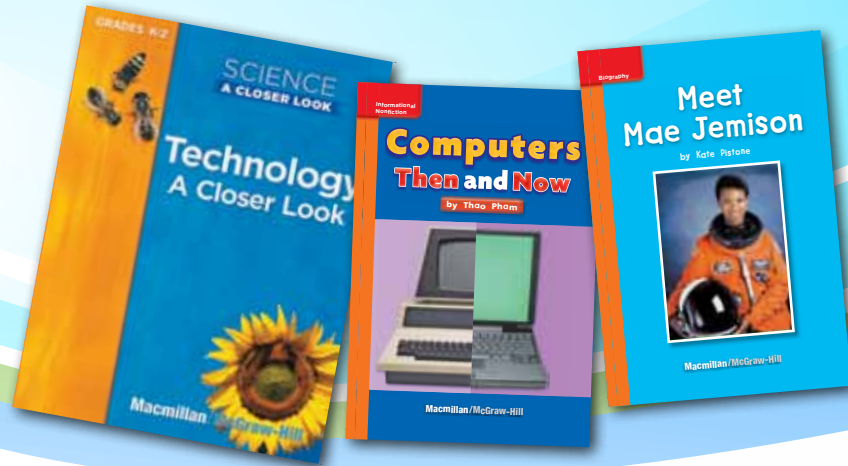


# STEM Essentials Modules

Preparing Today's Students for Tomorrow's Possibilities



K–2

## Technology A Closer Look

This package includes short lessons and activities that focus on technology as a tool, how different materials are used, how ideas become inventions, and the impact that inventions have on society.

- Includes hands-on activities that explore technological advances
- Supports student understanding of the design process
- Topics include:
  - Lesson 1** We Use Tools
  - Lesson 2** Materials and Their Uses
  - Lesson 3** Parts Work Together
  - Lesson 4** Whose Idea Was That?
  - Lesson 5** From Idea to Invention

- Online Teacher Guides** can be found at [MHEonline.com/STEM](http://MHEonline.com/STEM). This online support helps teachers prepare and implement each module—including activities, research suggestions, and questions that focus on STEM fields of study and connections to STEM careers.

Each package includes 6 of each title in addition to 6 copies of the *Technology A Closer Look* student books.

*Then and Now* (ISBN: 978-0-02-119856-6)

- Cars Then and Now
- Computers Then and Now
- Getting Around Then and Now
- Then and Now

*Technology That Helps Us* (ISBN: 978-0-02-119857-3)

- Mr. Bell and the Telephone
- Telephones Then and Now
- Technology That Helps
- What Will You Be?

*Our Natural Resources* (ISBN: 978-0-02-119858-0)

- Recycle, Reduce, Reuse!
- Recycling Glass
- Use it Again!
- Save Paper, Save Trees
- What Happens to Your Trash?
- Simple Ideas to Save the Earth

*Space* (ISBN: 978-0-02-119859-7)

- Let's Visit Space
- Ready, Set, Go!
- Meet Mae Jemison
- Star Sailor

*Flying Machines* (ISBN: 978-0-02-119860-3)

- Born to Fly
- The Flying Machine
- The Pilots
- It Can Go Up

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## Technology A Closer Look

This package includes lessons and activities that focus on defining what technology is, how ideas become inventions, various uses of technology in different fields, and the impact these inventions have on society and the environment.

- Includes hands-on activities that explore technological advances
- Supports student understanding of the design process
- Topics include:
  - Lesson 1** What is Technology?
  - Lesson 2** Ideas and Inventions
  - Lesson 3** Technology in Communications
  - Lesson 4** Technology in Medicine
  - Lesson 5** Technology in Industry
  - Lesson 6** Technology, Society, and the Environment
  - Lesson 7** Technology and the Future

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Each package includes 6 of each title in addition to 6 copies of the *Technology A Closer Look* student books.



*Energy Sources* (ISBN: 978-0-02-119861-0)

- Energy and Our Natural Resources
- Hydrothermal Vents
- Three Gorges Dam
- Giant Dams: Waterpower Wonders
- The Power of Wind
- Wind Energy

*Energy* (ISBN: 978-0-02-119862-7)

- An Eye on Energy
- Energy
- Sources of Energy
- Fossils and Fossil Fuels

*Inventions* (ISBN: 978-0-02-119863-4)

- Bright Ideas: Inventions That Changed History
- Young Inventors
- Electrical Inventions
- It's Electric!
- Incredible Inventions: Computers
- Incredible Inventions: Everyday Wonders

*Archeology* (ISBN: 978-0-02-119864-1)

- Fossil Hunters
- Dinosaur Sue: Tale of a T. Rex
- Discovering Pompeii
- Discovering Tutankhamen
- Solving the Pyramid Puzzle

*From Farm to Table* (ISBN: 978-0-02-119865-8)

- From Farm to Dinner Table: Food's Great Journey
- Resources All Around Us
- What is Recycling?



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## Technology A Closer Look

This package includes lessons and activities that focus on technology and design; various uses of technology in communications, medicine, and industry; as well as the impact technology has on society, the environment, and our future.

- Includes hands-on activities that explore technological advances
- Supports student understanding of engineering/design process
- Topics include:
  - Lesson 1** What Is Technology?
  - Lesson 2** The Design of Things
  - Lesson 3** Technology in Communications
  - Lesson 4** Technology in Medicine
  - Lesson 5** Technology in Industry
  - Lesson 6** Technology of the Future
  - Lesson 7** Exploring the Impact of Technology on Society

- Online Teacher Guides** can be found at [MHEonline.com/STEM](http://MHEonline.com/STEM). This online support helps teachers prepare and implement each module—including activities, research suggestions, and questions that focus on STEM fields of study and connections to STEM careers.

Each package includes 6 of each title in addition to 6 copies of the *Technology A Closer Look* student books.

*Architecture* (ISBN: 978-0-02-119866-5)

- A New Pyramid for Paris
- Building a Biome
- Building a Cathedral
- The Taj Mahal

*The Space Frontier* (ISBN: 978-0-02-119867-2)

- Life on a Space Station
- Mission to Mars
- On the Moon
- Looking to the Sky
- Space Station
- What Is GPS?
- Finding Our Way

*Engineering Marvel* (ISBN: 978-0-02-119868-9)

- Braille and Beyond: Inventions that Helped the Blind
- Foods That Feed the World
- Farming for the Future: How do We Feed Ourselves?
- Microwaves and Cooking
- From Dragonflies to Helicopters: Learning from Nature
- The Sky's the Limit
- Sonar, Radar, and Lasers
- The Smithsonian: America's Attic

*Genetics and Medicine* (ISBN: 978-0-02-119869-6)

- Genetics
- The Story of DNA
- DNA Fingerprinting
- Science in the Snow
- Searching for Cures
- Nuclear Medicine

*Use of Natural Resources* (ISBN: 978-0-02-119870-2)

- Mission: Green Earth
- Plants: An Amazing Resource
- Technology and Nature: Water
- Garbage: Where Does It Go?
- Greenhouse Effect

*Energy Power* (ISBN: 978-0-02-119871-9)

- Searching for Tomorrow's Energy
- Earth's Resources
- When Energy Changes
- Energy Hunter
- Power for Our Future
- Powered by the Sun
- Energy Problems and Solutions
- Do Fossil Fuels Have a Future?





**STEM Essentials are independent, thematic modules**  
designed to engage students and enhance learning.

- Exciting units provide an introduction to STEM related fields and careers
- High-interest topics and problem-based investigations are designed to capture student attention
- Supports the development of science skills and mathematical practices

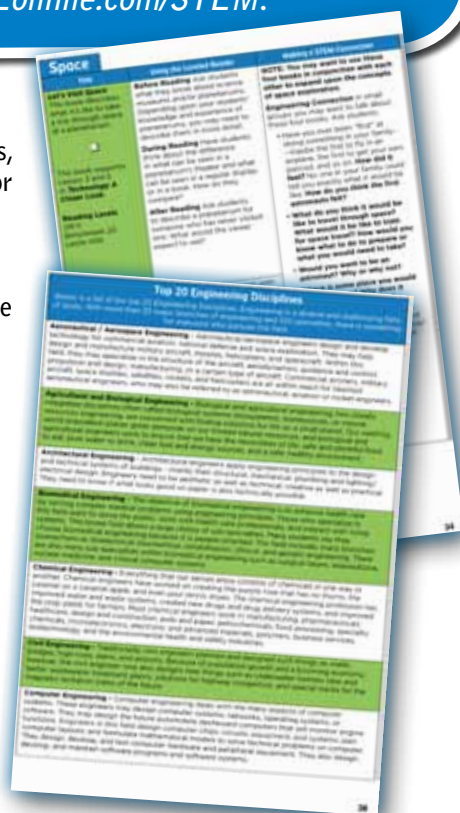
The lessons in the *Technology A Closer Look* student books provide hands-on activities that cover a broad range of information on all types of technology including media, transportation, entertainment, and medical technology.

Correlated with each lesson are a variety of high-interest, nonfiction leveled readers to give interested students more information and vital exposure to a particular topic or career.

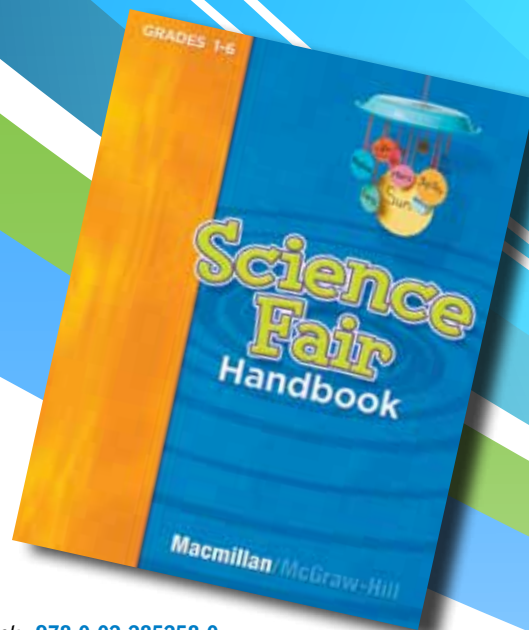
**Teacher Guides for the STEM Essential modules**  
can be found at [www.MHEonline.com/STEM](http://www.MHEonline.com/STEM).

- STEM careers, especially engineering fields, are recommended for further exploration for interested students.
- Reading strategies and reading levels are provided for each leveled reader to reinforce developing reading skills.
- Correlations are provided between the lessons in *Technology A Closer Look* and the leveled readers.
- Includes a short summary of each leveled reader.

**Downloadable.  
Accessible.  
Easy to Use.**



**STEM Essentials Modules**  
Preparing Today's Students for Tomorrow's Possibilities



*Science Fair Handbook* 978-0-02-285258-0

Available for separate purchase, *The Science Fair Handbook*, is a great teaching resource for any classroom to engage students in STEM activities. The book provides ideas for Science Fair Projects and gives suggestions and strategies for organizing and implementing Science Fairs in your school.



For more information or to place an order,  
visit us on the web at [MHEonline.com/STEM](http://MHEonline.com/STEM)  
or call 800-334-7344.



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# STEM ESSENTIALS

Preparing Today's Students for Tomorrow's Possibilities

K-6



## ⚠ WARNING



Use of *STEM Essentials* may cause students to become engaged, motivated and knowledgeable about science, technology, engineering, and mathematics.