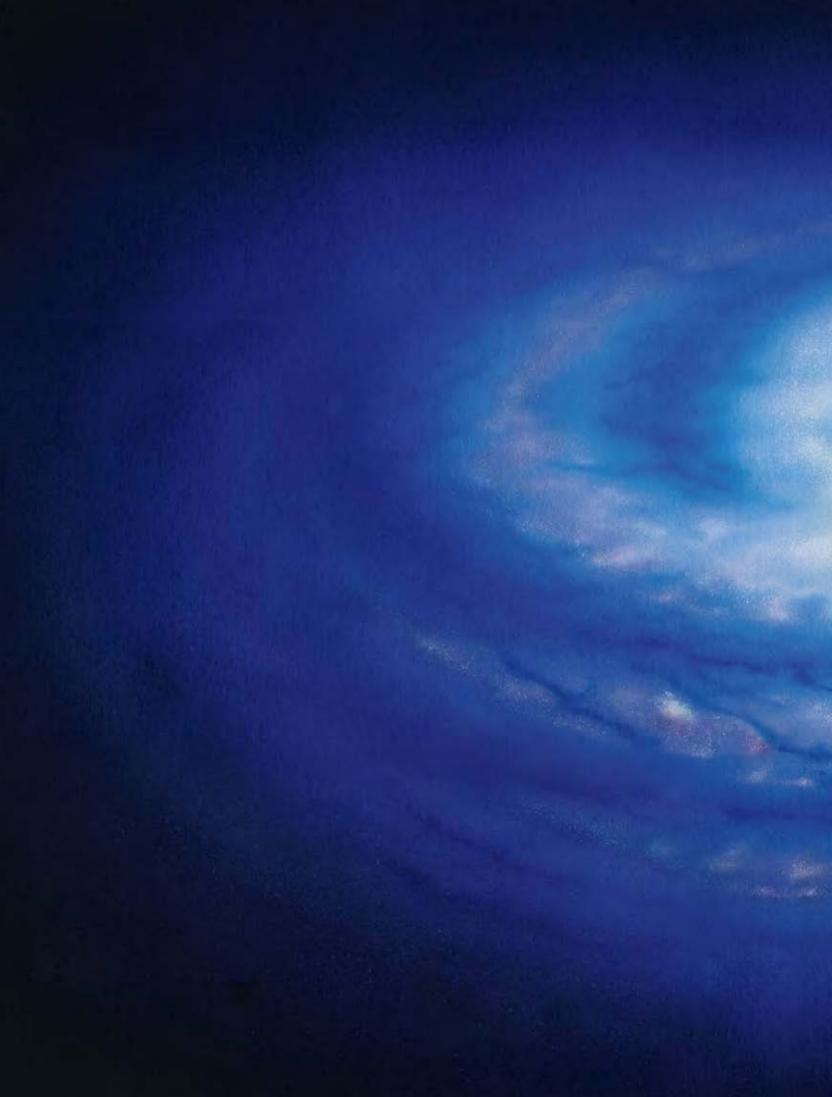
## MYPlace INSpace

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ROBIN & SALLY HIRST

## MY Place IN Space

Roland Harvey & Joe Levine



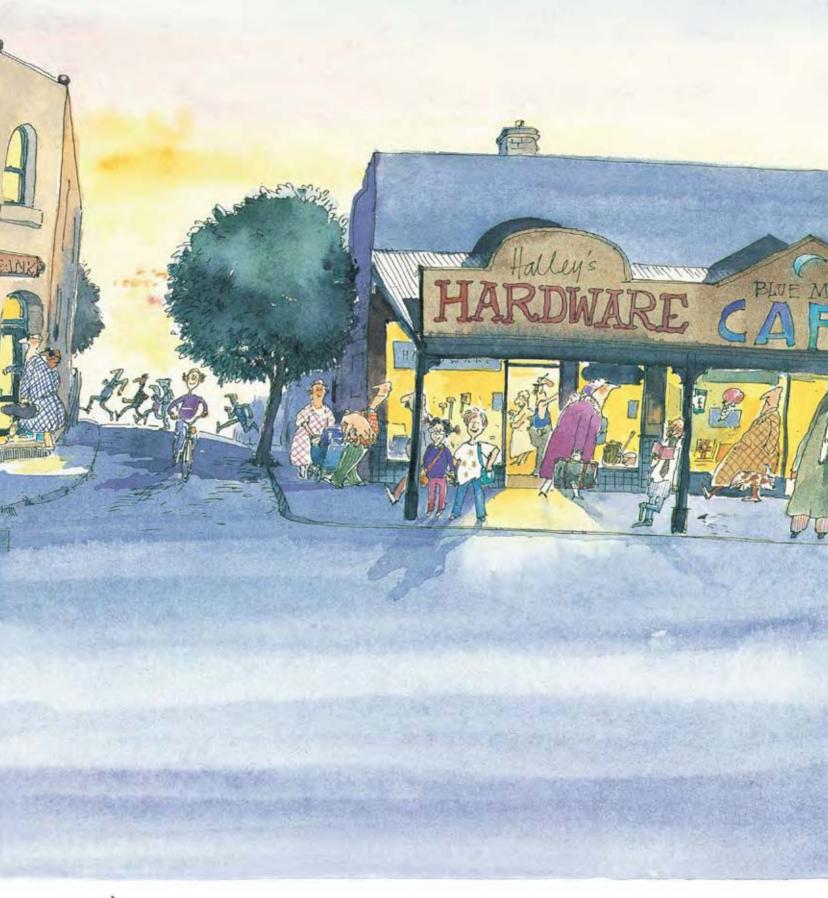




Not so long ago, Henry and Rosie Wilson were waiting for a bus. The bus roared around a corner and, with a sudden swerve towards the kerb and a hiss from the brakes, it stopped in front of them.

The door swung back. The tall and rather scruffy driver peered down at Rosie and Henry.







'Who are you?' asked the driver. 'And where would you like to go?'

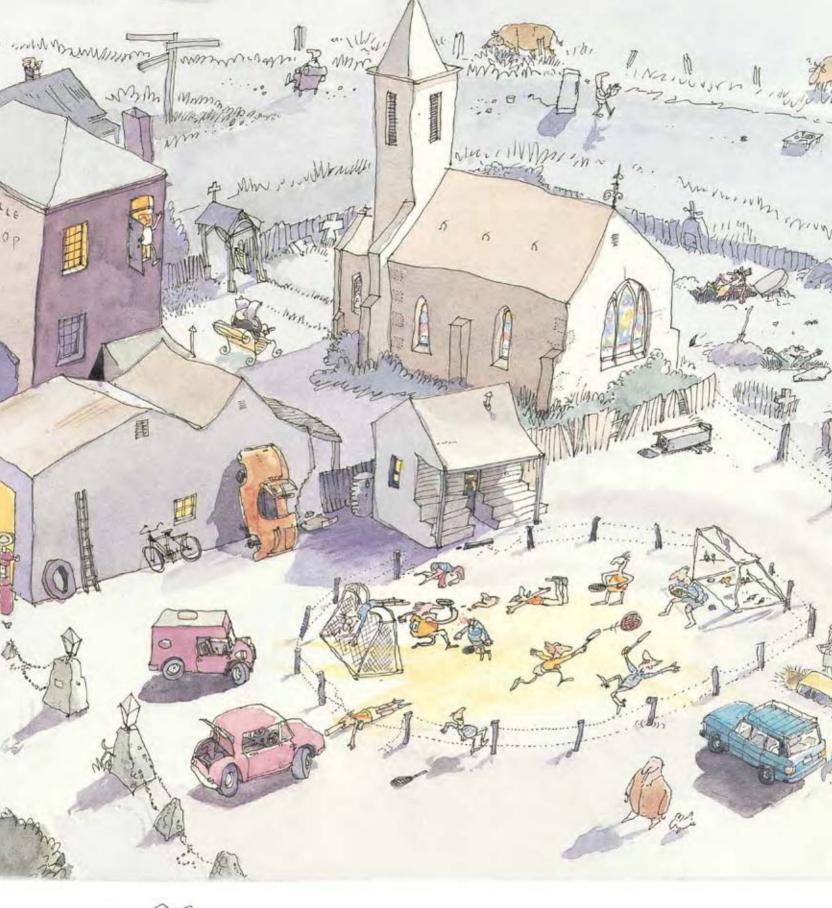
'I'm Henry Wilson and this is my sister, Rosie,' said Henry."
'We'd like a ride home, please.'



'Home?' asked the driver loudly, imitating Henry's voice and raising his eyebrows.

Henry felt his face go red.

'Well,' said the driver, leaning forwards, 'that depends on whether you can remember where you live!'

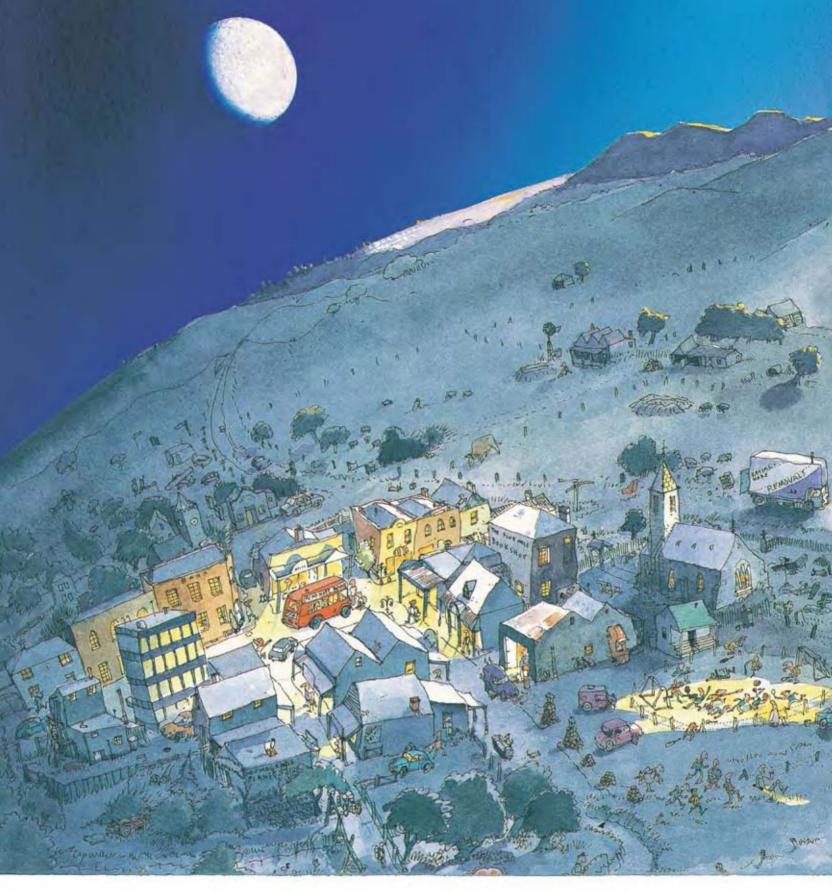




He laughed and winked at two women on the front seat of the bus. They giggled.

'Do you know where you live, Henry Wilson?' the driver's voice boomed.

The giggling women stared at Henry, waiting for his reply.





Henry gritted his teeth and took a deep breath.

'Yes, I do know where we live. We're at number
12 Main Road, Gumbridge. Our house is on the north side of
Main Road. The town of Gumbridge is just over the river from
here, about twenty kilometres south of the Dividing Range.'





The driver's grin faded slightly.

Henry took a deep breath and continued.

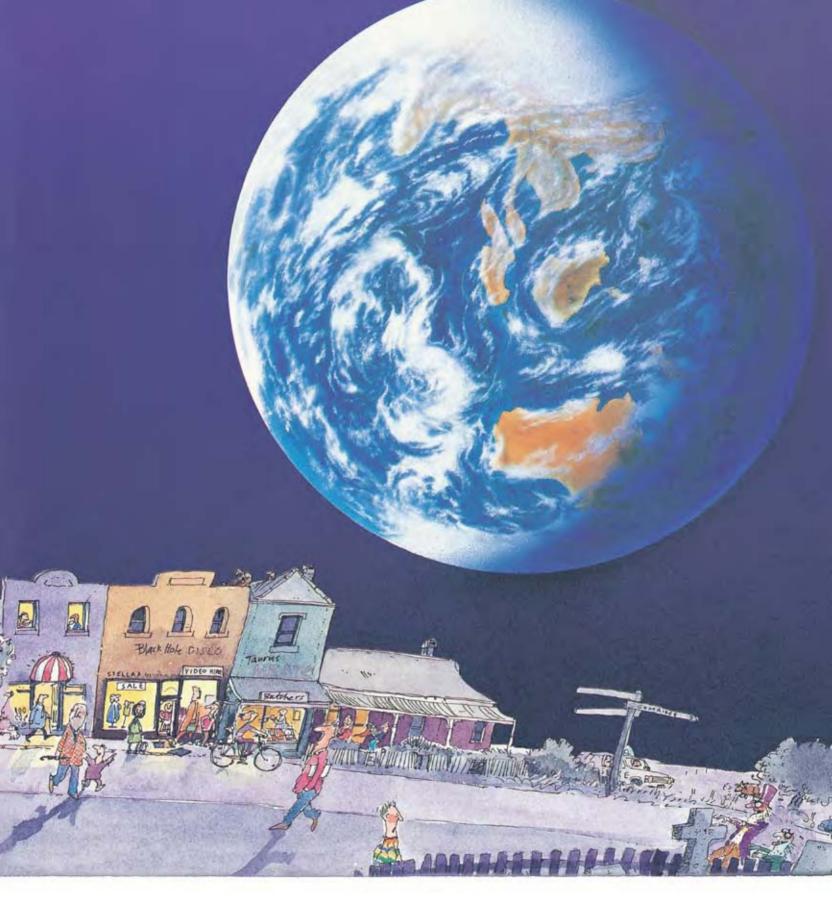
'Gumbridge is a typical country town in Australia.'





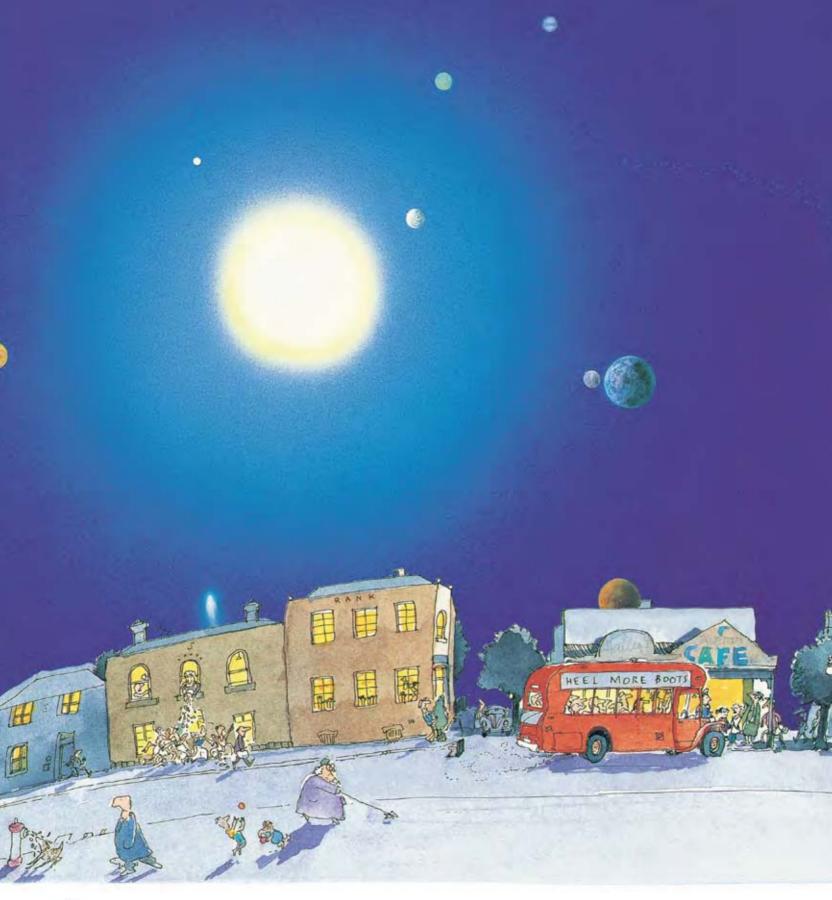
'Australia is in the Southern Hemisphere of the planet Earth,' continued Henry.

The women in the front seat had stopped giggling and their mouths were gaping rather foolishly. So was the bus driver's.



Rosie squeezed Henry's hand. Gaining courage, Henry took another deep breath and went on.

'The planet Earth is one of the eight major planets which circle the star we call the Sun. Earth is the third planet from the Sun, 150 million kilometres away from it.'





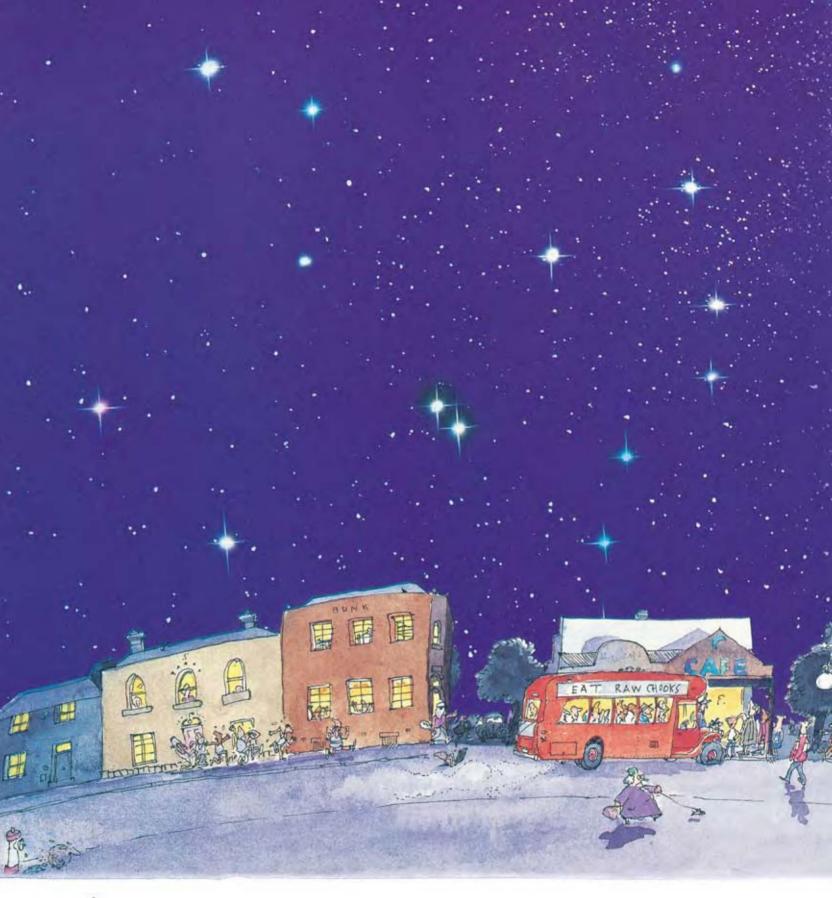
'It takes eight minutes for the Sun's light to travel from the Sun to Earth,' said Henry. 'That may seem a long way, but it's 4,500 million kilometres to Neptune, the eighth planet from the Sun. Sunlight takes over four hours to reach Neptune.'



'Shall I tell him about Pluto?' asked Rosie. Henry nodded.

Rosie turned to the driver. 'In case you were wondering why Henry didn't mention Pluto,' she said, 'it is now called a dwarf planet.'

The driver said nothing, even though his jaw was moving up and down. 'We call the Sun and planets our Solar System,' said Henry.





'Our Solar System is in the middle of a group of stars we call the Solar Neighbourhood. Our Sun's neighbours are stars of all colours and sizes. You can see them in the dark skies of Gumbridge on any clear night,' said Henry. 'The nearest star to the Sun that we can see is called Alpha Centauri. Even though it's the closest, it takes over four years for its starlight to reach our Sun.'



'Other stars, like the big red star Antares, are right out to the edge of the Solar Neighbourhood, about 600 light years away — that means that it takes 600 years for the light to reach us,' said Rosie. She smiled at Henry and took another deep breath.



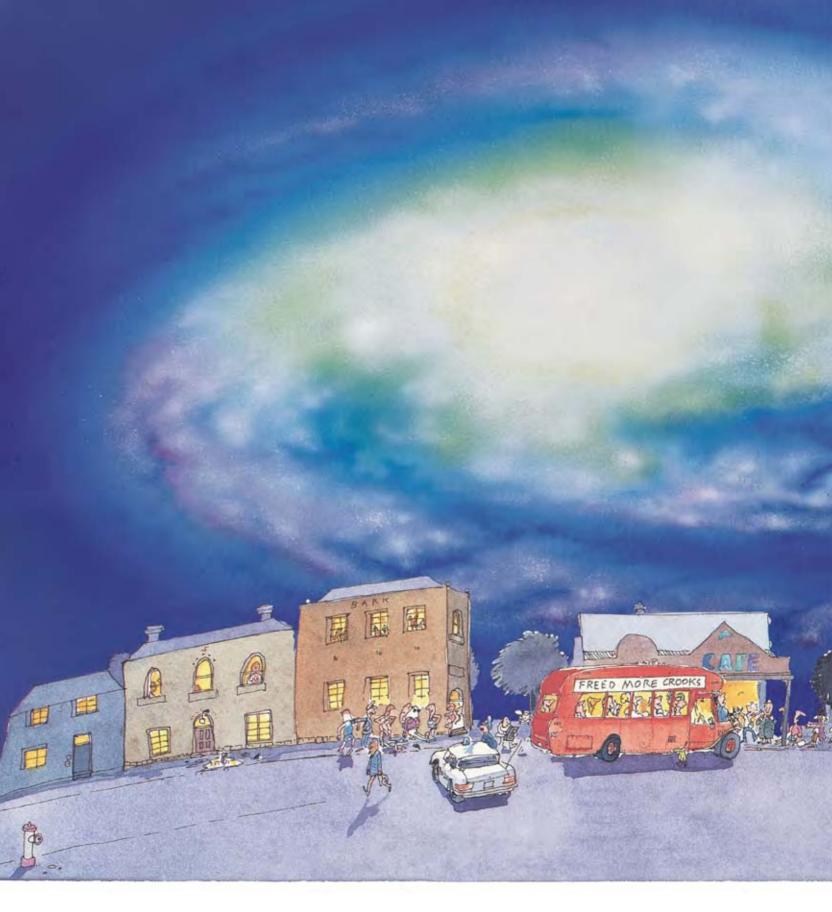


'The Solar Neighbourhood is just a small part of the Orion Arm,' said Rosie. 'Stars aren't spread out evenly in space — they hang around in groups. Our Sun is one star in a group of millions of stars that make a giant curved shape in space. The curve is called the Orion Arm. In among the stars are huge clouds of dust and glowing gases.'



'You can see the dust clouds from Gumbridge, too,' said Henry. 'They look like dark patches in the very starry parts of the sky.' The driver checked his watch. He looked as though he was about to say something, but Henry quickly continued.







'The Orion Arm is just one of the arms of a huge group of about three hundred thousand million stars. This whole group is called the Milky Way Galaxy.'

'If you think it's a long way to the nearest star, that's nothing — it takes light one hundred thousand years to cross from one side of the Milky Way Galaxy to the other,' said Rosie.

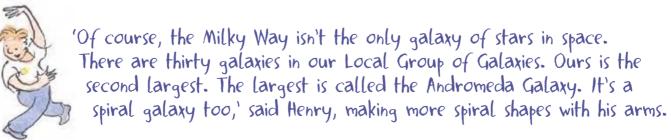




'The Milky Way Galaxy is called a spiral galaxy because of the way its arms make a spiral shape.' Henry and Rosie demonstrated the spiral arms.

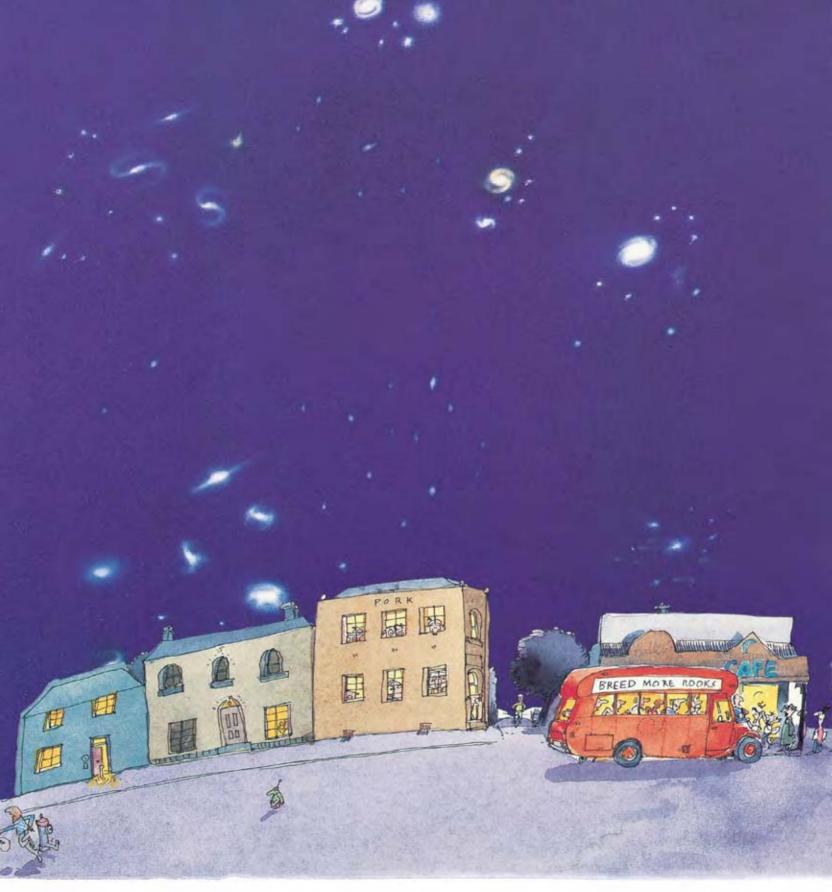








'Light from the stars in the Andromeda Galaxy takes over two million years to reach our galaxy. Most of space is just that — space,' added Rosie. The bus driver looked very puzzled indeed.





The two women on the front seat were staring at the driver, whose cheeks were turning slightly red.

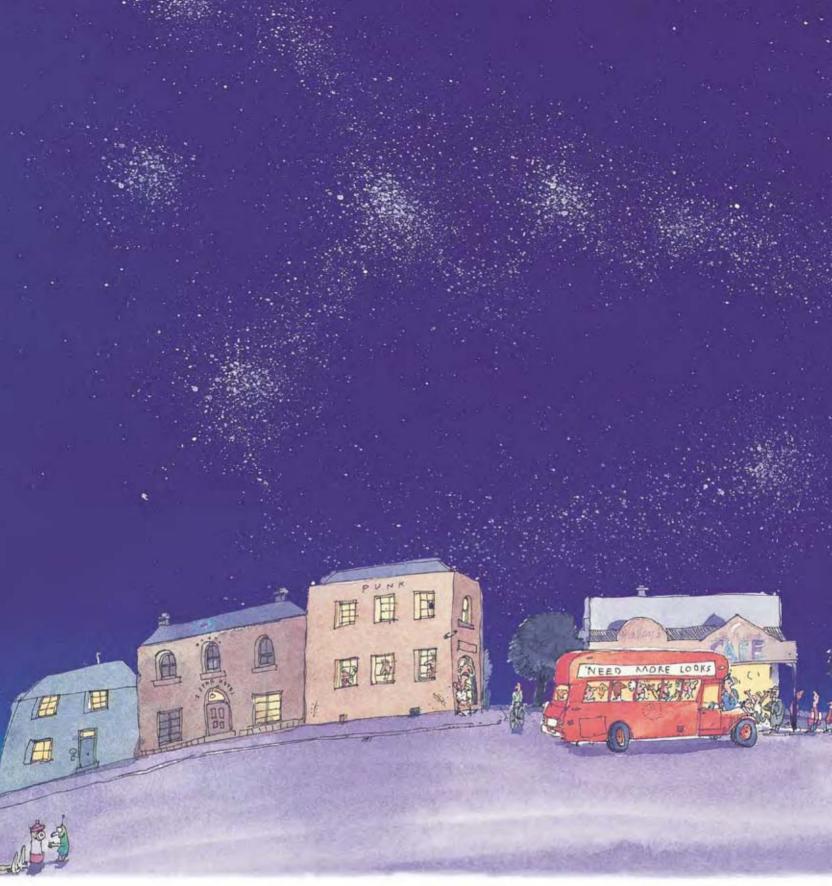
'Our Local Group of Galaxies is just part of a huge group of galaxies called the Virgo Supercluster,' said Rosie.





'It takes light a few million years to cross our Local Group of Galaxies, but it can take a few hundred million years to cross from one side of a Supercluster to another.'



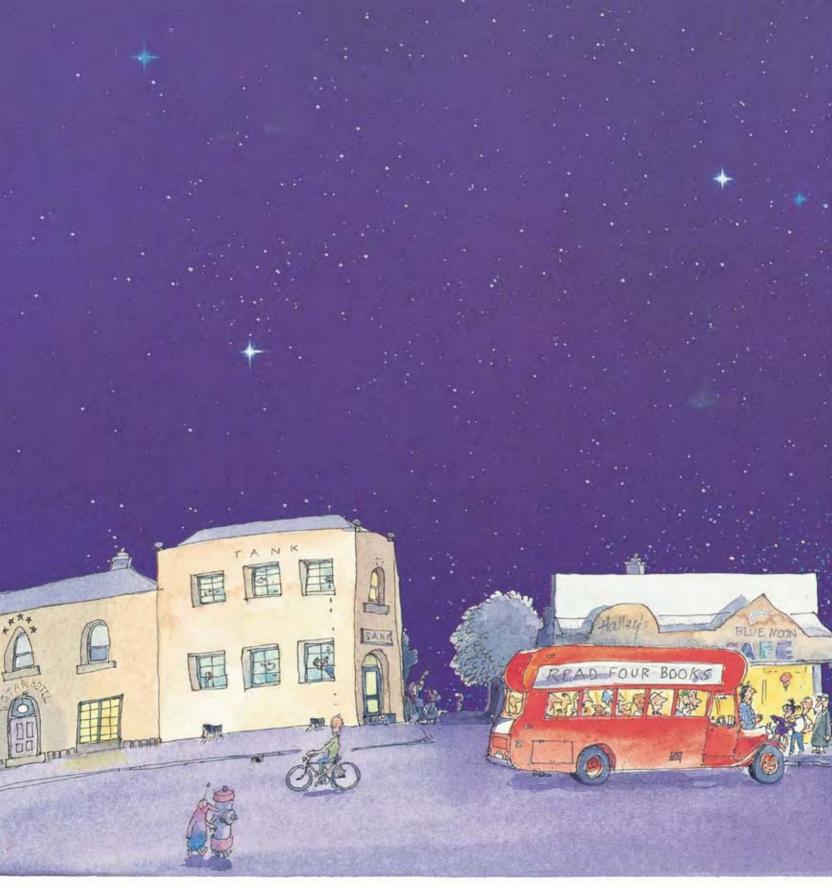




The driver's face was now a bright shade of red and he was shaking his head from side to side.



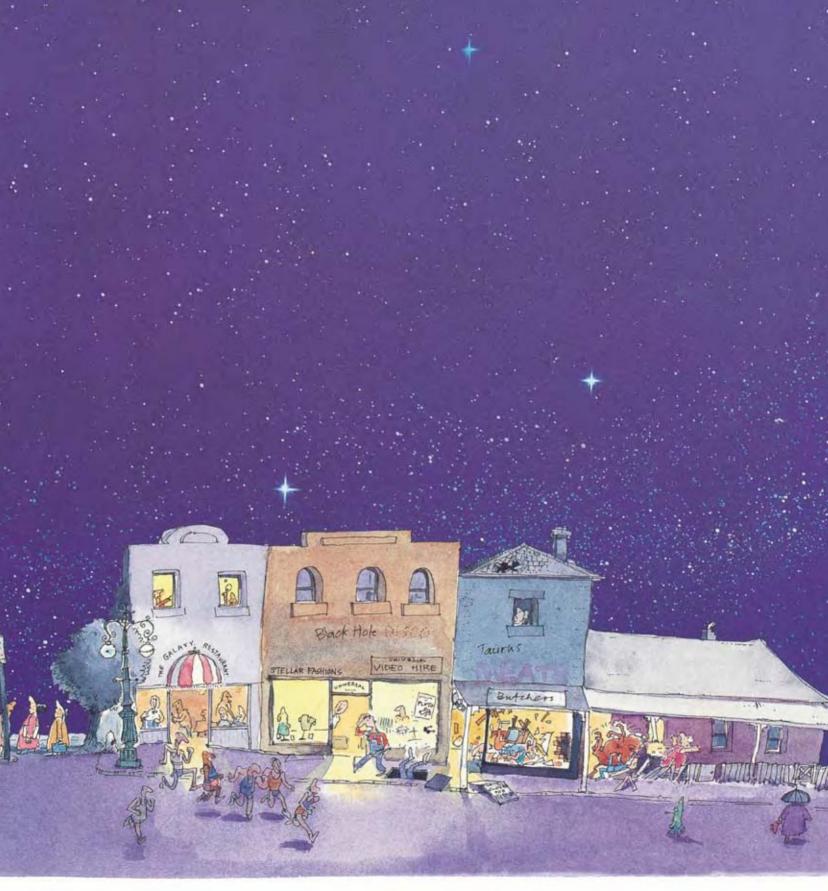
With one more deep breath and a quick smile, Henry waved both arms to make a large circle and said triumphantly, 'And the whole Universe is filled with Superclusters of Galaxies!'





Rosie stepped in front of Henry. She put her hands on her hips and pushed out her chest. 'So we do know where we live,' she said.



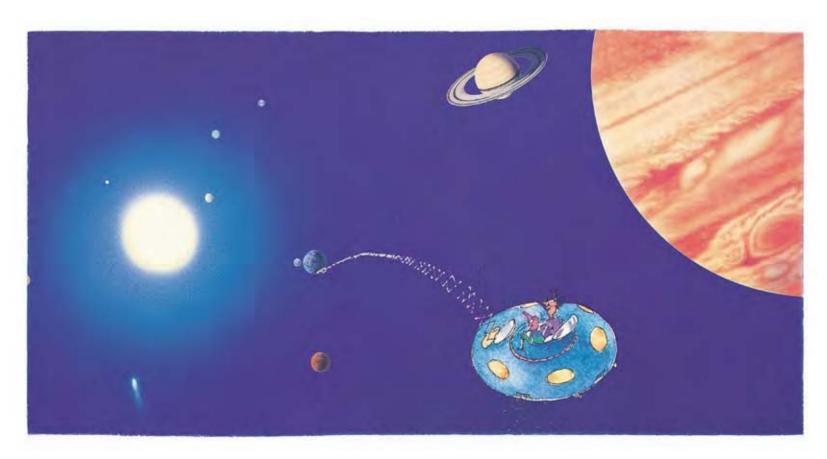


'We live at 12 Main Road, Gumbridge, Australia, Southern Hemisphere...

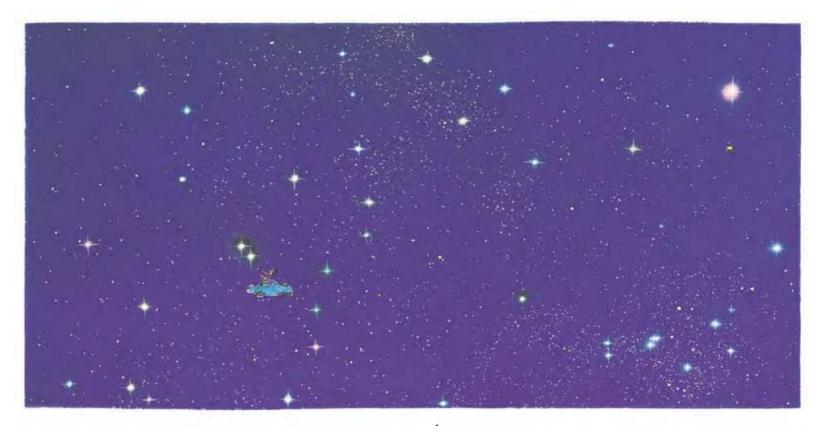




... Earth ...



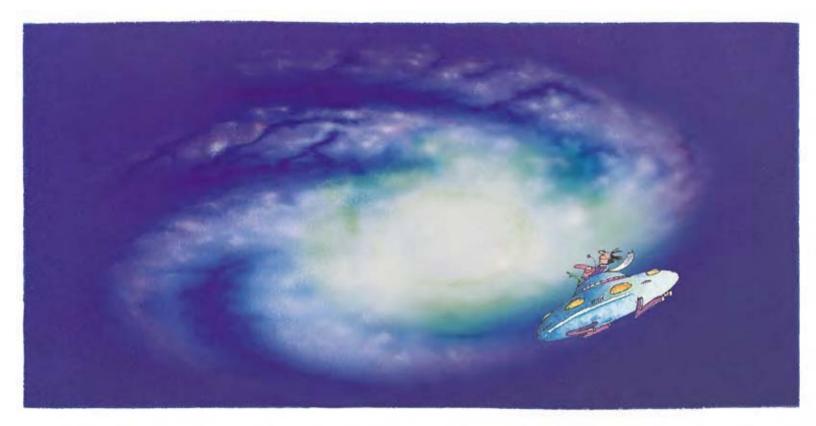
... Solar System ...



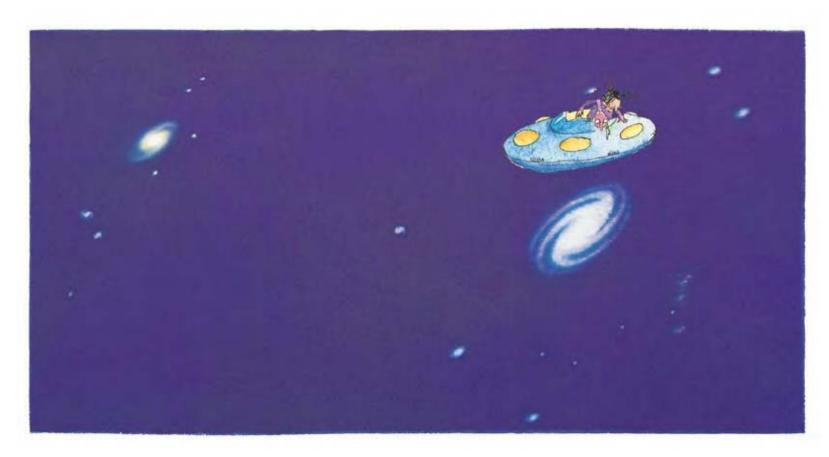
... Solar Neighbourhood...



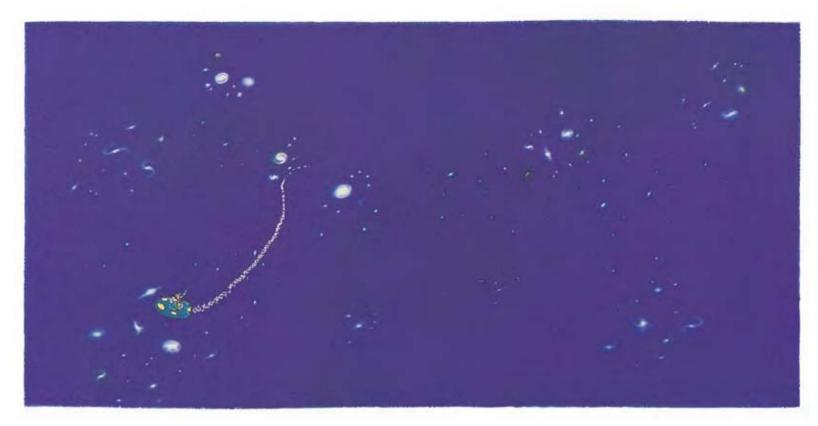
... Orion Arm ...



... Milky Way Galaxy ...



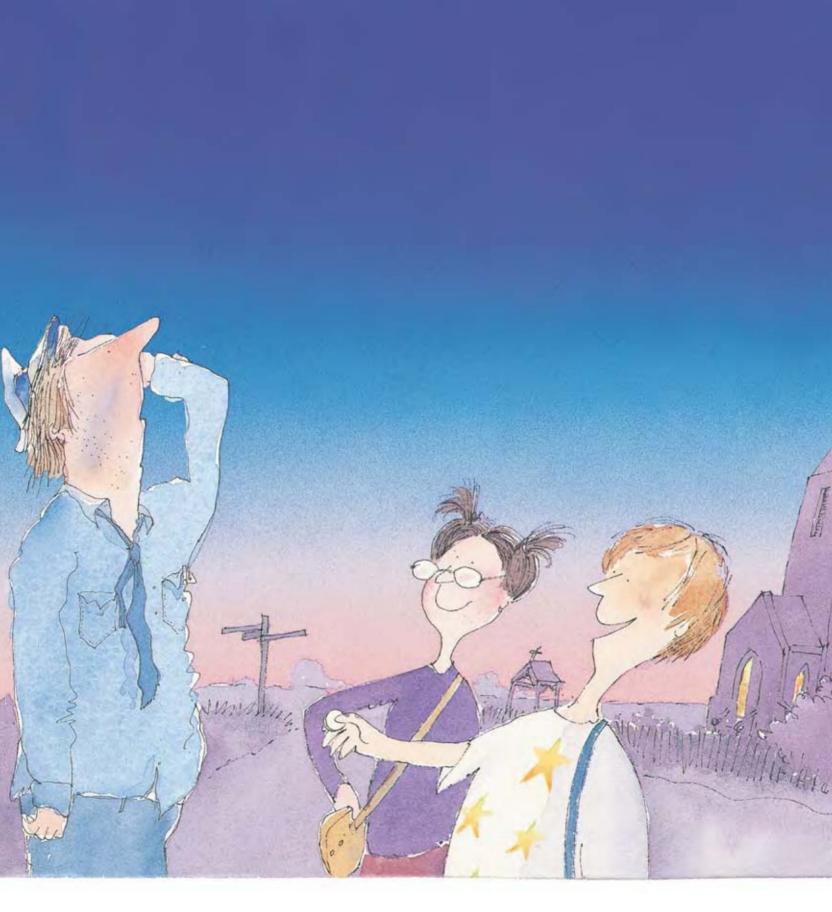
... Local Group of Galaxies ...



... Virgo Supercluster...



... the Universe."



'May we have our tickets, please?' asked Henry.

