

STEM Kits

This is our second collection of STEM (Science, Technology, Engineering, Math) Kits. These kits are housed in plastic bins, and were purchased as complete kits from Lakeshore Learning, an educational toy company. The kits were expanded slightly to include a book, either about the related story or a nonfiction book about the kit's topic.

Kit Topics Include:

- Wedgits (2 kits)
- Vehicle Building Kit
- House Building Kit
- Pet Vet Center
- Patterning & Sorting Kit
- Food & Nutrition Kit
- Robot Factory
- Ocean Discovery Kit
- Problem solving: Billy Goats Gruff
- Problem solving: Goldilocks and the three bears
- Problem solving: Three Little Pigs
- Magnets
- Motion
- Sink or Float
- Learning Science: Solar System
- Problem solving: John Henry
- Problem solving: Johnny Appleseed
- Problem solving: Paul Bunyan
- Forces & Motion: Don't Lose Your Marbles
- Human Body Activity Tub
- Solar System Activity Tub
- Fossil Discovery Kit
- Energy Experiments

Wedgits Kit

This kit teaches basic engineering principles.

This kit includes:

- 20 building pieces, Multi-color
- 1 Platform, Green
- Pack of 48 Design Cards

Best for ages 2 and up.



Vehicle Building Kit

This kit teaches basic principles behind car design.

This kit includes:

- 8 photo cards
- 59 plastic vehicle pieces
- Teacher's Guide
- Book, *If I Built a Car*

Best for ages 3—6.



House Building Kit

This kit teaches basic principles behind house design.

This kit includes:

- 8 photo cards
- 60 Blue Square Plastic Pieces
- 30 Green Rectangular Plastic Pieces
- 20 Red Triangular Plastic Pieces
- 10 Yellow Triangular Plastic Pieces
- 10 Orange Triangular Plastic Pieces
- Teacher's Guide
- Book, *Building a House*

Best for ages 3 years and up.



Pet Vet Center

This kit teaches basic principles behind responsible pet care.

This kit includes:

- Directions
- Poseable Puppy
- 4 Puppy X-Rays
- 4 Animal ID Cards
- 4 Checklist Cards
- Stethoscope
- Bandage
- Grooming Brush
- Small Swab Container
- Book, *Some Pets*

Best for ages 3 and up.



Patterning & Sorting Kit

This kit teaches basic principles behind recognizing and creating patterns, as well as sorting like and unlike objects.

This kit includes:

- Teddy Counter Directions
- Teddy Counters, Multicolor
- Red Sorting Tray
- Green Patterning Tray
- Book, *A Pair of Socks*

Best for ages 3 and up.



Food & Nutrition Kit

This kit teaches the principles behind following a nutritious diet.

In this box should be:

- Activity Guide
- My Plate Chart
- Book, Gregory, The Terrible Eater
- Book, Good Enough to Eat
- 36 Food Counters, 6 of each fruit
- 4 Shopping Lists
- 4 Dry Erase Markers
- Game Spinner
- 5 Blue Plates
- 31 Food Pieces
- 4 Food Sequence Puzzles, 12 pieces total

Best for ages 3 +



Robot Factory Kit

This kit teaches basic principles behind car design.

This kit includes:

- Directions
- 5 Orange Platforms
- 24 Gears, multicolor
- 2 Special Gears, blue & yellow
- 11 blue four-way connectors
- 2 spinner handles, yellow & blue
- 3 squiggly pieces, multicolor
- 4 blue two-way connectors
- 2 blue pegs
- 5 robot heads & bodies, multicolor
- 13 yellow connectors
- 2 yellow lever stands
- 1 yellow elbow joint

Best for ages 4 and up.



Ocean Discovery Kit

This kit teaches about ocean animals.

This kit includes:

- Science Specimen Center
 - Magnifying Glass
 - 5 Photo Cards
 - 5 Specimens
 - Activity Guide
- Science Viewer
 - 5 Sea Life Picture Disks
 - Animal ID Panel
- 4 Plexiglass Specimens
- Info Booklet
- Book: *Weird Sea Creatures*

Best for ages 4 and up.



Three Billy Goats Gruff Kit

This problem-solving kit is based on the fairy tale the Billy Goats Gruff, wherein the goats must cross a bridge guarded by a troll. The children need to construct a bridge using the materials provided.

This kit includes:

- Teacher card
- Design sheets
- 3 student cards
- 3 goat figurines
- 1 troll figurine
- 35 bridge-building blocks
- Book, *The Three Billy Goats Gruff*

Best for ages 3—6.



Goldilocks & The Three Bears Kit

This problem-solving kit is based on the fairy tale Goldilocks and the three bears, wherein Goldilocks uses items belonging to three bears. The children need to construct chairs using the materials provided.

This kit includes:

- Teacher card
- Design sheet
- 3 student cards
- 3 bear figurines
- 1 Goldilocks figurine
- 40 chair-building pegs
- 36 chair-building platforms
- Book, *The Three Bears*

Best for ages 3—6.



The Three Little Pigs Kit

This problem-solving kit is based on the fairy tale of the three little pigs, wherein the pigs build houses to keep out the wolf. The children need to construct houses using the materials provided.

This kit includes:

- Teacher card
- Design sheet
- 3 student cards
- 36 wooden platforms
- 18 house-building blocks
- 3 pig figurines
- 1 wolf figurine
- Book, *The Three Little Pigs*

Best for ages 3—6.



Magnets Kit

- This kit teaches basic principles behind magnets and magnetism.

This kit includes:

- 8 activity cards & wooden card stand
- Racetrack mat
- 3 mouse mazes
- Maze platform
- 2 horseshoe magnets
- 2 magnetic cars
- 25 nonmagnetic fish
- 50 magnetic fish
- Magnetic mouse
- Magnetic wand
- Magnetic fishing pole
- Activity Guide
- Book, *What Makes a Magnet?*

Best for ages 4—6 years.



Motion Kit

This kit teaches basic principles behind forces and motion.

This kit includes:

- 8 activity cards & wooden card stand
- Miniature golf board
- Target map
- 2 ramps
- 2 foam balls
- 6 wooden blocks
- 2 wooden carts
- Launcher
- 9 plastic bugs
- Activity Guide
- Book, *Move It! Motion, Forces and You*

Best for ages 4—6 years.



Sink or Float Kit

This kit teaches basic principles behind buoyancy.

This kit includes:

- 8 activity cards with a wooden stand
- 2 plastic boats
- Wooden raft
- 30 plastic gems
- 20 plastic sea animals
- 8 plastic frogs
- 5 lily pads
- Activity guide
- Book, *What Floats? What Sinks?*

Best for ages 4—6 years.



Learning Science: Solar System

This kit teaches about the solar system, including planets and moons.

This kit includes:

- Activity Guide
- Experiment Chart
- Fact Chart
- KWL Chart
- 6 writing prompts & wooden stand
- Book, *The Planets*
- Book, *I Want to Be an Astronaut*
- Book, *Man on the Moon*
- Constellation Viewer w/6 Cards
- Flashlight w/2 AA Batteries
- Purple Solar System Activity Bin
 - 40 Activity Cards
 - 8 Vocab Cards
 - 8 Photo Cards
- Model of the Sun, Earth, & Moon
 - Foam Sun, Earth, and Moon
 - 3 Blue Metal Scaffold Pieces

Best for ages 6—8.



John Henry Kit

This problem-solving kit is based on the folk tale of John Henry, wherein John Henry attempts to build a railroad faster than a machine. The children need to construct a working railroad.

This kit includes:

- Story card
- Teacher card
- Design sheet
- 3 student cards
- 102 building pieces
- Crate with ten rocks
- Mountain façade
- Ruler
- Book, *John Henry: An American Legend*

Best for ages 7—9.



Johnny App1eseed Kit

This problem-solving kit is based on the folk tale of Johnny Appleseed, wherein Johnny Appleseed plants orchards. The children need to design an apple orchard.

This kit includes:

- Teacher card
- Design sheet
- Story Card
- 3 student cards
- Ruler
- 2 double-sided landscape mats
- 10 short plastic logs
- 10 long plastic logs
- 30 plastic apple trees
- Book, *Who Was Johnny Appleseed?*

Best for ages 7—9.



Paul Bunyan Kit

This problem-solving kit is based on the folk tale of Paul Bunyan, wherein Paul Bunyan proves his massive strength. The children need to design a machine that can hold Paul Bunyan's sack.

This kit includes:

- Story card
- Teacher card
- Design sheet
- 3 student cards
- 52 building pieces
- Rubber bands
- Weighted knapsack
- Tape Measure
- Book, *Paul Bunyan*

Best for ages 7—9.



Don't Lose Your Marbles Kit

This kit teaches basic principles of force and motion.

This kit includes:

- 20 roller coaster track pieces
- 240 sticks and connectors
- 2 marbles
- 2 stopwatches
- 2 protractors
- 2 measuring tapes
- 4 STEM activity cards & wooden stand
- Activity Guide
- Book, *Forces and Motion*

Best for ages 9—10.



Human Body Activity Tub

This kit teaches about human anatomy, including the organs and skeletal structures.

This kit includes:

- Activity Guide
- Human Body Chart
- 8 Experiment Cards
- 25 Vocab Cards
- 6 Body System Cards
- 6 Plastic Tubes as “Model Lungs”
- Skeleton Model with Instructions
- Heart Model with Instructions
- Digestive Model
- **Consumables:**
 - Balloons
 - Straws

Best for ages 9 +.

Solar System Activity Tub

This kit teaches about our solar system.

This kit includes:

- Activity Guide
- Solar System Chart
- 8 Experiment Cards
- Book, Jimmy Zangwow's Moon-Pie Adventure
- Book, What the Moon is Like
- Slider – Phases of the Moon, 2 pieces
- Solar System Flipbook
- Solar System Vocab, 25 cards
- Plastic Crater Dish, w/ 8 oz. Bag of Sand
- Large “Crater” Marble
- Flashlight w/ 2 AA Batteries
- 6 Green Foam “Moon” Balls
- 18 ft. Black Cord
- 3 Piece Earth-Moon Model with:
 - Blue Foam Earth w/ rubber band
 - Grey Foam Moon

Best for ages 9 +.



Fossil Discovery Kit

This kit teaches about fossils, including how they are created and found, as well as common fossils.

This kit includes:

- Magnifying Glass
- Maroon Case—General Fossil Collection
 - 15 Fossils
 - Numbered fossil identification sheet
 - Investigating Geologic Time sheet
- Explore Real Fossils Case
 - 15 Fossils in removable plastic case
 - Book: Fossils—Discover the Past!
- Bag—2 lbs of sortable fossils
 - Fossil Identification Sheet
 - Labeled bag of fossils
- Book: *Dinosaurs*
- Book: *Fossils Handbook*

Best for ages 9 +.



Energy Experiments Kit

This kit teaches the principles behind solar and wind energy.

In this box should be:

- Lesson Plan Packet
- 6 Solar Panels
- 6 Digital Multimeters
- 6 Motors
- 6 plastic propellers, multicolor
- Solar Beads
- 12 PVC T-joints
- 12 PVC L-joints
- 3 long PVC pipe pieces
- 6 medium PVC pipe pieces
- 18 small PVC pipe pieces

Best for ages 10 and up.

