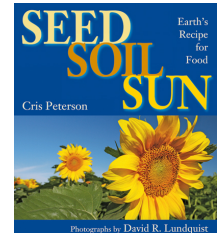




'Seed Soil Sun'

Ag Literacy Project with FFA



The Non-Fiction Book

'Seed Soil Sun, Earth's Recipe for Food' by Cris Peterson shares the three key ingredients for growing our food. The wonderful pictures and vivid descriptions describe the combination of the air, water, seed, soil and sun for plant growth. The author takes the reader on a journey from plant germination to a six foot tall plant. The important components of soil (and the creatures that live there) are also discussed in the book. The story is followed by a lesson where students watch the germination of a seed.

How the Project Works

Approximate time needed: 45 minutes

Supplies needed: Bean seeds, small jewelry plastic baggies, cotton balls, string/yarn, black sharpie

1. FFA students read to students in K-5 classrooms.
2. Following the reading, FFA members will complete a simple hands-on activity with the students discussing the book.

Checklist

- ✓ Collect teacher evaluation after the presentation.
- ✓ Complete the attached feedback form once you have completed project.

Part 1: Introduction (SUGGESTED TIME: 5 MINUTES)

1. Briefly introduce yourself and discuss your connection to agriculture. If you weren't involved with agriculture prior to FFA, explain what FFA has done for you or what you look forward to doing through FFA activities.
2. If you live on a farm or ranch, you may want to bring props, crop samples or photos of the farm, equipment, or animals.

Part 2: Words of Agriculture (SUGGESTED TIME: 10 MINUTES)

1. Introduce the F's of Agriculture. Example: "Agriculture is a big word and it covers many different things, including all the things you see on our New Mexico Map. I am going to teach you the F's of New Mexico Agriculture to help you understand agriculture in our state." Say, "Now repeat after me and hold up a finger for each word as we go through the F's." "The first F is Farming..." (The F words poster is on www.nmaitc.org with 'Who Grew My Soup?' Project).

- Farming and ranching – *raising crops and animals to feed all of us*
- Food – *Point to some of the NM crops on the map (food for us and our animals; e.g dairy, onions, pecans, alfalfa, etc.)*
- Fabric – *Wool, Cotton*
- Flowers – *Nurseries and Greenhouses*
- Forestry – *Lumber for homes, Christmas Trees*

Common Core Standards - English

K.RI.1	2.RI.1	4.RI.1
1.RI.1	3.RI.1	5.RI.1

- Fuel – *Ethanol made from plant material such as corn and biodiesel made from a diverse mix of raw materials including recycled cooking oil, soybean oil and animal fats.*

2. As you teach the F's of Agriculture refer to the New Mexico Agriculture Map for locations in the state where products are grown. (NM Agriculture Map is a separate attachment to 'Seed Soil Sun' Ag Literacy Project materials at www.nmaitc.org).

Part 3: Book Reading (SUGGESTED TIME: 10 minutes)

1. Introduce the story. For example, "I am going to read a story about how air and water combine with seeds, soil and sun to grow plants."
2. Show off the great images in the book.
3. PRACTICE reading the book before your classroom visit! For younger audiences, you may want to just read the first line on each page so the students don't lose focus.

Part 4: Transition Activity - Get the Wiggles Out! (SUGGESTED TIME: 5 MINUTES)

1. Have the students squat down and wrap their arms around (hug) their legs representing the bean seed.
 2. Tell the students to slowly stand up part way leaving both hands touching their toes representing the beginning of germination.
 3. Have the students keep the same position and raise one hand straight up. (Don't let them stand up yet)
 4. Have students slowly stand up with the one hand raised in the air and the other hand still down by their side.
 5. Ask students to raise both hands above their heads.
 6. As students hands are raised above their heads, have them stretch up on their tippy toes.
- Repeat exercise two or three times talking about the germination process.

Helpful Hints Before Your Classroom Visit

- Wear official dress. It looks sharp and promotes FFA.
- Practice! Prepare by reading book and practicing activity. You want to fit your presentation and activity within the time scheduled. Teachers are have very busy schedules so please try to stick to your allotted time.
- Check in with the teacher. If possible, before your presentation, briefly visit with the teacher. Share a copy of the activity and ask if there are students with special needs that need special accommodations.
- Can everyone see and hear? Before you start reading, make sure all the students can see and hear the book so they will be good listeners.
- Move the book around as you read. Either while you are reading, or after reading each page, move the book so each student can see the great images. This is especially important with younger grades.
- Pay close attention to the students' mood. Move along fast enough to maintain student's interest, but slow enough for all students to thoroughly enjoy the story.
- Most importantly, have fun! Enjoy this wonderful experience of reading aloud and teaching children about the importance of agriculture.



Wells Fargo sponsorship has made this
Ag Literacy Project possible.



Part 5: 'Bean as a Seed' Activity

(SUGGESTED TIME: 15 MINUTES)

MATERIALS:

Pinto Beans (Other dried beans may be used, but pinto beans are usually lower cost)

Small plastic jewelry bags (can be found at Walmart in the craft section near the beads)

Cotton balls

Yarn cut into 18- inch lengths

Hole punch

Black Sharpie to write students names on the bags.

1. Bean Babies

- Soak beans the night before the lesson.
- Provide each student with one or two (soaked) pinto bean (s), a plastic jewelry bag, yarn and a cotton ball.
- Students should moisten cotton ball in water and squeeze all excess water out of cotton ball.
- Students will place moistened cotton ball and pinto bean in plastic jewelry bag.
- Close the bag and thread yarn through hole punched in the top of the bag. Tie the ends of the yarn to make a necklace.

2. Ask students, "What conditions are necessary for a seed to germinate?" (moisture, warmth, sometimes darkness) *Remember to tie the yarn loose enough that students can get them easily over their heads.*

3. Ask students, "Where could you place the bags to provide the best conditions for germination?" (Have students hang the bags around their necks and tuck them inside their clothes).

4. Tell students they are responsible for providing their bean babies with the best possible care until they have sprouted. The students can name their bean baby and share the names with their classmates.

5. The teacher may want the students to leave the bean babies at school at the end of the day so they can watch them grow and record the progress of the seeds.

6. At the end of each day, the students can make a chart (or booklet) as a class showing how many of the seeds have sprouted.



Part 6: Wrap Up (If Time Allows)

1. Ask if there are any questions.

2. If you have time, review the F's of New Mexico Agriculture.

3. Leave the book, the poster and supplemental lesson with the teacher. Collect the teacher evaluation (as the presenter(s), you may want to sign the poster).

QUESTIONS:

Contact New Mexico Ag In The Classroom with any questions you may have on the Ag Literacy Project or to request a training session.

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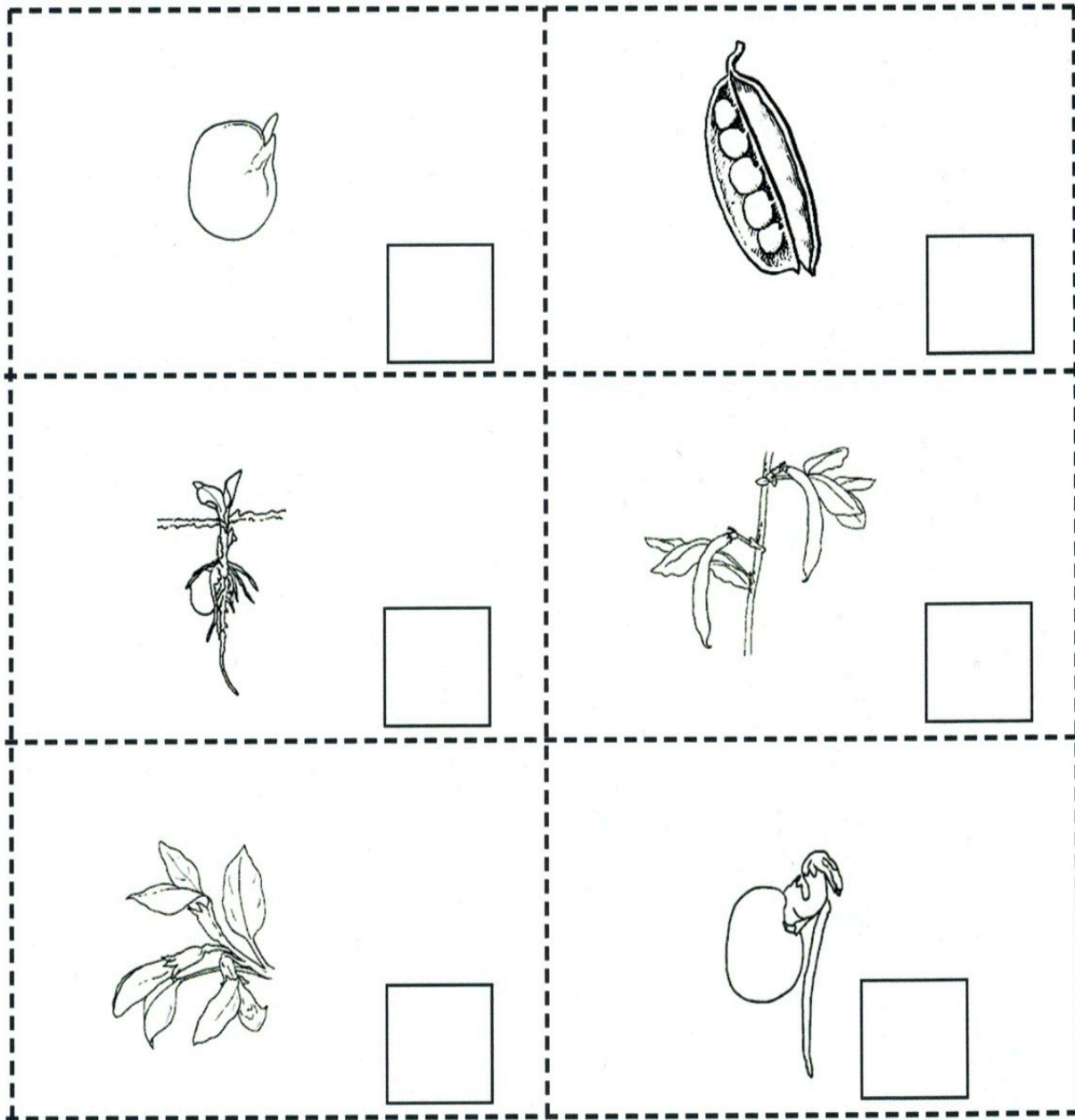
575-532-4714

Adapted with permission from "Agricultura" (FREE Teacher Resource in Spanish/English on www.nmaitc.org) and a special thanks to Oregon Ag In the Classroom for helping us start our Ag Literacy Program.

A Bean is a Seed

Supplemental Lesson for Ag Literacy Project

Cut out these pictures and put them in the correct order. Number them from one to six.



Glue or staple the pictures in order to make a book.



2015 Agricultural Literacy Project FFA Participation Form

Please complete and return this form to
New Mexico Ag in the Classroom

FFA Program: _____

Teacher: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone: _____ E-mail: _____

Classroom Presentations:

School	Teacher	Grade	# Of Students	Provided Teacher with Evaluation Sheet (Y or N)

Please see other side.

Comments are greatly appreciated about your participation. We value feedback that lets us know what worked or didn't work or what we could do next time to make the presentations easier for our volunteers.

Please return this form to:

E-mail: Cheryl at agclass1@nmflb.org

Fax: 575.532.4710

or

Mail: New Mexico Ag in the Classroom

533 Four Winds Dr.

Ft. Sumner, NM 88119



2015 Agriculture Literacy Project Teacher Evaluation Form

Presentation: Seed Soil Sun by Cris Peterson with Been is a Seed Activity

School:

Grade Level:

Presenter(s)/FFA Organization:

Do you feel the information presented helped your students have a better understanding of agriculture and the FFA program? (If yes, please explain.)

Share any comments on what you found valuable as well as ways we could improve the presentation:

NM Ag in the Classroom www.nmaitc.org has great resources for teachers and offers free teacher trainings, workshops, and classroom presentations. Please feel free to provide your e-mail address to receive the NM Ag in the Classroom E-newsletter.

Please answer these questions using this scale:

1-Strongly Disagree

2- Disagree

3- Neutral

4- Agree

5- Strongly Agree



1. The presenter communicated clearly and effectively.

1 2 3 4 5

2. The presentation was well organized and used your time effectively.

1 2 3 4 5

3. You will use the lessons/activity in your classroom in the future.

1 2 3 4 5

4. The presenter(s) invited and answered questions.

1 2 3 4 5

5. I would participate in another Ag literacy project event again.

1 2 3 4 5

Please feel free to contact us at agclass1@nmflb.org

We really appreciate your feedback and hope you enjoy your book.

Thank you for your hard work and dedication in educating our future generations!