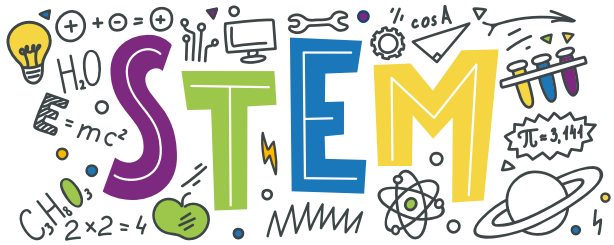
STEM Exploration: 6th-8th Grade

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 6th-8th 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, LETS LOOK AT...

The Cover: Based on the cover, including the title and any illustrations, what is this book about? What STEM topics might this book cover?

Prior Knowledge: What do the letters in "STEM" stand for? What classes have you taken in STEM fields? Do any STEM careers interest you?

Vocabulary: Identify 10-15 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 understand how individuals influence the development of ideas and concepts and how the development of ideas and concepts influences individuals. As we read, think about how people have contributed to advances in STEM knowledge and think about how STEM advancements have influences people's daily lives.

WHILE WE READ

MONITOR COMPREHENSION.

- Identify the central idea of text. What key details support the central idea?
- Choose the key STEM individual, idea, or even in the text. How is it introduced and described?
- What is the author's purpose for writing? What does the author want to answer, explain, or describe? What details in the text let you know?
- Identify any claims that author makes and identify which are supported by evidence and which are not.
- Describe the structure the author uses for the book. How do the various parts, sections or chapters add up to the make the whole?

LET'S THINK ABOUT

Our Purpose: How have individuals and STEM ideas and concepts influenced each other? Give examples from the book.

Extending Our Thinking: Model how to create a reverse outline as a reading comprehension strategy. Look at the various STEM concepts introduced in the book and list them on the board. Have students place the concepts in the appropriate place on the outline to see how the author organized the book. Discuss with students why the author's organization was effective in this particular book, and emphasize the idea that they can use this strategy to help them understand any complex topic or text.

©2025 Reading Is Fundamental