TABLE OF CONTENTS

Chapter 1 A Galaxy Far Away	3
Chapter 2 The Universe	10
Chapter 3 Gravity and Isaac Newton	15
Chapter 4 Einstein's World	22
Chapter 5 Cosmic Shortcut	29
Chapter б More Apples, More Worms	33
Chapter 7 Black Holes	36
Chapter 8 Through the Wormhole	39
Chapter 9 Time Travel	42
Chapter 10 What's Next?	47
Glossary	50

Chapter 1 A GALAXY FAR AWAY

Three! Two! One! Blast off! The rocket roars. Slowly it climbs into the sky. It rattles. It shakes.

Upward. Higher! Faster!

The sky turns colors. First blue. Then violet. Now black.

3

Outer space is dark. Stars shine above. Earth spins below. The rocket soars. *Astronauts* sit inside it.

Where are they going? They are off to another *galaxy*. It's two million light years away. A light year is the *distance* light travels in one year. That is six trillion miles. Light is the fastest thing we know of. It travels 186,000 miles per second. Nothing can move as quickly. Not even a rocket. So how can this one travel two million light years?