

Two ten-minute space adventures for curious kids

Ages 7 to 9 · from Karl P.J. Hobbes, author of The Adventures of Space and Time

Adventure 1: the solar system in your pocket

You need: a strip of paper about as long as your arm, and a pencil.

1. Write SUN at one end and NEPTUNE at the other. That whole strip is our solar system.
2. Fold the strip in half. Open it. On the crease, write URANUS.
3. Fold the Sun end in to the middle crease. That new crease is roughly SATURN.
4. Fold the Sun end in again to the nearest crease. That's roughly JUPITER.
5. Now the tricky bit: Mercury, Venus, Earth and Mars ALL have to squeeze into the little space left next to the Sun. Try to fit them in!

Talk about it: almost everything in the solar system is empty space, and the four rocky planets, ours included, are huddled up close to the Sun. (The folds are close-enough places, not exact ones. Real astronomers measure in AU: one AU is the distance from the Sun to Earth, and Neptune is about 30 of them away.)

Adventure 2: looking back in time

No equipment needed, just a grown-up and a clear evening.

Light is the fastest thing there is, but the sky is so big that light still takes time to cross it. So every time you look up, you're looking into the past:

- **The Moon:** you see it as it was about 1 second ago.
- **The Sun:** about 8 minutes ago (never look at it directly!).
- **The brightest stars:** years ago. The light landing in your eyes tonight may have left its star before you were born.

Talk about it: if a star is 8 light years away, what year did tonight's starlight leave it? Work it out together. You've just done the same sum astronomers do.

Enjoyed these? Space and Time, two best friends at the Faraway School of Discovery, have plenty more adventures with real science woven in. *The Adventures of Space and Time* by Karl P.J. Hobbes is available in paperback (£7.99): amazon.co.uk/dp/BoFHKQSZX2