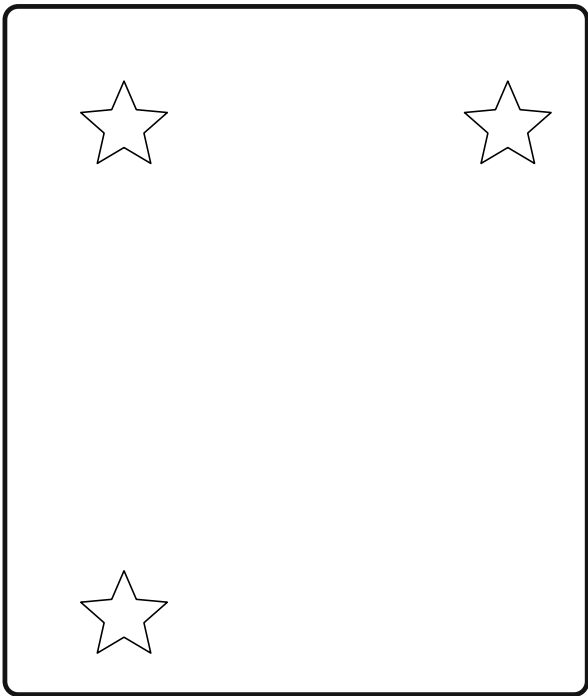
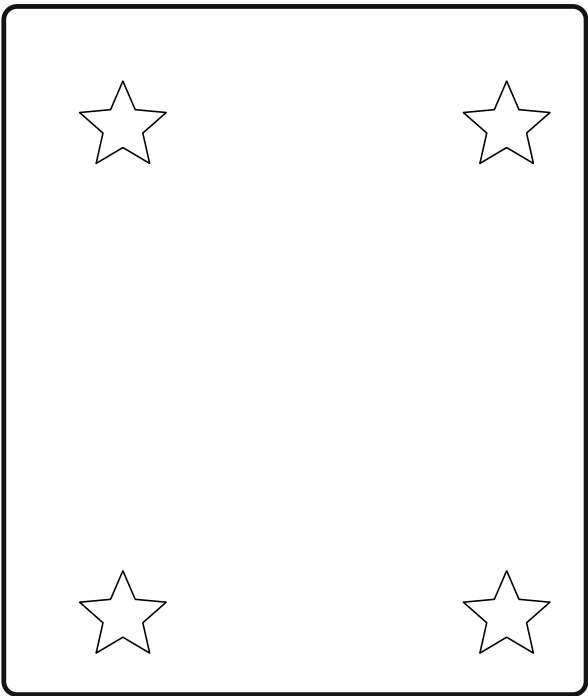


Tell a grownup what each pattern could be.

Two imagined pictures can use the same stars. These practice patterns are not official constellation maps.

One star is missing

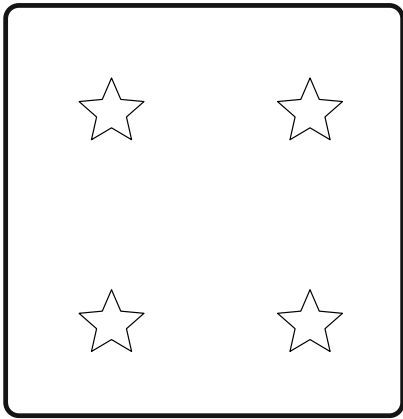
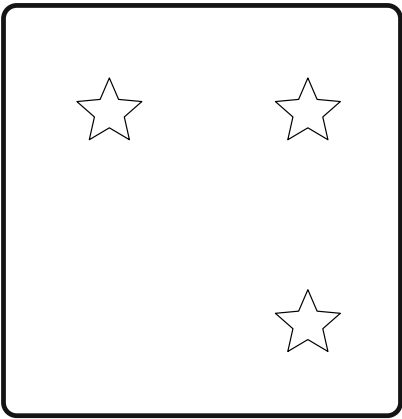
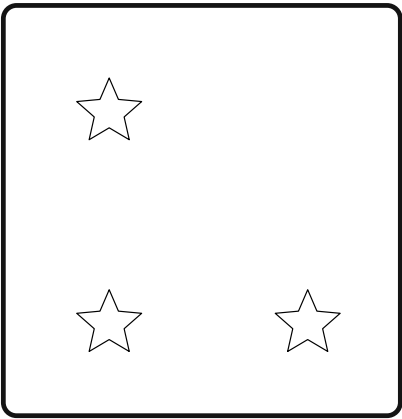
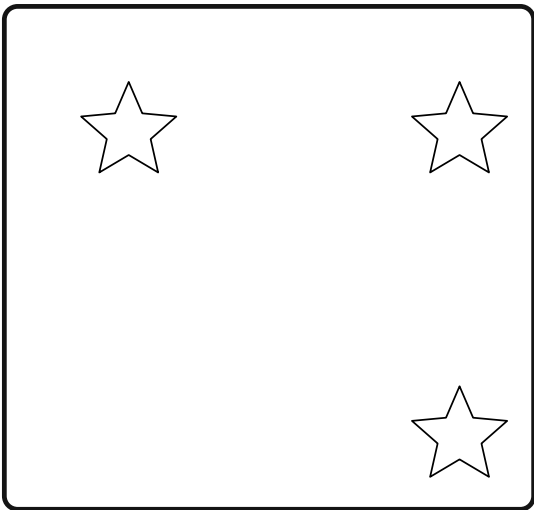
Compare the maps. Draw the missing star on the right.



The right map needs its lower-right star. Dots or circles can stand for stars if stars are hard to draw.

Find the matching sky map

Point to the little map that matches the big one.

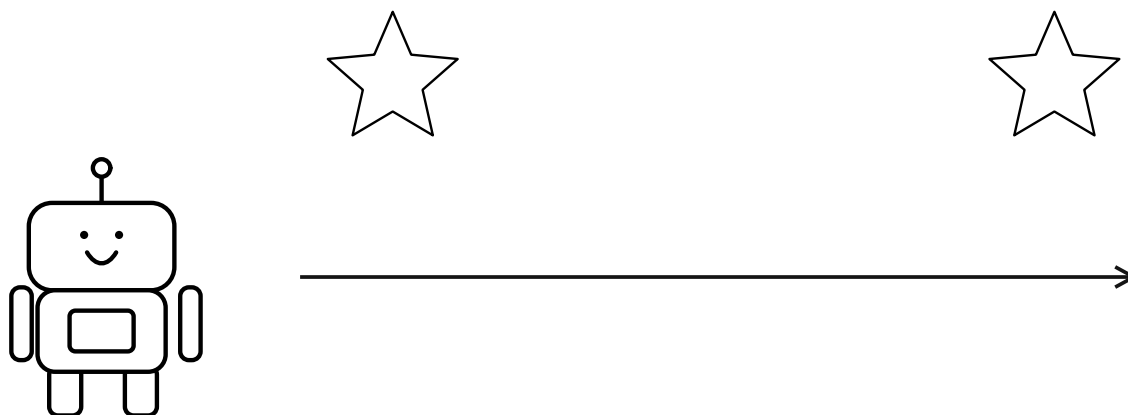


Middle choice: two stars above and one below on the right. Every chart here is invented for practice.

Near and far on paper

Point to the star closest to the watcher. Then point far away.

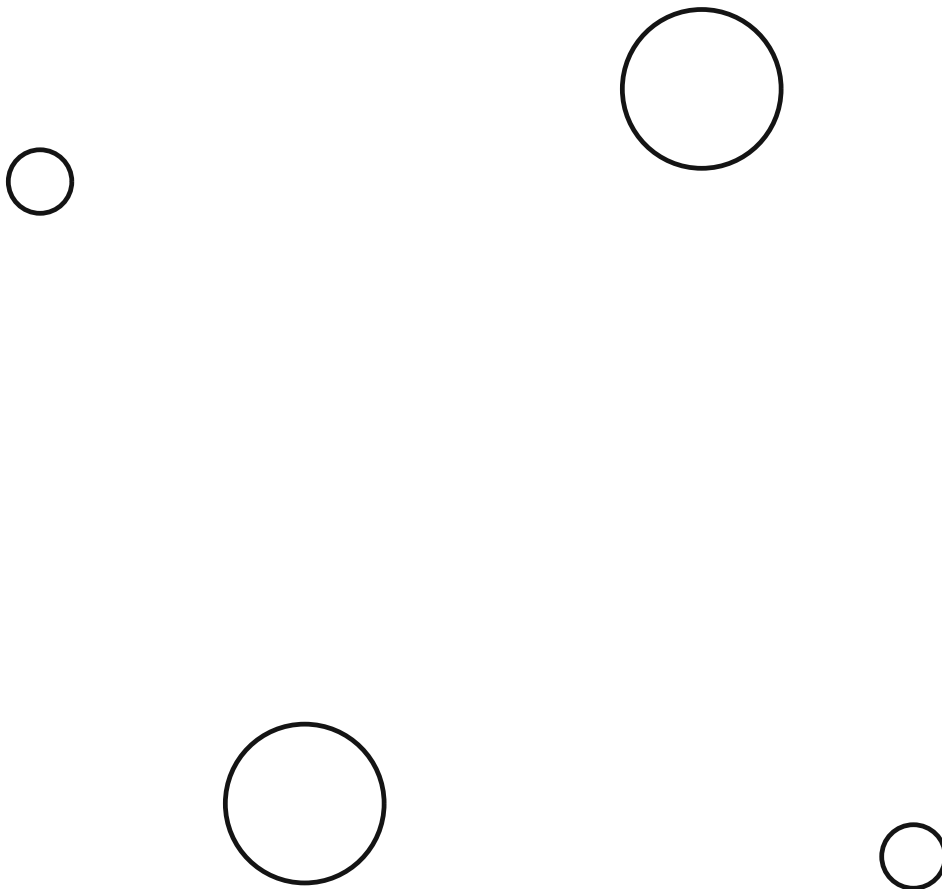
The two stars are the same size in this pretend side view.



Left star is nearer to the watcher. Real stars are extremely far away; this side-view model is not to scale.

Big dot, bright symbol

On this pretend map, circle the two biggest star dots.

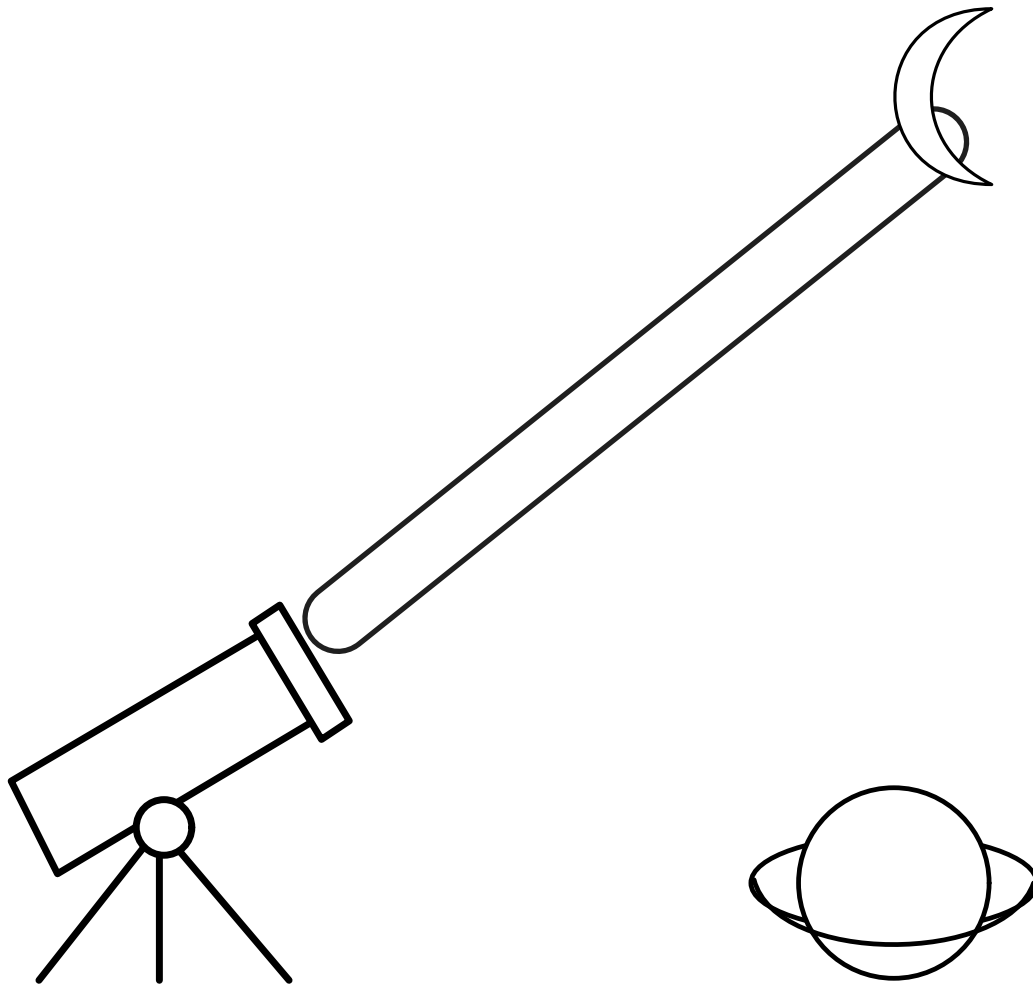


Our big dots mean: looks brighter.

Map-symbol size can show apparent brightness. It does not tell us a star's real size or distance.

Point the paper telescope

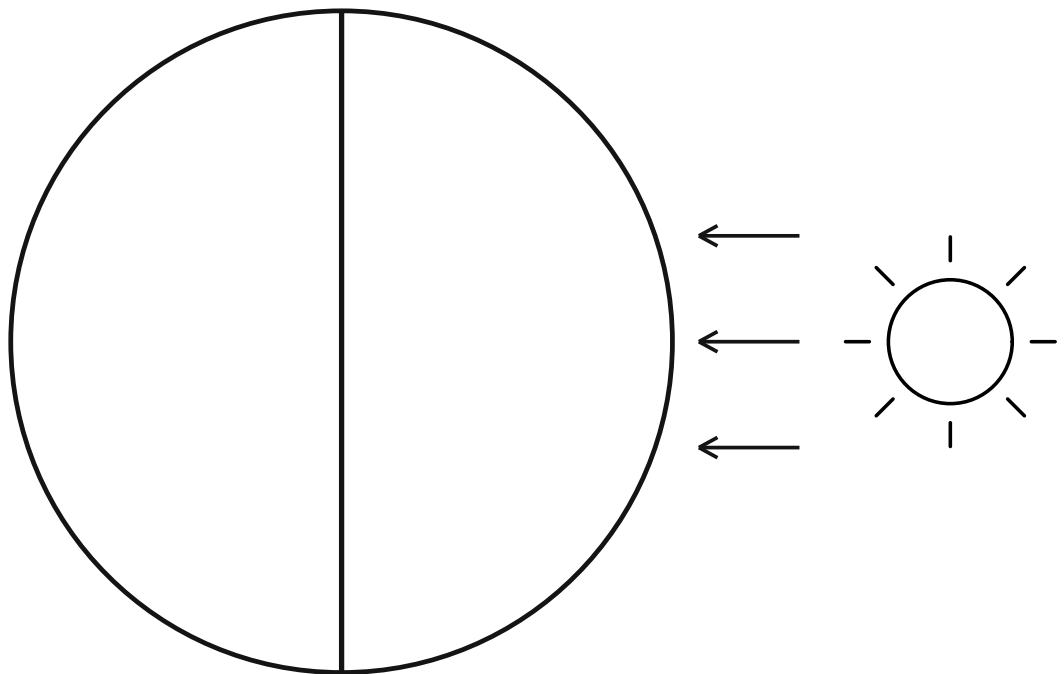
Trace the telescope's looking line. What picture is at the end?



The line leads to the Moon picture. Paper activity only: never point a real telescope at the Sun.

Earth has a day side

The Sun is on the right. Color the half of Earth facing away.

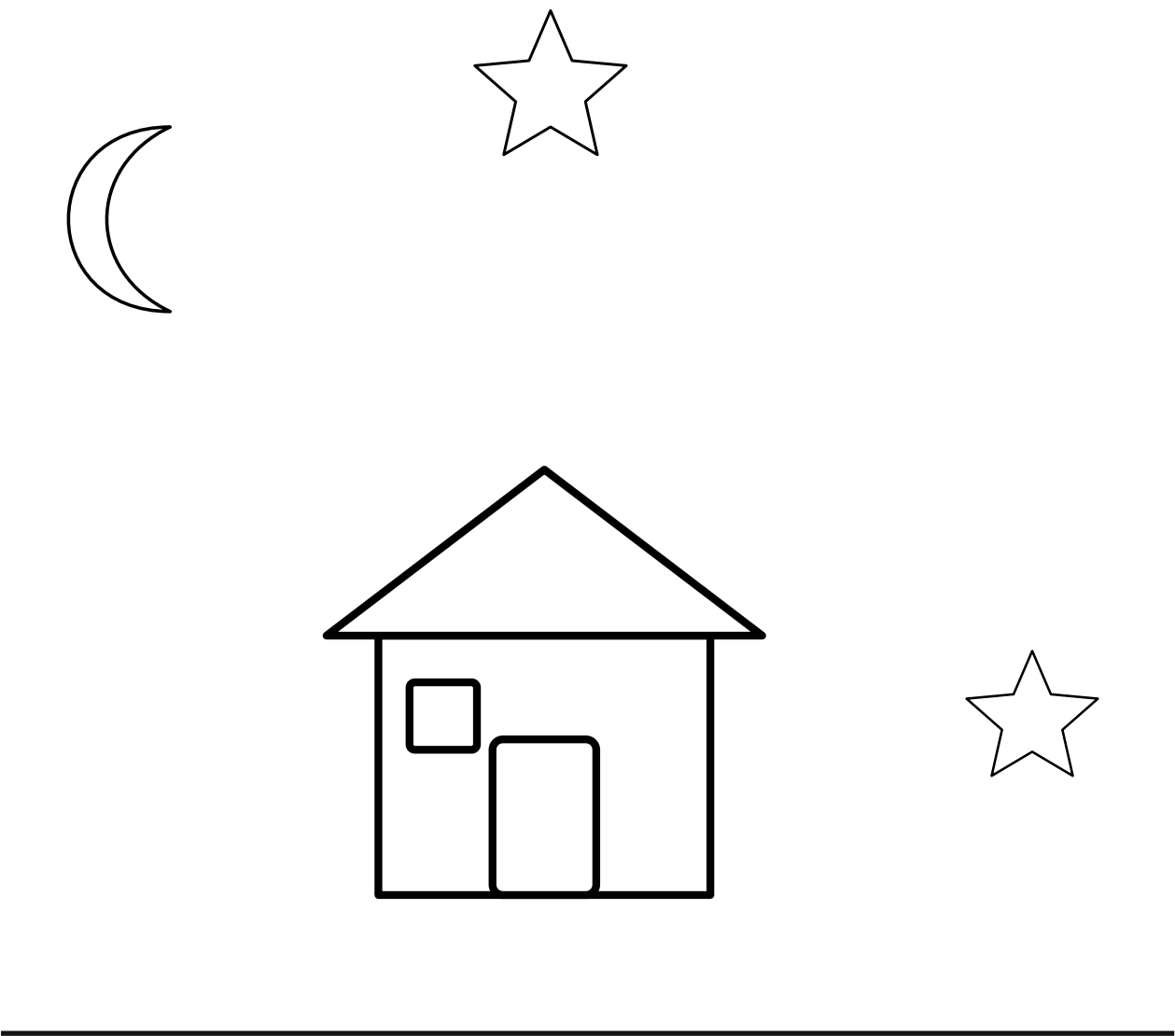


Point to the sunlit half. Point to the night half.

Color the left half. This simplified model shows sunlight reaching the right side; it is not to scale.

Above the little house

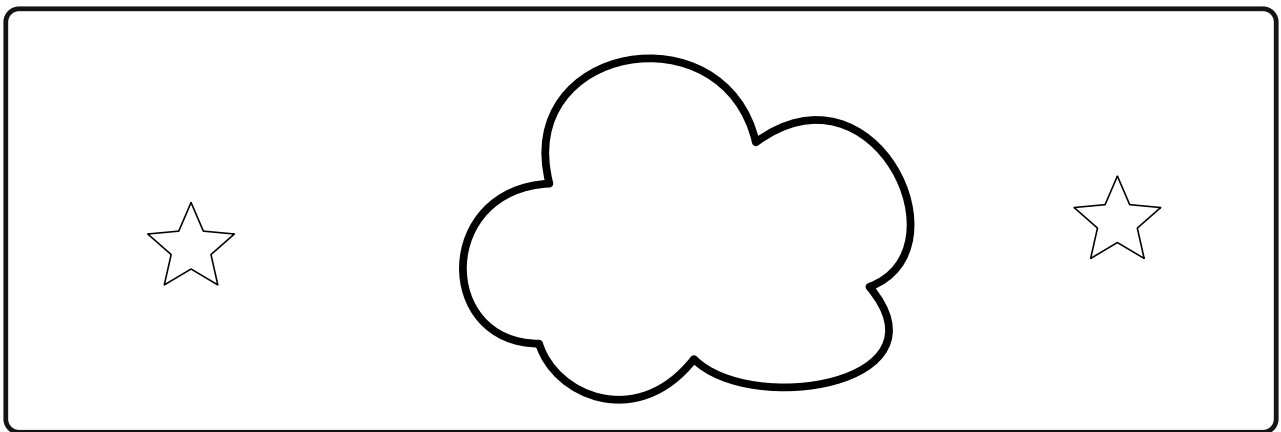
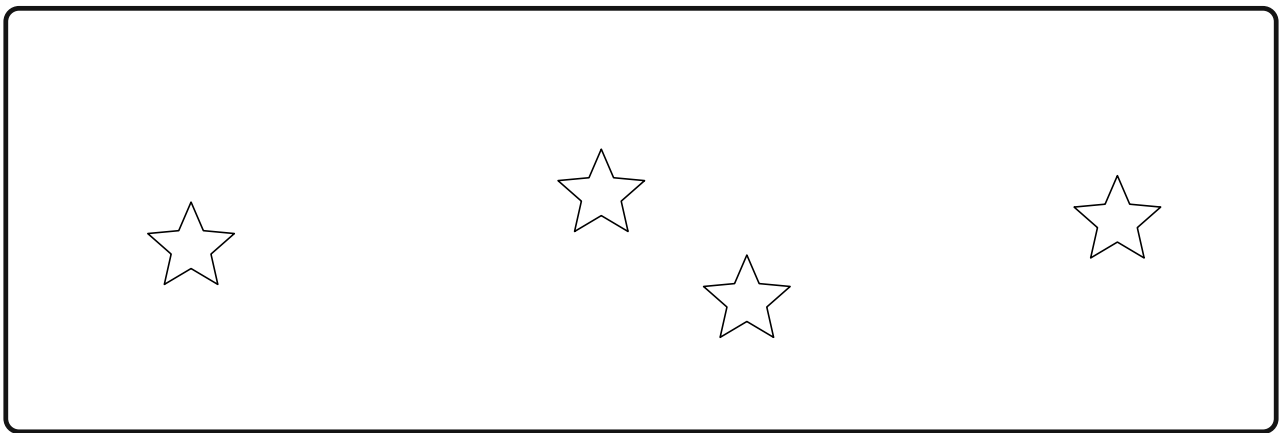
Color the star above the roof. Circle the star beside the house.



Top star is above the roof; right star is beside the house. Relative positions are useful when describing a view.

A cloud hides some stars

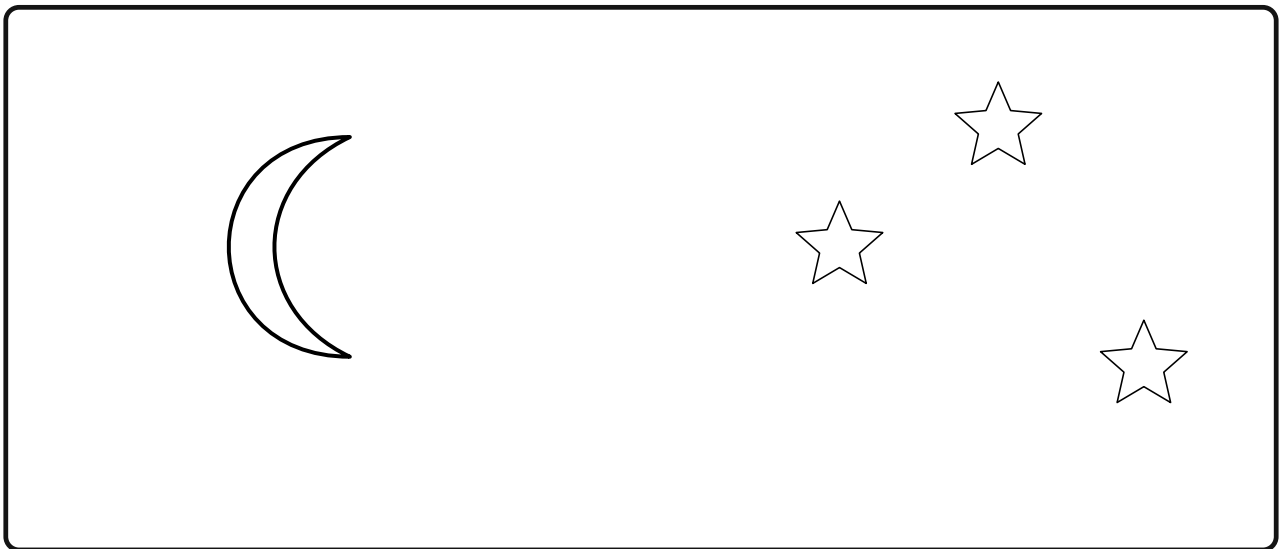
Look at both skies. Point to the stars the cloud hides.



The lower cloud covers the middle two stars. A cloud can block our view; the stars have not gone away.

The Moon in two skies

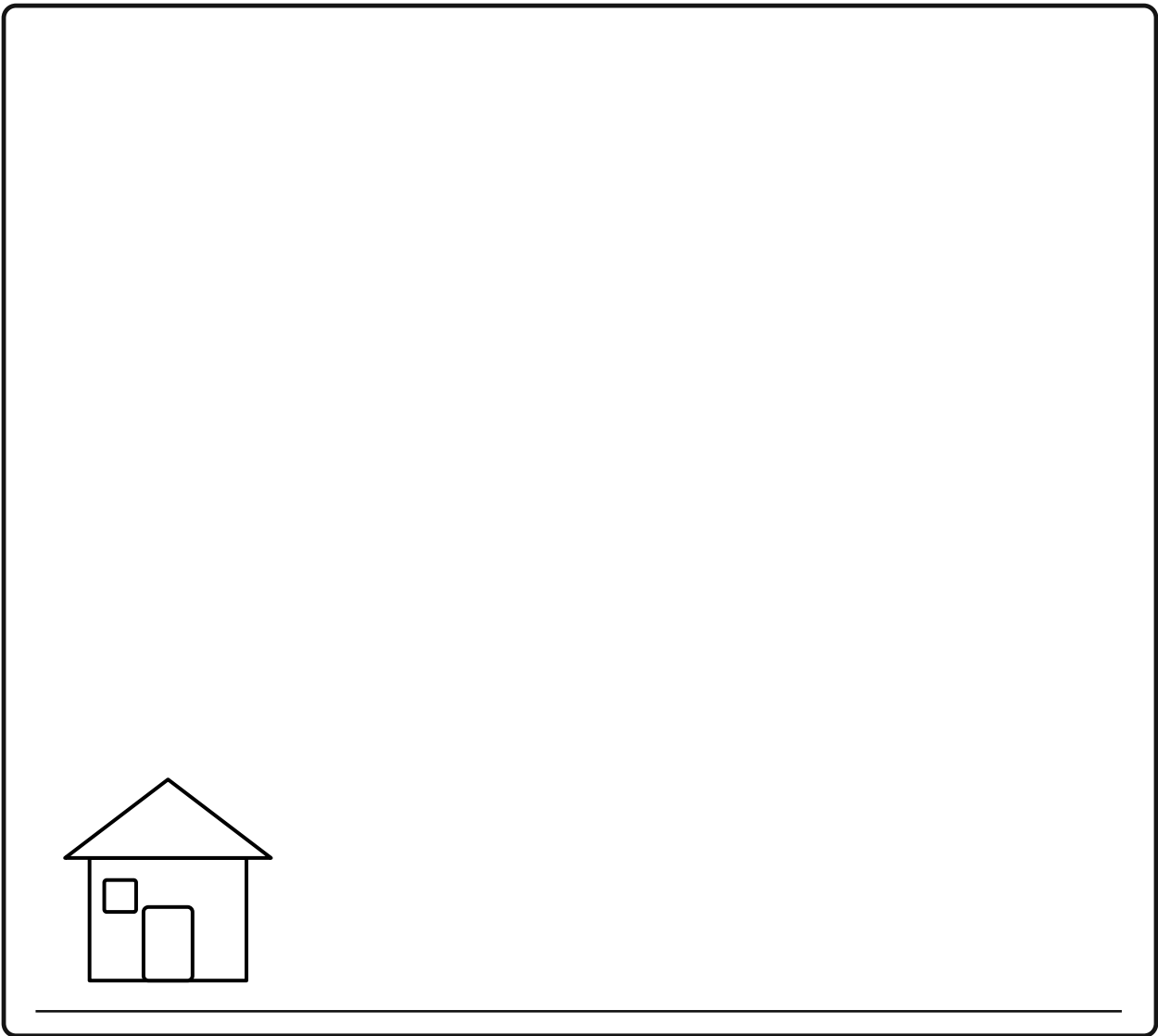
Find the Moon in each picture. Color both Moon pictures.



We can sometimes see the Moon in daylight as well as at night. These two skies are symbolic, not same-time charts.

Draw your own sky map

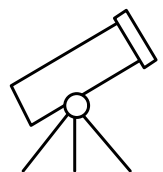
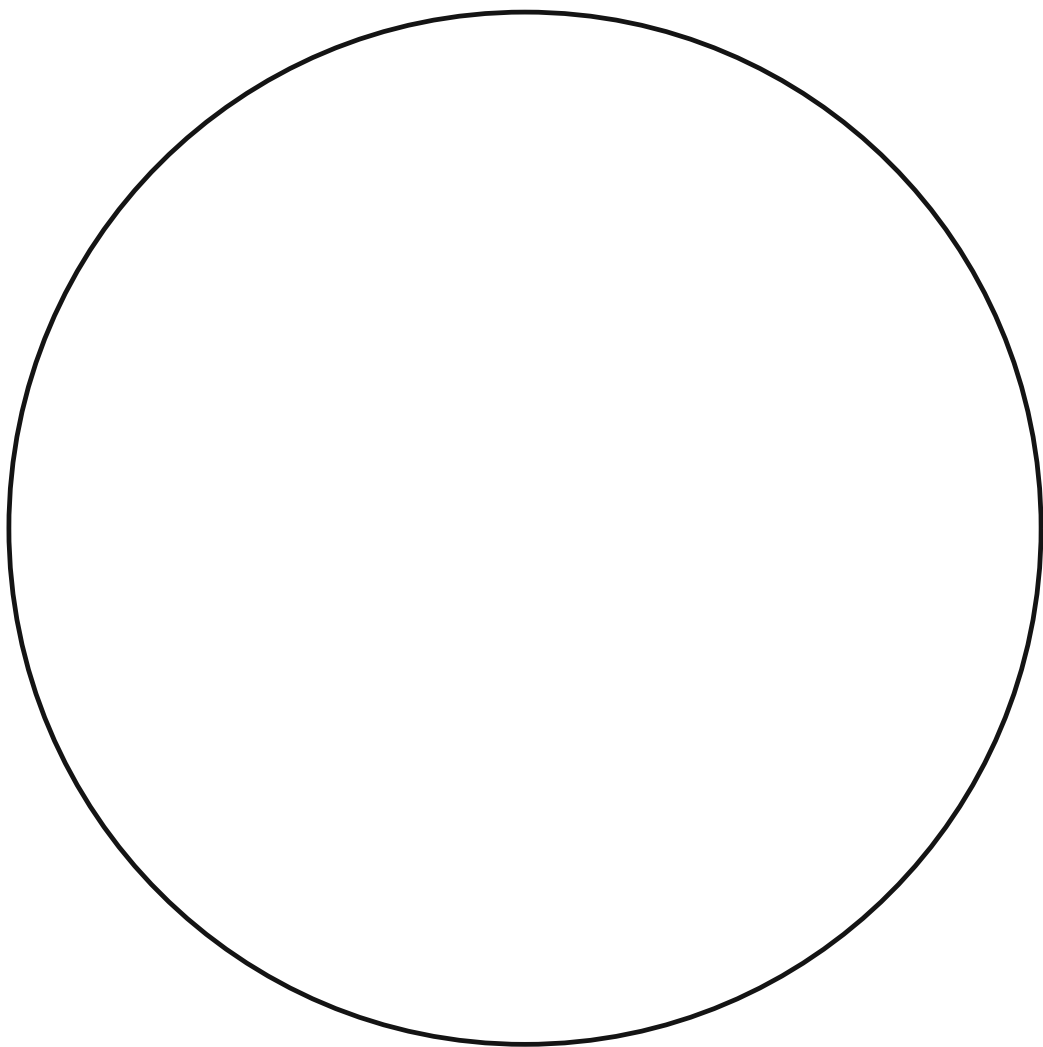
Add up to five star dots. Join some to invent a picture.



Give your invented pattern a name aloud. A map symbol is not a measured distance or the real size of a star.

A pretend telescope view

Draw a Moon or planet in the circle. Tell what you notice.



A telescope gathers light to help us see distant things. This is an imagined paper view, not an observing task.

A little guide for grownups

Ages 4-6 | Read aloud, point, trace, and talk.

Get ready

Print actual size on Letter or A4. Use crayons or a pencil. No scissors, glue, screens, or independent reading are needed.

Make it gentle

Try one or two pages at a time. A child may answer by pointing or speaking. Offer a finger trace before a pencil trace.

What this explores

Matching and counting star symbols, relative positions, invented maps, visible and hidden objects, a near/far model, and the day and night sides of Earth.

Keep the model honest

All charts are invented and not to scale. Star symbols are not real shapes; large dots need not mean large stars. Patterns vary across cultures. What is visible depends on place and time. Never look at the Sun through a telescope.

Sources for grownups

NASA Space Place: Constellations

<https://spaceplace.nasa.gov/constellations/en/>

NASA Space Place: Telescopes

<https://spaceplace.nasa.gov/telescopes/en/>

NASA: Top Moon Questions

<https://science.nasa.gov/moon/top-moon-questions/>

Answers and conversations

Pointing, speaking, or drawing all count.

1. Open: color and point to the star and Moon.

9. Upper-right and lower-left large dots mean looks brighter.

2. Left top -> right middle; left middle -> right bottom; left bottom -> right top.

10. The line leads to the Moon.

3. One -> middle dots; three -> bottom; five -> top.

11. Left half is night; right half faces sunlight.

4. Follow the four-star path; any imagined resemblance.

12. Color the upper star; circle the star right of the house.

5. Open: two different connections using the same four positions.

13. The cloud hides the middle two stars; two remain visible.

6. Add a lower-right star to the right map.

14. One Moon in each sky, on the left.

7. The middle little map matches.

15. Open: up to five star dots and an invented pattern.

8. Nearer: left star. Farther: right star.

16. Open: a Moon or planet drawing and an observation.

Open-ended pages have many useful answers. Ask what your child noticed; no scores are needed.