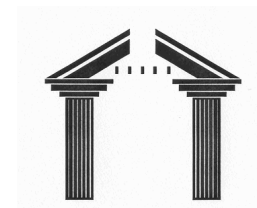


Adventures in Science



Science Kits
for Teachers and
Homeschooling Families



Way Public Library

HOURS

Monday-Thursday: 9:00—8:30

Friday & Saturday: 9:00—5:30

Sunday (Seasonal): 1:00—5:00



101 E. INDIANA AVENUE

PERRYSBURG, OHIO 43551

419-874-3135 EXT. 116

www.waylibrary.info

Questions? Contact the
Youth Services Department at
419-874-3135 ext. 116 or email
pughad@oplin.org

The ***Adventures in Science*** kits were created by the Way Public Library in Perrysburg, Ohio.

Funding for the kits was provided by the Institute of Electrical and Electronics Engineers (IEEE), Rotary of Perrysburg, Ohio and the Way Public Library Foundation.

Adventures in Science kits include:

- **Van de Graaff Generator**
- **Snap Circuits Energy Lab**
- **Microscopic Explorations**
- **Magic Magnets**
- **Wacky Weather**
- **Simple and Motorized Mechanisms**

Each kit contains information and equipment to perform science activities. Kits circulate for four weeks and are designed to accommodate a class of 25 to 30 students.

If you would like to reserve, renew or obtain additional information on any of the ***Adventures In Science*** kits, please contact the Youth Services Department at **419-874-3135 ext. 116**.

Simple and Motorized Mechanisms

Students will build and explore machines and mechanisms, investigate motorized machines, calibrate and capture wind, and study gearing mechanisms with this core brick set. The set contains 396 LEGO® Technic elements and full-color building instruction booklets for 10 principle models and 18 main models.

The teacher activity pack provides a fundamental understanding of simple machines, structures, and mechanisms. Students will investigate the principles of simple machines, mechanisms, and structures; experiment with balanced and unbalanced forces and friction; measure distance, time, speed, and weight; and much more.

The activity pack comes in a three-ring binder and provides 30 lessons featuring 37 principle model activities; 14 main activities, each with extension activities; and six problem-solving activities. Also included is a CD-ROM with teacher's notes, student worksheets, and glossary.

Contents of this kit:

8 boxes of Lego Technic elements described above. Each kit can accommodate 3-4 students.

1 box of instruction booklets and teacher activity pack.



Magic Magnets

This ready-to-use lab has everything students need to explore magnetism! Included are easy-to-follow activity cards with 14 skill-building science investigations...plus all the materials students need for unlimited exploration and discovery.

Targets standards in these areas:

- Properties of magnets
- Conducting experiments
- Making observations
- Using compasses

Contents of this kit:

32 compasses
32 brick magnets
16 electromagnets
16 battery cases



Wacky Weather

Here is everything students need to explore weather topics from rain to hurricanes! Science kit includes a paperback book, 4 information cards with reproducible activities on back, plus hands-on materials to complete the activities. There is even an experiment that takes students through the entire scientific process—as they discover how fog forms!

Targets standards in these areas:

- Identifying causes and types of weather
- Using tools to predict and record weather
- Understanding how to stay safe in dangerous weather

Contents of this kit:

1 weather book
32 thermometers
37 rain gauges
4 activity cards
1 wind vane



Van de Graaff Generator

Named after the inventor Van de Graaff, a German physicist, this machine produces low-amperage static electricity which can be shocking but perfectly safe. Two different pulleys with 2 neoprene belts inside a 1¾ plastic column create and carry static charge up to the polished aluminum collector globe. This static charge can be drawn out in a burst of lightning, sparks, or even by setting each hair on your head on end! It's an incredible display! The entire unit is 18 inches tall and runs on 110VAC.

Our instruction sheet tells you how to raise hair, produce lightning and electric wind, and experiment with St. Elmo's fire or electrostatic attraction and repulsion.

Contents of this kit:

1 VG200-200kV Van de Graaff generator

1 discharge wand

1 rubber mat

1 footstool

Assorted aluminum pie tins, containers and balloons to conduct experiments.

Instruction sheet



Snap Circuits Energy Lab

Learn about energy sources and how to think green. Build over 125 projects using the flexibility of Snap Circuits® to have loads of fun learning about environmentally friendly energy and how the electricity in your home works.

Each kit includes a 100 page full-color manual and a separate educational manual that explains all the forms of environmentally friendly energy including: geothermal; hydrogen fuel cells; wind; solar; tidal; hydro; and others.

Contents of this kit:

There are 9 identical energy kits available. Each kit can accommodate 3-4 students and includes:

- 1 box with plastic trays and 2 manuals
- 1 base grid
- 1 rechargeable battery
- 1 solar cell and water wheel
- 1 motor and wind fan
- 1 hand crank and FM radio
- 1 clock and horn



Microscopic Explorations

Explore worlds too small for the naked eye. Learn how a microscope works while investigating plants, animals, fungi and protozoa, as well as crystals and crystal formation.

Each kit includes 22 activities in 14 lessons, a teacher guide, easy to use pocket microscopes and more.

Contents of this kit:

- 30 pocket microscopes
- 36 tweezers
- 60 petri dishes

Miscellaneous materials to use to experiment with magnification.

