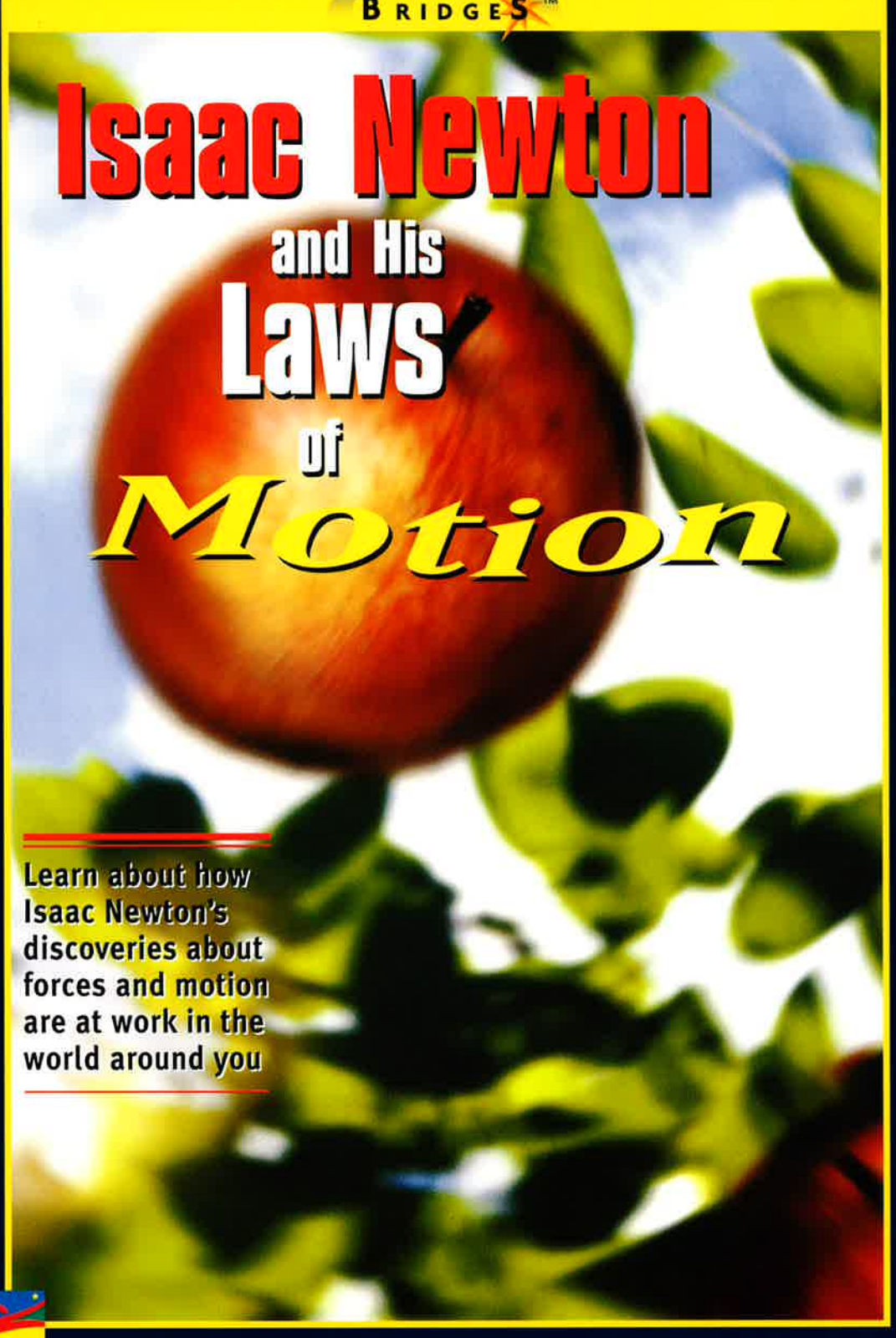
BRIDGES™

Isaac Newton and His Laws of Motion



Learn about how Isaac Newton's discoveries about forces and motion are at work in the world around you

MONA CHIANG

Benchmark EDUCATION

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SCIENCE AND MATH
Forces and Motion
Level 40 R

READING

Comprehension Skill:
Evaluate Author's Purpose and Point of View

As you read, try to figure out why the author wrote the book or used certain information such as photographs, captions, and sidebars. Also try to figure out what the author thinks about the book's topic.

Phonics/Word Study:
Long i digraph

As you read, look for words with long **i** digraphs like **design**. This sound in a syllable rhymes with the word **tie**.

Look for these text and graphic features.

Text Features

- Table of Contents
- Introduction
- Sidebars
- Conclusion
- Glossary
- Index
- Information about the author
- Vocabulary words in boldfaced type
- Captions for photos, diagrams, and illustrations
- Checkpoints. Check yourself to see that you understand what you have read. Pages 15, 29

Graphic Features

- Photographs
- Science Experiments. Pages 15, 22–23
- Tables. Pages 3, 7
- Time line. Page 29

SCIENCE

The Big Idea:

This book tells about Isaac Newton's life and explains his laws of motion.

Look for these special information features.

Content Sidebars

- **Solve This.** Solve these math problems to learn more about laws of motion. Pages 3, 5, 7, 19, 20, 27
- **Everyday Science.** See how science is part of your daily life. Pages 11, 13
- **Careers in Science.** Learn about jobs for people interested in laws of motion. Page 27
- **Myth or Reality?** Compare what people once believed to what really happened. Page 6

Content Vocabulary

acceleration
equation
force
friction
gravity
inertia
mass
motion
newton
optics
orbit
speed
unit

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ISBN: 978-1-4108-7656-0

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Isaac Newton & His Laws of Motion

by Mona Chiang

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Pictures To Think About

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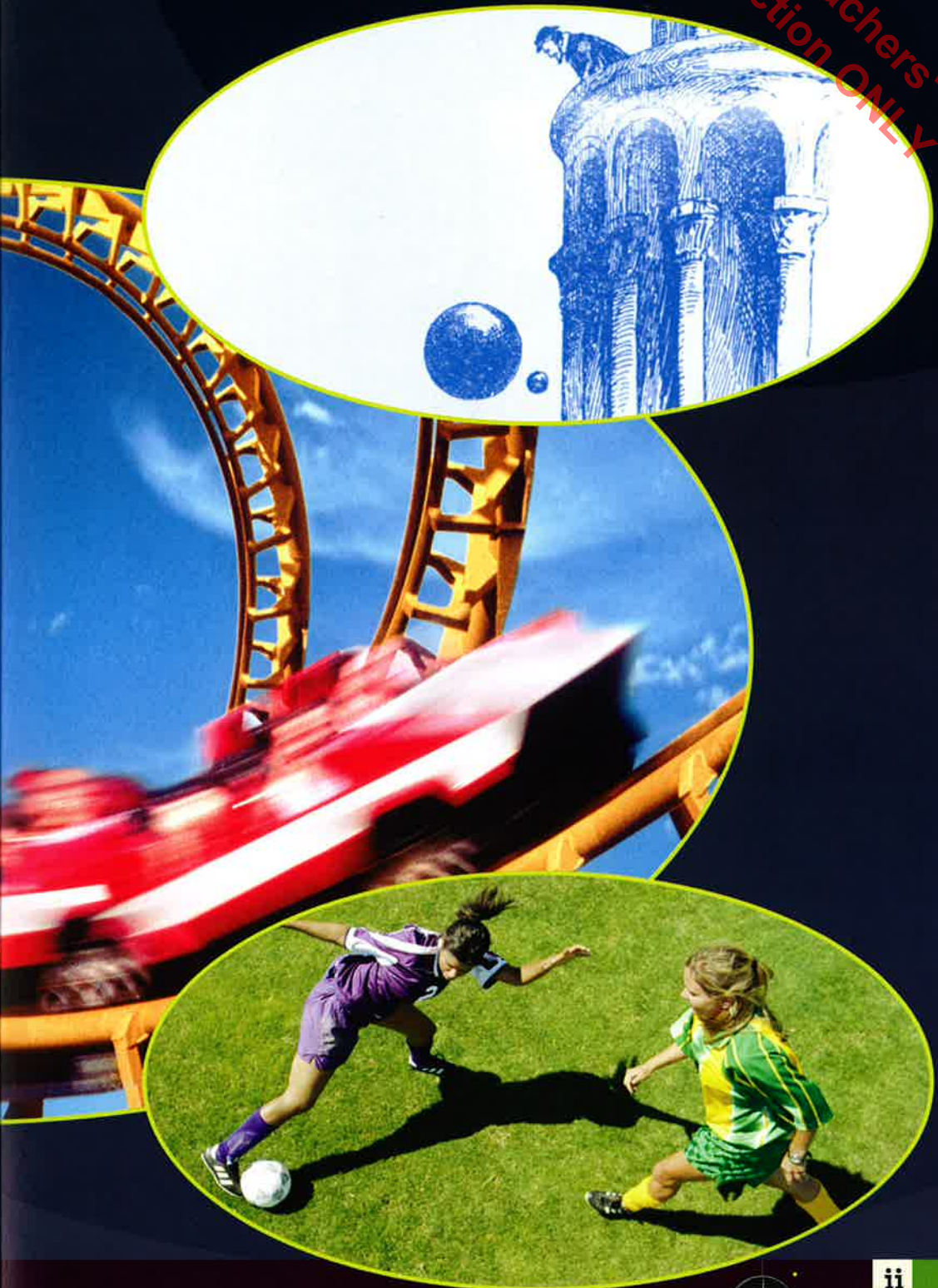






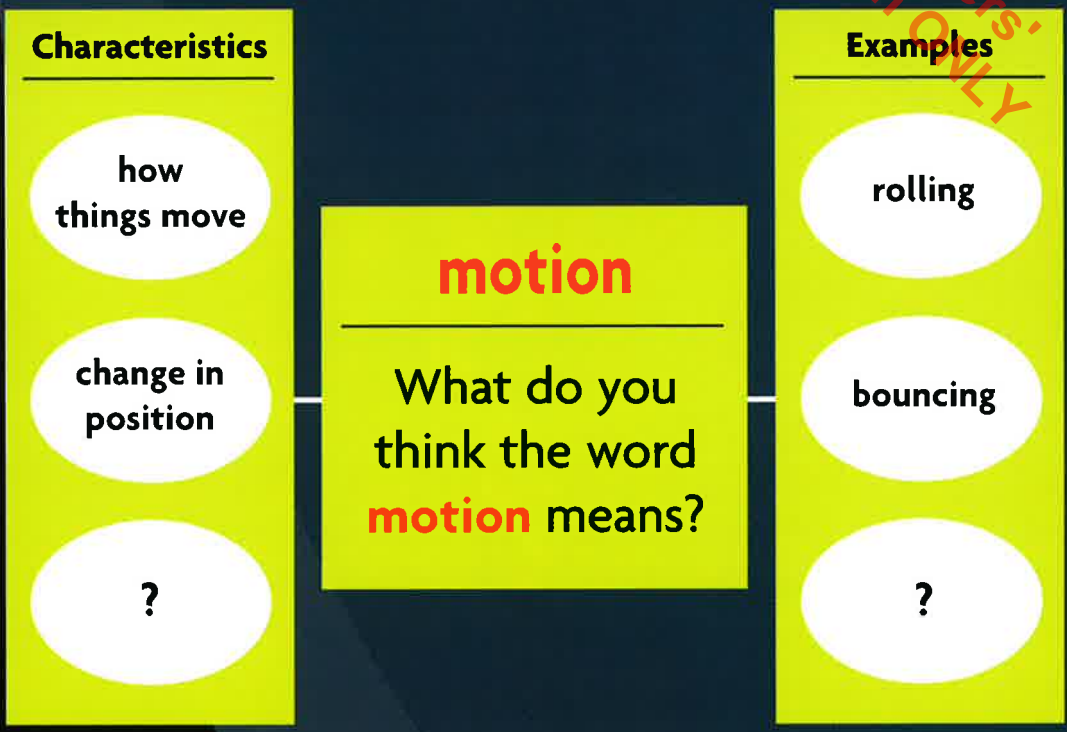
Isaac Newton and His Laws of Motion

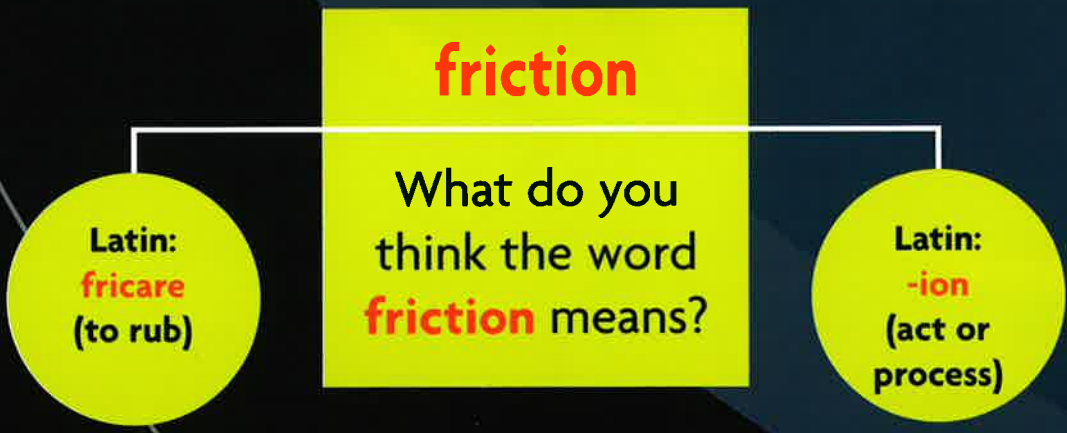
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Words To Think About

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Read for More Clues
force, page 6
friction, page 10
motion, page 2

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force

What do you think the word **force** means in this book?

Meaning 1
a group of police officers (noun)

Meaning 2
something that causes movement (noun)

Meaning 3
to break something open (verb)



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Introduction

You are shooting some hoops. You dribble the ball. Suddenly you have a strange thought. Why does the ball always bounce back?

You keep playing. You make a jump shot. You have another weird thought. You wonder why you can't jump high above the hoop. Why do things move the way that they do?



▲ Isaac Newton lived from 1642 to 1727.

One person came up with answers to those questions. His name was Isaac Newton. He was a scientist who lived in the late 1600s. He developed a set of laws about **motion** (MOH-shuhn).

Newton's laws of motion explain how things move. The laws even explain why the planets **orbit**, or move around, the sun. Read on to learn more about Isaac Newton and these laws. Find out why things move the way they do.