

# Need Something New to Excite your Students? We have the answer!

The Kentucky Soybean Board has 4 Soybean Science Kits for your classroom use. Each teacher may use the kit free of charge for two weeks.

The **Soybean Science Kit** program was developed twelve years ago at Purdue University through a grant from the Indiana Soybean Board checkoff funds. It is designed to assist teachers in meeting National Science Education Standards, particularly with 4th to 9th grade interdisciplinary curriculum.

The kit is a complete science lab that contains everything necessary for 30 students to participate in 21 hands-on experiments and exercises (with the exception of a very few readily available household materials), including two Bio-tech lessons, an interactive CD and an instructional videotape.

The kit is not a toy... it is a serious soybean science tool that is about four times

bigger than a bread box and weighs 50 pounds. More than 4,000 kits are currently being used in schools. These kits continue to receive outstanding evaluations from teachers.

To participate in the lending program please fill out the enclosed lending form. The kits will be lent out on a first come first serve basis. The kit will be shipped to you via UPS. **When your two week lending period is up, call or go online to schedule a pick up. Tell UPS to bill the recipient with the account number provided – this information will be included in your rental instructions folder. If you do not use the appropriate account information you will be responsible for the charges.**

Remember to be considerate of others and return the kit on time. Other teachers have also made arrangements to use the kit. For each week the kit is returned late there will be a \$25 late charge. Be sure to return your lending form promptly to ensure your participation. We look forward to hearing from you.

After using the kit, teachers may purchase a kit, materials, and the accompanying lesson demonstration videotape by calling 317-347-3620 or online at [www.soybeansciencekit.com](http://www.soybeansciencekit.com).

For more information about the Soybean Science Kit, please contact the Kentucky Soybean Board at 1-800-beansoy 232-6769 or [www.kysoy.org](http://www.kysoy.org)



## Lessons included in the Soybean Science Kit are:

### POLYMER LESSONS

- Chains in the Classroom
- Germinating and Growing Soybeans
- Polymers in Your Life
- "It Does What???" - Oobleck
- Links in the Classroom
- "It Does What???" - Gluep
- What's in a Soybean?
- Chromatography Using Soybean Leaves
- Many Kinds of Glue
- Glue Test
- Chains in Ink
- Polymers are Everywhere Evaluation

### OIL LESSONS

- Marbleizing
- Salad Dressing
- Lip Balm
- Hand Cream
- Oil and Water Emulsion
- Candles & Crayons
- Putt-Putt Boats

### BIOTECHNOLOGY

- DNA Modeling
- DNA Extraction

### INTERACTIVE CD-ROM

- Growing
- Processing
- Products

**Each Teacher is able to use the kit for a two-week period. For each week the kit is returned late there will be a \$25 late charge.**

# Soybean Science Kit Lending Form

(Please print clearly)

Ordered by \_\_\_\_\_

School: \_\_\_\_\_

Shipping Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-Mail: \_\_\_\_\_

ORDER DATE: \_\_\_\_\_

DATE REQUIRED: \_\_\_\_\_

<p>TO BE FILLED OUT BY KSPB STAFF:</p> <p>DATE SHIPPED: _____</p> <p>DATE TO BE RETURNED: _____</p>
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\*Due to limited time and resources, each kit must be returned promptly. For each week the kit is not returned there will be a \$25 late fee.



## Kentucky Soybean Board

P.O. Box 30/1001 US Hwy. 62  
 Princeton, KY 42445  
 1-800-232-6769  
 270-365-2506 Office)  
 270-365-2506 (Fax)  
 www.kysoy.org  
 bhicks@kysoy.org

## Kentucky's Core Content Assessments

### SOYBEAN SCIENCE KIT UNITS/LESSONS

#### POLYMERS

##### Lesson 1: Chains in the Classroom

SC-EP 1.1.1, 1.1.2; SC-05 1.1.1; MA-04 4.1.1, 4.1.2, 4.1.3  
 MA-05 4.1.1, 4.1.2, 4.1.3; MA-EP 1.1.1, 1.1.2, 1.1.3, 4.1.1, 4.1.2

##### Lesson 2: Germinating and Growing Soybeans

SC-EP 3.4.4, 3.4.2, 3.4.3, 3.4.4, 4.6.1; SC-04 3.4.1, 3.4.3, 4.7.1, 4.7.2  
 SC-05 3.4.1, 3.5.1, 3.5.2, 4.7.1, 4.7.2; MA-EP 2.1.1, 2.1.4, 2.1.5  
 MA-04 2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.2.1; MA-05 2.1.1, 2.1.2, 2.1.3, 2.2.2

##### Lesson 3: Polymers in Your Life

SC-EP 1.1.1, 1.1.2; SC-05 1.1.1; MA-EP 1.1.2, 1.1.2, 1.1.3, 4.1.1, 4.1.2, 4.1.3  
 MA-04 1.1.2, 1.1.3, 4.1.1, 4.1.2, 4.1.3; MA-05 1.1.2, 1.1.3, 4.1.1, 4.1.2, 4.1.3

##### Lesson 4: It Does What? Oobleck

SC-EP 1.1.1, 1.1.2, 1.1.3; SC-04 1.1.1, SC-05 1.1.1  
 MA-EP 2.1.3; MA-04 2.1.2; MA-05 2.1.2

##### Lesson 5: Links in the Classroom

SC-EP 1.1.1, 1.1.2, 1.1.3; SC-04 1.1.1, SC-05 1.1.1; MA-EP 1.1.1, 1.1.2, 1.1.3

##### Lesson 6: It Does What? Gluep

SC-EP 1.1.1, 1.1.2, 1.1.3; SC-04 1.1.1, SC-05 1.1.1  
 MA-EP 1.1.1, 1.1.2, 1.1.3, 2.1.1, 2.1.4, 2.1.5  
 MA-04 2.1.1, 2.1.2, 2.1.3, 2.1.4; MA-05 2.1.1, 2.1.2, 2.1.3, 2.2.2

##### Lesson 7: What's in a Soybean?

SC-EP 3.4.1, 3.4.2, 3.4.3, 3.4.4, 4.6.1  
 SC-04 3.4.1, 3.4.2, 3.4.3, 3.4.4; SC-05 3.4.1, 3.5.2, 4.7.1, 4.7.2  
 MA-EP 1.1.1, 2.1.5; MA-04 1.1.1, 2.1.1; MA-05 1.1.1, 2.1.1

##### Lesson 8: Chromatography Using Soybean Leaves

SC-EP 3.4.1, 3.4.2, 3.4.3, 3.4.4; SC-04 3.4.1, 3.4.2, 3.4.3, 3.4.4  
 SC-05 3.4.1, 4.7.1, 4.7.2; MA-EP 2.1.1; MA-04 2.1.1; MA-05 2.1.1

##### Lesson 9: Many Kinds of Glue

SC-EP 1.1.2, 1.1.3; SC-04 1.1.1; SC-05 1.1.1; MA-EP 1.1.1, 2.1.4  
 MA-04 1.1.1, 2.1.4; MA-05 1.1.1, 2.1.4

##### Lesson 10: Glue Test

SC-EP 1.1.1, 1.1.3, 1.2.3; SC-04 1.2.2; SC-05 1.2.2  
 MA-EP 4.3.1, 4.1.1, 4.1.2, 4.1.3, 4.2.1; MA-04 4.3.1, 4.1.1, 4.1.2, 4.1.3, 4.2.1  
 MA-05 4.3.1, 4.1.1, 4.1.2, 4.1.3, 4.2.1

##### Lesson 11: Chains in Ink

SC-EP 1.1.1, 1.1.2, 1.1.3; SC-04 1.1.1; SC-05 1.1.1  
 MA-EP 1.1.1, 2.1.4; MA-04 1.1.1, 2.1.4; MA-05 1.1.1, 2.1.4

##### Lesson 12: Polymers Everywhere Evaluation

SC-EP 1.1.1, 1.1.2, 1.1.3; SC-04 1.1.1; SC-05 1.1.1

#### OILS

##### Lesson 13: Marbleizing

SC-EP 1.1.1, 1.1.2, 1.1.3; SC-04 1.1.1; SC-05 1.1.1  
 MA-EP 1.1.1, 2.1.1; MA-04 1.1.1, 2.1.1; MA-05 1.1.1, 2.1.1

##### Lesson 14: Salad Dressing

SC-EP 1.1.1, 1.1.2, 1.1.3; SC-04 1.1.1; SC-05 1.1.1  
 MA-EP 2.1.3; MA-04 2.1.2; MA-05 2.1.2

##### Lesson 15: Lip Balm

SC-EP 1.1.1, 1.1.2, 1.1.3; SC-04 1.1.1; SC-05 1.1.1  
 MA-EP 2.1.3; MA-04 2.1.2; MA-05 2.1.2

##### Lesson 16: Soybean Hand Cream

SC-EP 1.1.1, 1.1.2, 1.1.3; SC-04 1.1.1; SC-05 1.1.1  
 MA-EP 2.1.3; MA-04 2.1.2; MA-05 2.1.2

##### Lesson 17: Oil and Water Emulsions

SC-EP 1.1.1, 1.1.2, 1.1.3; SC-04 1.1.1; SC-05 1.1.1  
 MA-EP 2.1.3; MA-04 2.1.2; MA-05 2.1.2

##### Lesson 18: Candles and Crayons

SC-EP 1.1.1, 1.1.2, 1.1.3; SC-04 1.1.1; SC-05 1.1.1  
 MA-EP 2.1.1, 2.1.3; MA-04 2.1.1, 2.1.2; MA-05 2.1.1, 2.1.2

##### Lesson 19: Putt-Putt Boats

SC-EP 1.1.1, 1.1.2, 1.1.3, 1.2.2, 1.2.3, 1.2.4  
 SC-04 1.1.1, 1.2.1, 1.2.2, 4.6.5; SC-05 1.1.1, 1.2.1, 1.2.2, 4.6.1, 4.6.5  
 MA-EP 2.1.1, 2.1.3; MA-04 2.1.1, 2.1.2; MA-05 2.1.1, 2.1.2

#### BIOTECHNOLOGY

##### Lesson 20: Making a DNA Model

SC-EP 3.4.2, 3.4.3; SC-04 3.4.2, 3.4.4; SC-05 3.4.1, 3.4.2, 3.4.3, 3.5.1  
 MA-EP 1.1.1, 2.1.1; MA-04 1.1.1, 2.1.1; MA-05 1.1.1, 2.1.1

##### Lesson 21: DNA Extraction and Spooling

SC-EP 3.4.2, 3.4.3; SC-04 3.4.2, 3.4.4; SC-05 3.4.1, 3.4.2, 3.4.3, 3.5.1  
 MA-EP 2.1.1, 2.1.3, 2.1.4; MA-04 2.1.1, 2.1.2, 2.1.4; MA-05 2.1.1, 2.1.2

The Kentucky Core Content Assessments are available by contacting the Ky Department of Education

# Soybeans ...



What will they think of next?

- Soy Biodiesel
- Soy Milk
- Soy Candles
- Chocolate
- Chewing Gum
- Hand Lotion
- Lip Balm
- Crayons

