AgriScience Teaching Kits

Eggciting Experiments-Chick Incubation and Embryology

Students participate in a 5-week study of living organisms including incubation of chicken eggs, charting events as the embryos develop in the eggs, and observation and care of the hatched chicks.

Agriculture Renews Our Planet-Growing Energy for the Future

Students compare soyink with petroleum based ink, make biodegradable plastics from corn, and compare renewable and nonrenewable natural resources.

Insects-Agriculture's Foes or Friends

Students study the parts of a grasshopper and compare it to close relatives, study and compare honeybee queens, drones, and workers, and study the role of the honeybee in plant pollination.

Probing Our Soils-Getting to the Roots of Agriculture

Students collect soil samples, study soil texture and structure, determine acid and base reactions, measure pH, compare moisture holding capacity of different soils, and examine the effects of soil erosion and pollutants.

Protein Providers-The Superb Soybean

Students examine the effect of water on seeds, learn the parts of seeds, compare monocot with dicot seeds and plants, study the effects of temperature variations on seed germination and plant growth, and investigate the many uses of soybean products in our lives.

Animals in Agriculture-Their Growth and Development

Students compare common food products with a complete livestock feed, checking for protein, sugar, starch, fat, and vitamin C. They dissect a chicken wing, comparing it with the parts and functions of the human arm. Scale animal models are used to help learn about livestock weight estimates and weight gain.

Dairy Delights-Good Nutrition from Milk

This kit provides hands-on experiences for students as they become involved in demonstrating the processes of using milk and acids, enzymes, bacteria, heat, and cold to make glue, cottage cheese, yogurt, and ice cream.

Growing Better Every Day-Using Genetics to Improve Agriculture

Colored paper clips are used to illustrate genes and chromosome chains as students learn how traits are inherited by offspring from parents. A germination study of seeds which produce albino or normal green corn plants helps students understand genotypes and phenotypes. Students learn about probabilities of transmission of two genes from parent to offspring.

Agriculture Measures Up-Using Mathematics in Agriculture

Students compute the areas and calculate the perimeters of enclosures as they study the most economical use of fencing. A small jar of shelled corn is used to simulate a grain bin as students learn to estimate weights, numbers, and volumes. Students determine the amount of fertilizer needed for the lawn of a problem home after they have calculated the areas of the lot, house, garage, and driveway.

Rain or Shine-Weather's Effect on Agriculture

Students build a terrarium to observe the water cycle and compare the growth rates of three types of plants. Students build growth chambers to observe how various light colors influence plant growth. They use varying fertilizer rates in an attempt to grow larger, healthier plants.

Soybean-Polymer and Oil Kit

The Soybean Agriscience Kit introduces students to the science of polymers and oils by providing science experiment materials which students can use to produce everyday products from soybeans. Students will make salad dressing, lip balm, hand cream, candles, crayons, and other everyday items such as ink and glue from soybeans.

AgriLearning Kits

Pondering Pizza: A Slice of Agriculture

First in a series of agriLearning kits designed to reinforce language arts, reading, mathematics, social science, and agriculture for grades K to 6. Pondering Pizza provides a unique way to learn about food, plants, and animals. By looking at a slice of pizza, users will learn how all the ingredients begin on farms, are processed, distributed, and made into a tasty meal. Students will explore Planet Pizza via video and visit a real "pizza farm." Includes a pizza fractions game and many other resources.

Dairy Cow Capers: Exploring Dairy Farming and Nutrition

Explore dairy farming in action. Through videos and books, experience the life of dairy cows on the farm and see a veterinarian at work. Follow the path milk takes as it travels from cow to you. Learn about the nutritional value of dairy products and try your hand at making butter. This kit may be used alone or as a perfect supplement to agriscience kit AK-07 Dairy Delights—Good Nutrition from Milk. Activities can accommodate up to 30 students.

Getting to the Core: Apples and Orchards

How do apples grow? Where do all the varieties of apples come from? Learn the answers to these questions and more. Take an inside look at apples and their history. Getting to the Core: Apples and Orchards includes hands-on activities and games, things to make and things to eat, videos, posters, and books.

Unraveling Fibers: More Than Just Clothes

Unravel the mysteries of the fibers that make up our clothing and a multitude of other items. Through hands-on activities, books, a video, and fiber samples, discover the origins of many natural fibers such as cotton, wool, and silk. Try your hand at spinning and weaving and learn how fibers are woven into our daily lives. Use the magnifying lenses to take a closer look at the textile industry.

Eggsploring Poultry: Cracking the Egg

Crack the mystery of eggs and see a miracle in 21 days! Eggsploring Poultry is filled with books on embryology, videos, poultry facts, games and other hands-on activities.

Pumpkin Patch: A Vine Through Time

Discover the wonders of pumpkins. Watch tiny seeds grow into several varieties of pumpkins in a time-lapse video and learn how to prepare the soil for next year's crop. The Pumpkin Patch contains posters, books, hands-on activities, recipes, and fascinating pumpkin facts.

The Wheat We Eat

Teach your students how wheat is grown, milled, and then made into foods worldwide using the science, math, reading and social studies lessons included in this curriculum. Besides the core subjects, you will also find lessons to expand the curriculum with arts and crafts projects, songs, poetry, and books. The resources in this kit are for Pre-Kindergarten to 3rd grade students.

Pigs on the Farm

The lessons and materials in this kit will help students understand what pigs are, what farmers do to take care of pigs, and how people benefit from pigs. Students will also learn that while we go to the store to purchase our food, it begins with the plants or animals raised on farms. Through this kit, students will discover that they all depend on agriculture each day of their lives.

Adventures Around the Farm

The lessons and materials in this kit will help students understand what a farm is, what farmers do, and what comes from farms. They will also learn that there are many different kinds of farms. Through this kit, students will discover that they all depend on agriculture every day of their lives. Besides the core subjects, you will also find lessons to expand the curriculum with arts and crafts projects, songs, poetry, and books.

Seasons on the Farm
The lessons and materials in this kit will help students understand how agriculture revolves around the seasons and how the farm brings us many lessons about winter, spring, summer, and fall. Besides the core subjects, you will also find lessons to expand the curriculum with arts and crafts projects, songs, poetry, and books.

Multidisciplinary Agricultural Integrated Curriculum (mAGic) Kits

Poultry mAGic
Students will uncover interesting facts about U.S. poultry production through exercises and hands-on experiments. They'll learn about the anatomy and nutritional value of an egg. They'll also learn about the history of egg production and find out how poultry dishes are prepared around the world. Kits include a printed activity guide in a 3-ring binder.

Insect mAGic
Students will learn about the impact of insects on crop production through a variety of lessons and activities. Mapping exercises let students follow butterflies on migration patterns. Students track a day in the life of an insect and learn about wingspan, life cycles, anatomy, and social hierarchy patterns of common insects. Kits include a printed activity guide in a 3-ring binder.

Soil mAGic
Soils are alive, as students will discover through the lessons in this kit. Students will learn to conduct experiments in soil pH, create soil profiles, and understand the components of soils. They will also unveil the history of crop rotation and dig into the Dust Bowl. Kits include a printed activity guide in a 3-ring binder.

Dairy mAGic
Hands-on exercises let students explore the processes of using milk, acids, enzymes, and bacteria to make cottage cheese, yogurt, and ice cream. Students will find out how much milk one cow produces in its lifetime. They'll also dive into history, and they'll learn about issues of supply and demand in the dairy industry. Kits include a printed activity guide in a 3-ring binder.

Plant mAGic
This kit offers problem-solving activities in plant propagation, production, and processing. Students will conduct experiments to learn about plant differences and plant ecosystems. They'll also sequence plant products, research the discoveries of George Washington Carver, and look at the impact of crops on the national economy. Kits include a printed activity guide in a 3-ring binder.

Machine mAGic
Students will learn about the history of farm machinery and the impact of modern farming techniques on families and communities. They'll also learn how inventors John Deere and Cyrus McCormick helped shape modern agriculture. Hands-on exercises let students identify machinery parts and estimate farm machinery costs.

Illinois mAGic Kit
This kit is a multidisciplinary, all-inclusive curriculum that is designed to teach students about agriculture through active discovery. Students learn about a variety of topics ranging from the prairie landscape to the Chicago stockyards, the Lincoln-Douglas debates, and the forests of Southern Illinois. The kit includes 8 math, 10 English language arts, 11 social studies, and 7 science lessons focused on the state of Illinois. Lessons can be selected to match your region of the state. The lessons meet Illinois State learning standards for grades 4 to 8. The Illinois mAGic Kit is sold as a complete package that includes necessary components for each lesson, as well as a printed curriculum manual and a CD-ROM version. The CD-ROM version of the manual may also be purchased separately.

Horticulture Science Kit

What's the role of science in horticulture? The materials in this kit are designed to teach students in grades 7 to 12 about science and how it impacts today's horticulture industry. The curriculum covers the major aspects of horticultural science. Students will become familiar with plant taxonomy, and they'll learn how to grow plants in soil and in soil-less media. They'll get introduced to plant pests and how to control them. Lab exercises help students understand plant breeding and genetics. A section is devoted to the impact of biotechnology on ornamental horticulture, and students will learn how to conduct DNA analysis to match offspring to parents. The Horticulture Science Kit includes lesson plans, exercises, student handouts, and quizzes.

Horticulture Careers Kit

What are the career opportunities if you like to work with plants or landscaping? This kit introduces students to the different areas of the horticulture field. Through hands-on exercises and activities, students learn about a variety of careers in horticulture, including landscape design, turf management, retail industry, marketing, and new product development. Activities and lessons are designed to help students understand how they can apply skills and interests they already have in today's horticulture industry. The students will become familiar with the culture, terms, and responsibilities in each employment area. The materials are appropriate for students in grades 7 to 12. The Horticulture Careers Kit includes lesson plans, exercises, student handouts, and quizzes.

Biotechnology Applications in Agriculture

This kit provides teachers and students an opportunity to get "hands-on" learning experiences with one of today's hottest topics—biotechnology. The kit contains all the materials needed to conduct each activity of the kit. A teacher's guide outlines each lesson and activity, and correlates the lessons with Illinois Learning Standards in Science, Social Studies, English and Language Arts, and Mathematics. This kit contains a CD-ROM (can be purchased separately) with multiple PowerPoint presentations.