

STEM Exploration: Preschool-2nd Grade

A RIF Guide for Educators

Themes: Science, Technology, Engineering, Math

Book Brief: This guide is designed for use with books about STEM exploration at the Preschool to 2nd Grade reading level. Adapt the questions and activities in this guide to the book you are reading.

Content Connections: ELA, Science, Math

Time To Read!

Before we read, let's look at...

The Cover: What is the title of this book? Who is the author? Who is the illustrator? What is happening in the cover illustration? Based on the cover, what STEM topics will you explore in this book?

Prior Knowledge: What do the letters in "STEM" stand for? What do scientists, mathematicians, and engineers do? Can you name any ways we use science, technology, engineering, and math in our daily lives?

Vocabulary: Identify 3-5 words that are likely to be new to your students and introduce them before you read this book with your class.

Purpose for Reading: It's important to be able to make connections between different ideas in a text. As we read, think about how science, technology, engineering, and math are all connected to each other.

While We Read

Monitoring Comprehension

- What is the main topic of this book? What key details did you learn about this topic?
- How do the illustrations help you to understand the STEM topics in the book?
- Name some things you learned from text features such as glossaries, keywords, headings, and the table of contents.
- What is the author's purpose for writing? What does the author want to answer, explain, or describe?

Let's Think About

Our Purpose: How are science, technology, engineering, and math connected? In other words, how do engineers use science and math? How do mathematicians and scientists use tools developed by engineers?

Extending Our Thinking: Scientists, mathematicians, and engineers all help us to learn about our world and to solve problems in our world. Ask students to imagine they work in one of these fields. Provide them with sheets of construction paper and have students use a combination of drawing, dictating, and writing to describe how they would use the STEM concepts in this book to learn about or solve a problem in our world. You may choose to adapt this activity so that it is more specific to the book you are reading.