The Swivel-Chair Star Spin

KIDS HANDS-ON | RUN AT 11:00 | 25 MIN

The point

Spin slowly and the whole ceiling appears to circle the one point directly overhead — which never moves. That is EXACTLY why the night's stars wheel around the North Star: **the sky holds still; we turn beneath it.**

Materials

- A swivel chair
- A removable sticker dot on the ceiling, directly above the chair
- A spotter behind the chair

Steps

1. Point out the ceiling dot. Ask: when you spin, what will the dot do? What will the rest of the ceiling do?
2. One child sits, looks straight UP, and turns SLOWLY (the spotter keeps it gentle).
3. Watch: the lights, the corners, the whole ceiling glide in circles — around the dot. The dot alone stays put.
4. Stop. Ask the trap question: did the ceiling move?
5. Every child takes a spin; the group confirms the dot never moves.
6. Connect it: time-lapse photos of the night sky show every star wheeling in circles around the North Star — the star parked over Earth's axis. Same sight. Same cause. The sky is the ceiling; the Earth is your chair.

> *Say: "The ceiling never moved an inch — YOU turned. And tonight's stars will wheel around the North Star for exactly the same reason: the sky stands still, and we are the ones spinning."*



TEACHER PREP

Stick the dot truly overhead (plumb it with D-1's bob for the joy of it). Brief the spotter: slow spins only.

What to watch for

- The dot must be DIRECTLY above the chair or the effect smears
- The trap question lands before the astronomy: who moved?

EXPECTED RESULT

The ceiling appears to wheel around the never-moving dot for every spinner. The North Star's nightly circles now have a felt explanation.