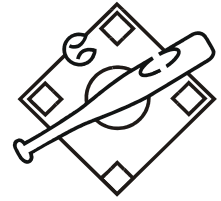


LET'S PLAY BALL

4th Grade Ag in the Classroom Lesson Plan



Goal for presentation: Help children make a connection between agriculture & their lives.

Length of presentation: 45 - 50 minutes.

Materials Needed:

1. Equipment bag of Play Ball items – *1 per presenter*

(See item explanations on page 5, “Why you can’t enjoy a baseball game...”)

**Presenter provides:
(add to bag)**

- bat (wooden)
- ball (leather)
- glove (leather)
- shoe (leather)
- baseball shirt
- socks
- soft drink (non-diet)
- ketchup
- mustard
- nacho chips
- gummy bears
- towel
- band-aids

**Items provided by Farm Bureau:
(already in bag)**

- equipment bag
- ball cap
- score sheet
- tickets
- play money
- plastic tableware
- hamburger
- hot dog
- hot dog bun
- grass seed
- chewing gum
- candy bar
- bar soap
- peanuts
- Cracker Jack®
- deodorant

2. Sample set of soap/deodorant ingredients: distilled beef tallow, distilled coconut oil, and glycerin – *1 per presenter*
3. Baseball diamond/scoreboard poster – *1 per presenter*
4. Ziploc bag of game supplies: Spinner, dry erase marker, paper towel, tape, 4 red & 4 blue colored disks, answer slip example, game tips sheet – *1 per presenter*
5. Clue Cards – *2 sets per presenter* (in plastic game supply bag)
6. Answer slips, 14 pink, 14 blue – *1 set per classroom* (2 sets in game supply bag)
7. Student handouts – *1 per student*
 - Certificates of Participation (signed by you in advance)
 - “I’m Connected to Agriculture” stickers
 - “Let’s Play Ball” pencils
8. Teacher gift bag – *1 per teacher*

Procedure:

1. Introduce yourself. Thank classroom & teacher for having you. Begin by sharing your excitement for the coming of spring, with its warmer weather, longer days and being able to get outside more. Display the baseball diamond/scoreboard by taping it to the chalkboard. As you do, ask students:
 - “How many of you like to get outside and play baseball or softball?” “What other sports do you enjoy?”
 - “Believe it or not, every sport you play depends on agriculture in some way. Today we are going to find out how the products we use to enjoy baseball come from agriculture.”
2. “What do we need to play a baseball game?” Ask the class to name items needed to play a baseball game. Hold up items from your equipment bag as they are mentioned. Extend the discussion by asking the class what items players might use when hot and sweaty after the game (soap, deodorant) and what spectators might use during the game (money, snacks). Glancing back into the bag, state with a puzzled expression: “Actually, it looks like we have just about everything we need. I think here is something missing, though... farmers. Do you think we can have a baseball game without a farmer?” Discuss briefly with the class. Without being specific, establish that many of the items used or consumed during a game originate on farms.
3. Divide the class into two teams. Teams should be as evenly divided as possible, but it is not necessary that they be equal in numbers. Have students move desks and/or chairs or sit in groups on the floor so that team members are all facing one another. Each team will have a coach throughout the activity. Ask the teacher to be the coach of one team while you act as the coach for the other.
4. Carefully explain the activity before distributing materials.
 - The teams will be competing in a game of “baseball.” In order to earn hits and runs, they first need to figure out how ball game items come from farms and farmers.
 - Each team will receive a set of 10 clue cards, 12 baseball game-related items, blank answer slips, and a plastic bowl.
 - The clue cards will be spread out picture side up, where all team members can see them. Game items will be distributed so that each team member has one or two items (this will vary depending on class size).
 - Each team should assign someone to be the “secretary”. This person will be in charge of writing down the team’s answers and putting them in the plastic bowl. Display the “answer slip example” on the board for students to see.
 - Once teams have received their materials, their task will be to determine what farm product(s) their items contain. Team members should take turns to determine what their item(s) are made from. This should involve group discussion and reading the clue cards for hints. For example, if the child holding an item thinks it may contain corn, he or she should then read the “corn” clue card aloud to verify this answer and discuss it with the group. Once an answer is agreed upon, the team secretary should write the answer on a slip and place it in the container. Then it is another team member’s turn to determine what farm product(s) their item contains.
 - Emphasize good teamwork!! When someone is speaking or reading, other team members should be watching and listening carefully. Good teamwork also includes

treating others with courtesy and offering encouragement. Teamwork will result in less frustration and more correct answers! The more correct answers each team has, the better chance they have of winning the game later on.

- Not all clue cards will have a corresponding item, and some items may contain materials described on more than one clue card. Only one correct answer per item is necessary to earn a hit. (If the team has already decided that the baseball is made of leather from cattle and placed that answer in the container, it is optional, but not necessary, that they retrieve their answer and add to it if they discover that baseballs also contain cotton and wool.)
 - By way of example, show the students the wooden baseball bat and ask them what agricultural product it is made from (lumber from trees). Remind students that this correct answer would later count as a hit. (Use the bat as an example only; do not give it to either team.) Again, in many cases there may be more than one correct answer as some game items are made from more than one farm product. For example, some candy bars contain corn syrup, soy lecithin, and peanuts.
 - ALL of the information students need to get the correct answers is provided on the clue cards, so they need to read and listen carefully! Also, many game items have an ingredients list on their packaging which could provide additional clues. Again, the more correct answer slips each team has, the better chance they have of winning the game.
5. Distribute clue cards, answer slips, and items from the equipment bag to each team. Each team should receive an equal number (at least 12) of different baseball items!
 6. Give the teams time to work. With the classroom teacher helping one team as you work with the other, “coach” the students as they work by reminding them to work on one item at a time and to listen carefully to their teammates. You will need to provide occasional help reading new vocabulary on the clue cards. It is okay to “guide” the students towards the correct answers; if they have decided on an incorrect answer, you might say, “Hmmm, are you sure that’s right? Maybe you should read the clue card again.”
 7. Monitor progress until both teams are finished. Collect each of the answer slip containers. Ask a student from each team to collect the clue cards and baseball items.
 8. “Now it’s time to PLAY BALL!” (Also refer to “LET’S PLAY BALL” Game Tips in ziploc bag.)
 - Explain that the game will be played in this manner: answer slips, each representing a ‘batter,’ will be drawn one at a time out of the container of whichever team is ‘up to bat’ first. You will read the slip and with the help of the class, decide whether the answer is correct for a ‘hit’ or incorrect for a ‘strikeout.’
 - Ask the teacher to write down a number between 1 and 10. Have one student from each team say a number. Whichever number is closest to the teacher’s number wins; that team is the ‘home’ team and is ‘at bat’ first. Three ‘innings’ will be played.
 - One at a time, draw slips of paper from the ‘at bat’ team’s container. Read aloud and discuss with the class whether or not they think each answer is correct (see discussion points on page 4).
 - For each correct slip, allow a different member of the team at bat to spin the ‘hit’ spinner. This will determine whether the hit is a single (player moves one base), double (player moves two bases), triple (player moves three bases), or home run.

Move the team's 'players' (colored disks) to the corresponding bases on the baseball field. Incorrect answers do not earn hits; discuss the correct answer and draw the next answer slip. Use the scoreboard to show how many points have been scored.

- Each team is at bat until 4 slips have been drawn (regardless of 'outs'). Once 4 slips have been drawn, the other team is at bat. There should be enough slips to play three innings, plus some extra. If there is time after the game, you can review the answers on the extra slips. If short on time, you may adjust by decreasing the number of batters to 3 per team, per inning.
 - The team that scores the most runs after two innings wins.
9. Wrap up the game. "It looks like the ["red team" or "blue team"] got the most runs in our baseball game. But, you know what? You've ALL won, because you've figured out that baseball is connected to agriculture! What else in life involves agriculture?" Discuss briefly that almost everything we do in life involves agriculture in some way, therefore we are all "connected to agriculture." Ask additional "recap" questions, such as "What is the most surprising thing you learned about agriculture today?"
10. Give each child an "I'm Connected to Agriculture" sticker.
11. Before leaving:
- Hand out signed certificates (students may fill in their own names) and "Let's Play Ball" pencils, or give to teacher to distribute later.
 - Remind teachers & class of placemat design contest. **The entry deadline is March 12, 2010.** The 4th grade theme is "**I'M CONNECTED TO AGRICULTURE.**"
 - Thank teacher and class!
 - Before leaving, give teacher the thank you gift bag. Point out the Food for Thought placemat contest rules/entry forms, evaluation form, and other items in the bag. **Encourage teacher to explore the presentation follow-up resources posted on our website, www.dekalbfarmbureau.org. Remind teacher to complete and submit the evaluation form.**

Important Ball Game Item Discussion Points

- As you discuss each item, talk about both its importance to the game and how the item is derived from the original product (see page 5). Example: Players must have a glove to catch the ball and those gloves are made of leather from beef cattle. Or, if you decide to attend the game you need ticket which is made of paper from trees and printed with ink from soybeans.
- Many items, such as the deodorant and plastic tableware, have less obvious origins than the bat, ball, or glove. To help students understand how such products can have farm origins, define by-products: materials made or derived from a part of the animal or plant other than the main product. For example, the main product from hogs is pork, but cortisone (an important drug used to treat people with serious illnesses) is a by-product derived from the pig's adrenal glands. In another example, fatty acids, which are used in a wide variety of products from cosmetics to plastics, are processed from animal fat and are therefore referred to as hog, cattle, or sheep by-products.
- Sometimes students think it's "gross" that something from an animal gets made into such things as soap or deodorant. Help them understand that this isn't "gross" because the by-products are highly processed and refined to be clean and safe, as in the case of beef tallow in bar soap. **Show the set of sample soap/deodorant ingredients to help illustrate this point.** Scientists constantly develop ways to use all parts of animals and plants so that nothing is wasted.



Why you can't enjoy a baseball game without farmers



	ITEM	FARM PRODUCT	DETAILS
PLAYING THE GAME	equipment bag	cotton	Canvas fabric is made from cotton, which is grown in southern states including Mississippi and Texas.
	bat (wooden)	timber	Most professional wood bats are made from the wood of Northern White Ash trees. Some bats are also made from Rock or Sugar Maple.
	ball (leather)	cattle, sheep, cotton	Official baseballs are covered with cowhide, stitched with cotton thread, and have wool yarn wrapped around their core.
	glove (leather)	cattle	Leather baseball gloves are made from cowhide.
	shoe (leather)	cattle, cotton	Shoes can be made of cowhide and shoelaces are often made of cotton.
	baseball shirt	cotton	Cotton is widely used for clothing and uniforms because it is soft, comfortable, and is easily dyed different colors.
	socks	cotton	Sport socks are often made of cotton.
	ball cap	cotton, hogs	Ball caps may be made of cotton and tinted with dye made with animal-based fatty acids.
	ball field	grass seed	Grass seed production and turfgrass maintenance are a part of the agricultural industry.
	chewing gum	corn	Some brands of gum contain corn syrup and dextrose from corn.
ENJOYING THE GAME	score sheet	timber, soybeans, corn	Most paper is made of wood from pine or fir trees. Corn starch is added to help make paper smooth. Printing ink is made using soybeans.
	tickets		
	money	cotton	Currency paper in money is made of 75% cotton and 25% linen.
	plastic tableware	corn, cattle, hogs	Fatty acids are used in the plastic for most plastic tableware. Biodegradable tableware is made with plastic derived from corn starch.
	hamburger	cattle	Ground beef is made of the meat from cattle.
	hot dog	hogs or cattle	Many kinds of hot dogs are made of pork from hogs or beef from cattle.
	bun	wheat	Wheat, ground into flour, is made into many types of bread.
	ketchup	corn, tomatoes	Ketchup is made from tomatoes and sweetened with corn syrup.
	mustard	mustard seed	Prepared mustard is made from ground mustard seed. Most mustard seed is grown on farms in Montana, North Dakota, and in Canada.
	peanuts	peanuts	Peanuts are grown on farms in southeastern U.S. states such as Georgia and Mississippi.
	Cracker Jack®	popcorn, peanuts, corn	Cracker Jack® is made from popcorn, a special kind of corn that pops when heated, peanuts (see above), and corn syrup as a sweetener.
	nacho chips	corn	Food grade field corn is ground into flour for corn tortillas and nacho chips.
	gummy bears	cattle, corn	Gummy bears contain corn syrup as a sweetener. Gelatin from cattle makes them chewy.
candy bar	corn, soybeans	Chocolate candy bars usually contain corn syrup as a sweetener and soy lecithin, an emulsifier or stabilizer.	
soft drink	corn	Non-diet soft drinks are sweetened with corn syrup.	
AFTER THE GAME	bar soap	cattle	A bar of soap may contain up to 70% tallow, or refined beef fat. Most bar soaps also contain plant oils such as coconut or palm oil.
	deodorant	cattle, corn	Solid deodorants may contain stearyl alcohol, derived from beef tallow, and corn starch. Gel deodorants contain ethyl alcohol—also known as ethanol—from corn.
	towel	cotton	Towels are usually made from cotton because of its softness and absorbency.
	band-aids	hogs	Skin collagen from hogs may be used in non-stick band-aids.