

LAB-aids[®]

Proven Science Programs

STEM | LAB EQUIPMENT

APPLIED
SCIENCE

KITS & MODULES
CATALOG

20
20



SEPUP[®]
Issue-Oriented Science



THE LAWRENCE
HALL OF SCIENCE
UNIVERSITY OF CALIFORNIA, BERKELEY

EDC Learning
transforms
lives.

We've never been "just kits."

Hands-on learning is more than playing with science equipment.

When students are authentically engaged in a task, they are actively doing, actively thinking, and actively discussing. While hands are engaged, minds are questioning, sorting through input, and making connections. All of our programs – from 1-2 day kits, month long modules, and full-year curricula – are lessons, materials, and teacher supports designed to engage both the hands and the minds of students.





**Science lessons for a day,
a week, or the whole year.**

	Activities	Instructional Time	Components
Kit	1-3	1-3 days	materials student sheets teacher's guide
Module	6-20	8-30 days	materials curriculum teacher's guide assessment
Unit	15-23	4-10 weeks	materials curriculum teacher's guide ancillaries assessment system*
Full Year	customizable by district	customizable by district	materials curriculum teacher's guide ancillaries assessment system*

Proven Science Programs

* see pages 44-45 on curriculum side

LAB-aids®

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KEY TO ICONS

- AG** - popular with AgSci teachers
- ADD A GROUP** - material packs available that accommodate one additional group
- LITERACY** - meets our criteria for supporting literacy
- NONCONSUMABLE** - contains no consumable materials
- REFILLABLE** - refills for consumable items are available (-RC indicates a discounted refill pack)
- SPANISH** - comes with two sets of student sheets, one in English, one in Spanish
- STEM** - meets our stringent STEM criteria

OB-SCERTAINER®: A BETTER BLACK BOX

Kit #100



Engaging and fun are two expressions often used to describe this kit. The concise lab activities emphasize behavioral reaction and observation. This exceptional Lab-Aid introduces students to the scientific method of problem solving.

Students use indirect observations to develop and test hypotheses about the inner configurations of twelve different Ob-Scertainers®.

The activities in this kit are suitable for all science curriculums and grade levels. They can be completed in a single lab period.

Accommodates unlimited classes, each with 24 groups of two students.

Kit No. 100 \$93.50

Eng./Spn. Kit No. 100-BL \$95.70

LITERACY STEM

SPANISH NONCONSUMABLE



COLONY COUNTER

Kit #10

Counting is made easy with this reasonably priced Colony Counter. The viewing screen is made of translucent plastic and is printed in standard Wolffhugel rulings that form 1 cm squares. The diagonal rows are subdivided into nine equal squares. This versatile counter accommodates petri dishes up to 125 mm in diameter.

This is a must for students in any lab using microorganisms.

Includes bulb, power cord with in-line on/off switch, and a detailed instruction booklet.

Accommodates unlimited classes with one group of students.

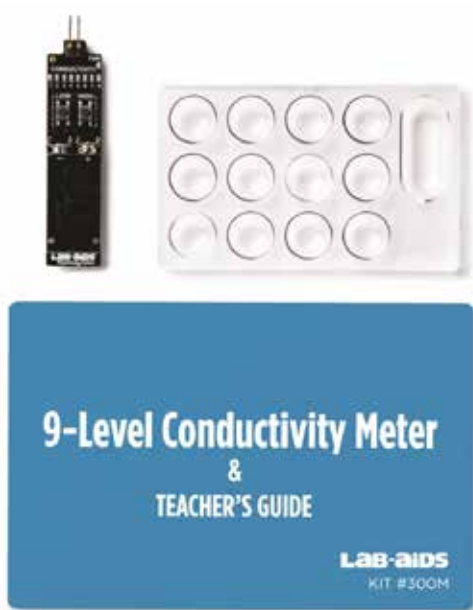
Kit No. 10

\$125.95

STEM AG NONCONSUMABLE

9-LEVEL CONDUCTIVITY METER

Kit #300M



The Lab-Aids® 9 Level Conductivity Meter shows the relative conductivity/resistance of liquids and solids. As the conductivity of the tested material increases, the number of glowing red LEDs (light emitting diodes) will increase to a maximum of 8, which indicates a very good conductor. There will be zero glowing red LEDs if the material being tested has a very low electrical conductivity (is a good insulator). The kit includes a 12 well Chemplate® for testing multiple items conveniently.

A 9-volt battery is required, but is not included.

Accommodates unlimited classes with 1 group of students.

Kit No. 300M \$32.80

Kit No. 300M-U (no Chemplate) \$29.85

STEM AG

NONCONSUMABLE

ATOMIC STRUCTURE, VALENCE, AND BONDING

Kit #145N

In this kit, students perform three activities using an innovative model of atomic structure. Initially, each group of students uses three atom models to visualize the arrangement of subatomic particles within an atom and compare the atomic structure of different elements. They then connect the different atomic structures shown by the models to an element's position on the Periodic Table and use the models to "see" the role of valence electrons in chemical bonding.

145N-1 (for 1 group) \$160.00



LITERACY STEM

NONCONSUMABLE

DESIGN-YOUR-OWN CUSTOM MOLECULAR MODEL SET

Kit #530A



This complete assortment of color-coded atoms and bonds allow the flexibility to create individualized models and molecules. Just like the standard model kits, atoms are molded in polypropylene with flexible vinyl connectors to represent the bond “linkages.” Double and triple bonds are easily constructed. The models are easy to assemble, well constructed and come apart only when you want them to come apart.

This Lab-Aids kit contains an extensive assortment of 480 atoms plus 300 bonds.

Accommodates unlimited classes.

Kit No. 530A

95.00

NONCONSUMABLE**CONCEPTS OF CLASSIFICATION**

Kit #50

This lab activity provides a controlled environment for exploring a rather complex concept: the classification of things different and similar at the same time. Students learn that 20 different objects can be assigned to different groups based on color, shape, size, type of edge, structure and number of sides. With these materials, they are able to grasp the general concept of characteristics and order. Students can comprehend the importance of these characteristics in the identification process.

Accommodates unlimited classes, each with 12 groups of two students.

Kit No. 50

\$45.90

Eng./Spn. Kit No. 50-BL

\$48.05

Add a Group No. 50EL

\$9.65

SPANISH **ADD A GROUP****LITERACY** **NONCONSUMABLE**

LAB-AIDS® CHEMPLATE, PACKAGE OF 10

Kit #800



The Lab-Aids® Chemplate® is a clear plastic tray about the size of an index card. It has changed thousands of science teachers' ideas of how to conduct labs. Using the inexpensive Chemplate® eliminates the need for glassware and provides a semi-micro environment for conducting many experiments.

Molded into the high impact transparent plastic tray are 12 large numbered cavities, an additional jumbo-sized cavity plus a snap-off cap and snap-off measuring spatula.

Accommodates unlimited classes, each with 10 groups of two students.

Kit No. 800

\$16.05

STEM AG

NONCONSUMABLE

INTRODUCTION AND USE OF DICHOTOMOUS KEYS

Kit #51

Scientists use dichotomous, or taxonomic, keys to identify both living organisms and non-living specimens. All dichotomous keys are developed the same way and similarities and differences in characteristics and traits are observed and recorded.

In this game-like activity, students focus on the physical attributes of an imaginary organism. Students identify the specimen and draw two organisms that match the organism's description.

Accommodates unlimited classes, each with 30 groups of two students.

Kit No. 51

\$48.30

LITERACY NONCONSUMABLE



NATURAL SELECTION: VARIATION IN SPECIES AND NORMAL DISTRIBUTION

Kit #74R

Variation in species and normal distribution are brought to life with this kit. Students use our exclusive Variation Profile Tubes to sort a variety of physical characteristics in sunflower seeds. They gain experience in constructing visual graphs, histograms, and linear graphs from data collected by the entire class. The idea that greater validity of information gathered from a large sample versus a smaller sample is illustrated beautifully by comparing class results in the Variation Profile Tubes to the student's own histograms and graphs.

Accommodates unlimited classes, each with 30 groups of one to two students.

Kit No. 74R

\$92.15

LITERACY AG NONCONSUMABLE

SCIENTIFIC METHOD PROBLEM SOLVING

Kit #100-A

Instead of learning how to solve problems, students are all too often expected to simply “do” activities.

In this creative problem-solving kit, students are presented with a “situation” that requires them to:

- Analyze the situation
- Identify the problem
- Formulate a hypothesis
- Conduct experiments to test the hypothesis

The result? Students learn “how to inquire,” not just “do.” Lab activities, suitable for all science curriculums, can be completed in approximately sixty minutes.

Accommodates two classes, each with 15 groups of two students.

Kit No. 100-A

\$92.10

Refill Kit No. 100-A-RC

\$58.40

LITERACY STEM REFILLABLE

ONE IN A MILLION: LARGE AND SMALL NUMBERS

Kit #101

Help your students grasp an understanding of what one in a thousand or one in a million means. Using pennies and the “power of 10” in this simple and interesting activity, students visualize that a million is a very large number. They conduct two different serial dilution activities that will impress upon them how very small numbers can have potential significance.

Accommodates dozens of classes, each with 16 groups of two students.

Kit No. 101

\$100.20

LITERACY STEM REFILLABLE

MEASURING EXPERIMENTS

Kit #102

This diverse Lab-Aids kit provides a series of individualized activities that require students to perform increasingly sophisticated measurements. The primary focus on length over a wide range of dimensions provides ample opportunities to practice using metric units. This kit is a “must have” for science students at any level.

Accommodates unlimited classes with 24 students.

Kit No. 102

\$106.45

LITERACY

NONCONSUMABLE



AUDIBLE CONDUCTIVITY INDICATOR

Kit #301

The Lab-Aids Audible Conductivity Indicator is a qualitative alternative to the 9-Level Conductivity Meter. If the material being tested is a conductor there is an audible tone that increases in volume and intensity as conductivity increases. If a non-conducting material is tested there is no tone. The kit includes a 12 well Chemplate for testing multiple items conveniently.

A 9-volt battery is required, but not included

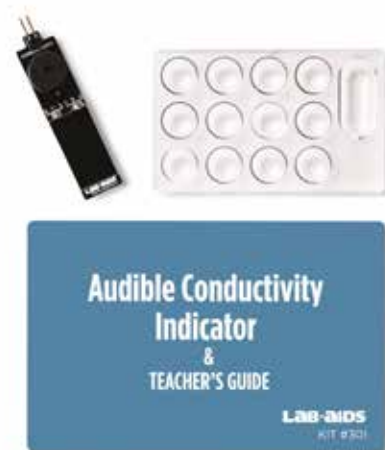
Accommodates unlimited classes with 1 group of students.

Kit No. 301

\$32.80

STEM SPANISH

NONCONSUMABLE



ENGINEERING & DESIGN: MECHANICAL HANDS

Kit #490S — Developed by SEPUP

In this multi-day activity, students use the approach of biomimicry to design, test, evaluate, and redesign a mechanical gripping device to meet criteria. Working in small groups, students use the engineering design process to design a mechanical grabber that can pick up and move an object. They then use an iterative process to optimize the device in one of two ways. In doing so, they investigate the relationship between structure and function of the device and how the technology they developed can be applied.

Accommodates one class, with eight groups of students.

Kit No. 490S

\$84.50

STEM

LITERACY REFILLABLE





UNDERSTANDING AND USING ENERGY AND TECHNOLOGY

Kit #P300A

This unit contains three activities designed to increase student understanding of energy and how we use it, energy of motion, and energy and technology. A companion unit, Using Energy Effectively in Lighting and Life (Kit # P300B), helps students to investigate energy efficiency in home lighting, patterns of energy use in the home, and renewable sources of energy.

Accommodates unlimited classes, each with 8 groups of students.

Kit No. P300A

\$249.00

STEM LITERACY

AG NONCONSUMABLE



USING ENERGY EFFECTIVELY IN LIGHTING AND LIFE

Kit #P300B

This unit contains three activities designed to increase student understanding of energy efficiency in home lighting, patterns of energy use in the home, and renewable sources of energy. A companion unit, Understanding and Using Energy and Technology (Kit #P300A), helps students investigate energy and how we use it, the energy of motion, and energy and technology.

Accommodates unlimited classes, each with 8 groups of students.

Kit No. P300B

\$395.00

STEM LITERACY

AG NONCONSUMABLE



ENGINEERING & DESIGN: MODELING AND MITIGATING STREAM PROCESSES

Kit #446S — Developed by SEPUP

Students model the phenomenon of sediment movement in a river using a unique mini stream table that provides evidence for how geoscience processes change Earth's surface. In Part A, students investigate how the changing energy of flowing water erodes and deposits sediments to create common landforms. Part B is an engineering design challenge where students use design criteria and constraints to design and test erosion-control structures. Based on the results of their initial testing, students redesign and retest their structures.

Accommodates unlimited classes, each with 8 groups of 4 students.

Kit No. 446S

\$259.95

LITERACY STEM

NONCONSUMABLE

SEPUP TRAYS, PACKAGE OF 16

Kit #SP-1CT

The SEPUP tray can be thought of as 9 test tubes and 5 beakers. They rinse quickly, dry easily and stack for storage. The tray is transparent and exceptionally durable but cannot be used with an open flame or some organic solvents. Many science teachers use SEPUP trays instead of fragile, dangerous expensive glassware and these trays are an integral part of many SEPUP products.

Accommodates unlimited classes, each with 16 groups of two students.

Kit No. SP-1CT

\$84.50

STEM AG

NONCONSUMABLE



LAB-AIDS® LAB-MASTER SYSTEM

Kit #NAC-LM-TS

The Lab-Master® is a unique, easy-to-use, probeware system consisting of an integrated RGB spectrophotometer, temperature probe, voltage probe, and a safe control-point heater. Using standard cuvettes students learn the principals of colorimetry and understand how these important measurements are performed in industry.

The Lab-Master® can be used for weeks on a single charge (the heating unit requires wall AC), and will output data in comma-separated values to a standard SD card.

Accommodates unlimited classes, each with 1 group of students.

Kit No. NAC-LM-TS

\$748.05

STEM AG

Kit No. NAC-M-TSP (Lab-Master Safety Package)

\$912.50

NONCONSUMABLE



LAB-AIDS® SINKLESS CONDENSER

Kit #SS-1P11

This economical distillation apparatus uses ice water to cool and condense hot gases and is ideal for non-lab settings because it does not require a sink with a water supply and a drain. It can be used to separate substances whose boiling points differ by at least 3-5 Fahrenheit degrees.

Kit No. SS-1P11

\$33.00

SINKLESS CONDENSER PACKAGE

Kit #39S-C

To make set-up that much easier, this package includes one Sinkless Condenser plus one #7 2-hole and one #3 1-hole rubber stopper, one 18" and one 9" length of plastic tubing and two 3" lengths of glass tubing.

Kit No. 39S-C

\$44.15

Accommodates unlimited classes, each with 1 group of students.

AG STEM NONCONSUMABLE



LAB-AIDS® ELECTROPHORESIS CHAMBER

Kit #SGI-P011

This gel electrophoresis unit includes two chambers for running two gels simultaneously. The unit includes the electrodes, gel combs, and AC power adapter.

Accommodates unlimited classes, each with 2 groups of students.

Kit No. SGI-P011

\$250.00



STEM AG

NONCONSUMABLE

MINI STREAM TABLE

Kit #442-ST

One complete Lab-Aids® Mini Stream Table setup includes stream bed, catch basin, stand, rainmaker, and sand.

This kit does not include any activity write-ups.

Accommodates dozens of classes, each with 1 group of two students.

Kit No. 442-ST

\$34.95

Kit No. 442-ST8 (Set of 8)

\$205.95

Kit No. 442-ST16 (Set of 16)

\$360.45



STEM AG

REFILLABLE

LAB-AIDS® LIGHT STATION PLUS

Kit #810

The Lab-Aids® Light Station is a safe, compact, easy-to-use light source, suitable for use in middle and high schools. It provides a cost-effective way for your students to study light and its interactions with matter. The light station is constructed of sturdy, high-impact polystyrene, which folds flat for storage.

The kit includes: The light station and power supply, a 15W V-filament light bulb, and one each of the following filters: single slit, three slit, diffusing filter mask, tri-color, red, blue, and green.

Accommodates unlimited classes with 1 group of students.

Kit No. 810

\$116.90

Kit No. P100 (2 Light Stations, no filters)

\$178.50

Kit No. P100-2 (4 Light Stations, no filters)

\$334.00

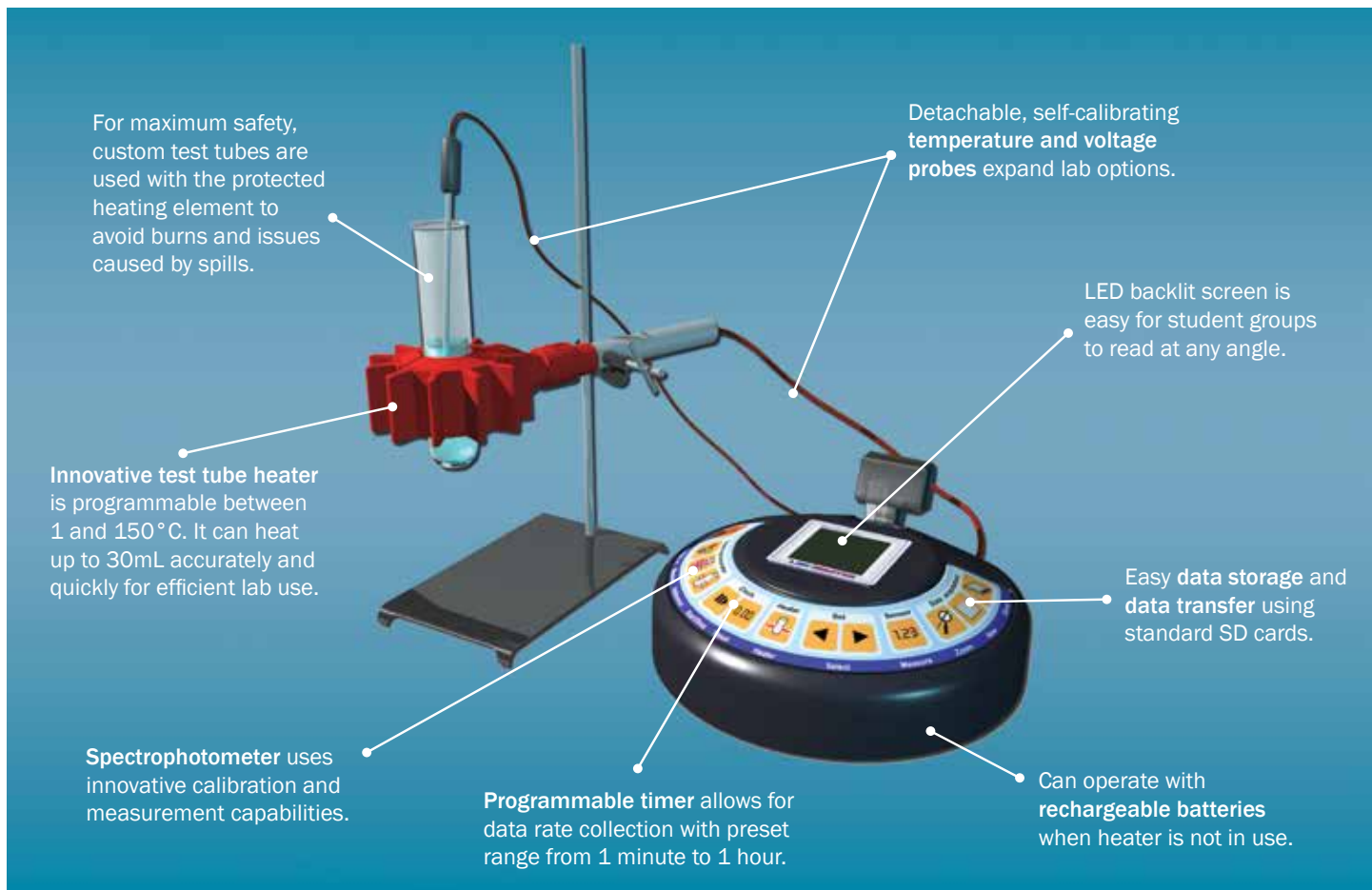


STEM AG

NONCONSUMABLE

SAFETY CONCERNS? CUT THE FLAME, NOT THE LABS

The Lab-Master® is an innovative, easy-to-use, probeware system consisting of an integrated RGB spectrophotometer, temperature probe, and voltage probe. Instead of an open flame the Lab-Master system uses a safe, electric control-point heater to heat test tubes.



LAB-AIDS® LAB-MASTER SAFETY PACKAGE

Kit #NAC-M-TSP

The complete Lab-Master® Safety Package includes Lab-Master Control Unit: data logger - spectrophotometer, Lab-Master Control point heater, Lab-Master Temperature Probe, Lab-Master Voltage Probe, Lab-Master Power Adapter and Power cable (6 ft.), Insulation ring, Condenser unit, Extension ring, 2 clamps, 6 Cuvettes, 6 Test tubes (glass, 25x100mm), Cuvette-Test Tube Holder and Lab-Master Desiccator. The full A Natural Approach to Chemistry, Laboratory Investigations and 7 year access to My Lab-Aids Bookshelf for Teachers; A Natural Approach to Chemistry, 2nd Edition, is also included.

Accommodates 1 group of 4 students for unlimited classes.

Kit No. NAC-M-TSP (Lab-Master Safety Package) **\$912.50**

Kit No. NAC-LM-TS (Lab-Master System on page 104) **\$748.05**

A Natural Approach to Chemistry Full Program **see page 121**

