

# POWER of PATTERNS

TIME

# CODING

Rane Anderson

## Consultants

**Timothy Rasinski, Ph.D.**

Kent State University

**Lori Oczkus, M.A.**

Literacy Consultant

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Rachelle Cracchiolo, M.S.Ed., *Publisher*

Conni Medina, M.A.Ed., *Managing Editor*

Dona Herweck Rice, *Series Developer*

Emily R. Smith, M.A.Ed., *Content Director*

Stephanie Bernard/Noelle Cristea, M.A.Ed., *Editors*

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**Note:** The answers to the mathematical problems posed throughout the book are provided on page 48.

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# A Coder's Dream

Imagine creating a useful tool that will make life better for thousands of people simply by your writing words on a page. With **computer programming**, you don't have to imagine it; you can make it happen.

Computer programming helps turn dreams into reality. Someone once dreamed of sharing thoughts, photos, and messages with people around the world. And now, people can do that through social media. Gamers once dreamed of adventuring through uncharted territory. So computer programmers, often called coders, developed virtual worlds. Employees at NASA once dreamed of exploring the surface of Mars. They programmed robots that can travel there and collect environmental data. Each of these **innovations** depended on computer programming to bring it to life. From social media to artificial intelligence, **coding** can make our wildest dreams come true. The only limit is our imaginations.

## Computer Science for All

In President Barack Obama's 2016 State of the Union Address, he announced his plan to bring computer science into all schools in the United States. He said that students of all grade levels should learn the skills to create digital technologies. He considers computer science, including coding, a basic skill.



## That's So Coded

Most electronic objects people use on a daily basis require coding. Video game consoles, cell phones, tablets, pacemakers, alarm clocks, and so many other items rely on coding.

the *Curiosity* Mars rover

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