



Three space adventures you can do before bedtime

For explorers aged 7 to 9 (grown-ups welcome). No equipment beyond household bits.

1. Design your school rocket

Imagine your school could only be reached by rocket. Draw it. Your rocket must have: a way to launch quietly (the neighbours are sleeping), one room just for science experiments, and somewhere to keep your lunch so it doesn't float away. Label all three. Hardest question, for the back of the sheet: where does it land when school's out?

2. Walk the solar system

If the Sun were a football sitting at your front door, the Earth would be about the size of a peppercorn, about 25 big steps down the road. Try it: put a ball at the door, take 25 steps, and hold up something tiny. Everything between your ball and your peppercorn is empty space. Now here's the surprise: at that scale, the NEXT star is roughly 6,000 kilometres away. That's why rockets are hard.

3. The minute test

You need a timer and a grown-up. First: sit completely still and silent for one minute. Then: do star jumps for one minute. Which minute felt longer? They were exactly the same. Or were they? Scientists have found that time really can pass differently depending on how you're moving, which is one of the strangest true things we know. Your homework is simply to tell someone else about it at breakfast.

*From **The Adventures of Space and Time** by Karl P.J. Hobbes, an illustrated STEM chapter book for ages 7 to 9. The Home Ed Daily called it "a warm, bright and imaginative chapter book that introduces younger children to some very big scientific ideas without making them feel heavy." Paperback £7.99; all formats at <https://fosspress.co.uk/book-space-and-time>*