



# BrickLAB STEM FOUNDATIONS

Grades: 3-6

## Highlights:

- Inspires critical thinking, creativity and innovation in engaging STEM lessons in physics, communication, construction engineering and math
- Research-based methodology for teaching inquiry-based STEM with hands-on manipulatives
- Top quality bricks are an investment that last for years

**Students:** 30

**Contact Hours:** 52+ hours (13+ per book)

## Recommended Settings:

- After-school programs and clubs
- Elementary classrooms looking for hands-on STEM lessons
- Home learning environments

## Logistics & Storage:

Bricks are shipped in a sturdy plastic tub for easy access and storage.

## Materials:

- 6,545 Building Bricks: 6 different sizes and 8 different colors
- 45 Base Plates
- Two 16-gallon Storage Tubs
- 4 Soft cover Instructor Guides:
  - Physics
  - Communication
  - Construction Engineering
  - Math

*Digital and print curriculum comes with Instructor Guide only, which includes master copies of all student pages.*

## Assessment:

1 Assessment per module with multiple choice and short answer questions

## Curriculum Structure:

4 books, each with 13 modules.

Each module includes:

-Intro Discussion

- Build
- Engineering Challenge
- Real World Extension
- Language Arts Extension
- Assessment

## Standards & Alignment:

Aligned to International Technology Education Association (ITEA) standards for technological literacy.

## Pricing Options:

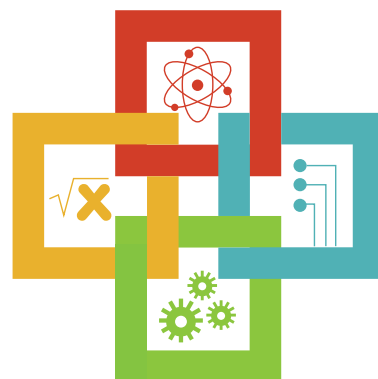
- \$749 Ultimate Set (1 BrickLAB and print curriculum for all 4 books)
- \$195 Ultimate Digital Curriculum (Digital curriculum for all 4 books)
- \$349 Print Curriculum Set (Print curriculum for all 4 books)
- \$129 Digital Download (Any 1 book)

## Training Available:

- Purchases of \$500 or more come with 30 minutes of free webinar training.
- Purchases of \$1000 or more come with 1 hour of free webinar training.

*Additional training time can be purchased as well.*

**Shipping:** Contact your sales rep for shipping options.





## PHYSICS

Falling Bodies  
Center of Gravity  
Mass, Volume and Density  
Friction  
Coefficient of Friction  
Potential and Kinetic Energy  
Calculating Potential Energy  
The Work Formula  
Newton's First Law  
Newton's Second Law  
Newton's Third Law  
Visible Light Spectrum  
Light and Shadow



## COMMUNICATION

Tactile Symmetry  
Descriptive Communication  
Verbal Dependence  
Hieroglyph Building  
Learn to Sign  
Create Your Own Code  
Semaphore  
Assembly Line  
Modeling  
Charades  
Inquiry  
Tall Towers  
Telephone



## CONSTRUCTION ENGINEERING

Post and Lintel  
Cantilever  
Arches and Corbelled Arches  
Walls and Dams  
Buttress and Flying Buttress  
Pagoda  
Pyramid Construction  
Castle Construction  
Post and Lintel Bridge  
Aqueducts  
Greek Architecture  
Floorplans  
Urban Planning



## MATH

Volume of Cubes  
Circles and Circumference  
Pi  
Trapezoids and Line Intersections  
Tessellations  
Measurement  
Estimate  
Bar Graphs  
Line Plots  
Frequency  
Make a Table  
Mean, Median and Mode  
Probability