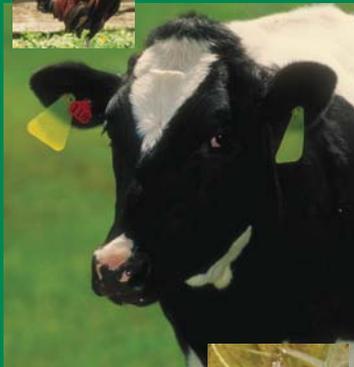


# How to Have an Ag Day

Want to have an Ag Day at your school but don't know where to start? In the cards that follow you will find some ideas to help you plan a successful event at your school. The first card is a list of pointers from educators who have conducted their own Ag Day events. In addition we have included a sample grid showing how one Ag Day was conducted. On the back of this card is a blank grid you can use for planning your own Ag Day.

We have also provided some Ag in the Classroom activities that will work well in an Ag Day setting. Specific skills are listed with each activity so you and your administrators can be assured Ag Day will not just be fun but educational as well. Related lessons from the Ag in the Classroom Web site are listed so teachers can follow up or prepare students in advance for this event.

**For more information about Oklahoma Ag in the Classroom, go to the Oklahoma Ag in the Classroom Web site at [www.agclassroom.org/ok](http://www.agclassroom.org/ok), or call 405-522-6768.**







# Stick Horse Rodeo

## Barrel Racing

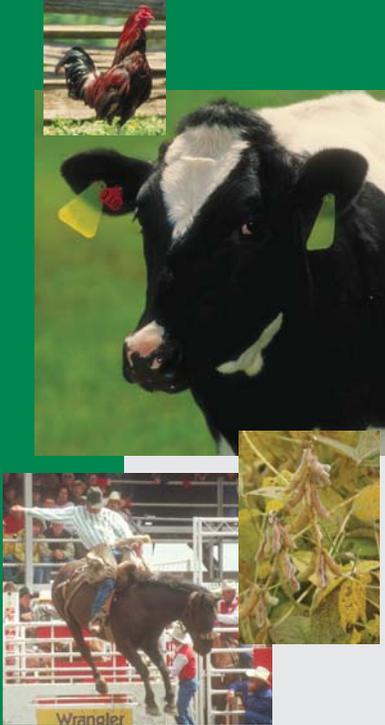
Set up three coffee cans in a triangle for each rider. Show students how to ride their horses around the cans in a figure eight, or cloverleaf, pattern. The rider must ride around at least three cans without turning one over. Use a timer, and have someone record the times. The rider who finishes fastest wins.

## Wild Cow Milking Contest

Fill a rubber glove with water, and poke a small hole in one or two fingers. Have someone hold the rubber glove. Each participant will "milk the cow," filling the spoon with water. Once the spoon is full, the participant will return the water to a cup at the starting line. Each member does this until all have participated. The group with the most "milk" wins.

## Calf Roping

Set up two bales of straw, 3 feet apart. Place a saddle on the back bale and a bucket on one end of the front bale to simulate the calf's head. Allow one child to sit in the saddle and try to throw a hula hoop over the calf's head. Each child gets three tries.



# [www.agclassroom.org/ok](http://www.agclassroom.org/ok)

## Flag Relay

Divide children into two teams. Place two bales of straw with a flag stuck in each one, about 20 feet away. The first child on each team will ride down to the bale of straw, take the flag, return to his or her team and hand the flag to the next person in line, who will then carry the flag back and stick it into the bale of straw. Continue until all children take a turn. First team to finish wins.

## Relay Races

Have students race on their stick horses, first trotting, then loping, then galloping.

## Boot Relay

Have students put on man-sized boots, race to a certain spot with them on, race back and take them off for the next team member.

**Skills: Motor Skills; Movement; Sportsmanship; Cooperation; Social Skills**

**Related Lessons Online: Stick Horse Rodeo; Bill Pickett, Bull Doggin' Cowboy; A Handy Measure; What's Your Brand?**





# Beans and Wheat Berries

When a seed gets warmth, air and water, it starts to change. The stem and the root emerge from the seed. This is called germination. Germination occurs if the seed is in a warm place. Most plants germinate best in the dark, but some plants (e.g., lettuce) actually need light. We plant seeds in the spring, when the ground is warming up. The seed is the food for the baby plant until it can grow its own root system. A seed is germinated when it can grow without the food stored in the seed.

The seed of the wheat plant is called a wheat kernel or berry. This is the part of the plant that is ground into flour for bread. Wheat is the most consumed grain on Earth. In the US, Oklahoma ranks number three in the production of hard red winter wheat, the kind of wheat mostly used to make bread. Hard red winter wheat is planted in the fall, lies dormant through the winter and is harvested in the spring. Wheat berries can also be sprouted for a sweet, nutritious treat.

A bean is the seed of the bean plant. In Oklahoma we grow soybeans as a crop. Soybeans are used in many common products, like candy bars, linoleum and other building materials, ink used in newspapers, crayons, foods like soy sauce and vegetable oil, on CDs, and in sunscreen, lip balm, hand lotion and other makeup products. Soybeans are related to other kinds of beans. Lima beans and green beans are some beans commonly grown in Oklahoma gardens. Mung beans and cow peas are beans grown in Oklahoma that are mostly used for feeding animals.

**Related Lessons Online: [A Bean is a Seed](#); [The Wheat Plant](#); [Dirt Babies](#)**

# www.agclassroom.org/ok



**Materials: dried lima beans; wheat berries (available from health food stores); small plastic jewelry bags; cotton balls; yarn cut into 18-inch lengths; medicine dropper or pipette; hole punch**

1. Provide each student with one large bean and two or three wheat berries, a plastic jewelry bag, yarn and a cotton ball. Have each student place the cotton ball and the seeds inside his or her bag and moisten the cotton ball with a few drops of water, using the medicine dropper. Then help students punch holes in their bags with a hole punch. String the yarn through the hole, and tie the ends to make a necklace.
2. Ask what conditions are necessary for a seed to germinate (moisture, warmth). Ask students where they might place the bags to provide the best conditions for germination. Have students hang the bags around their necks. Test the effects of light vs. darkness by having half your students tuck their bags inside their clothes and half leave them out. Tell students they are responsible for providing their sprout babies with the best possible care until they have germinated. Send a note home to parents explaining the needs of the sprout babies. Have students name their babies and share the names with their classmates.
3. Have students record the progress of their seeds. Which ones grow faster? Each day have students discuss the changes taking place in their seeds. At the end of three days, make a chart as a class showing how many of the seeds have sprouted.
4. Have students predict what their seed babies will look like two weeks later.

**Skills: Plant Science (Germination); Estimation; Prediction**

# Butter, Butter, Shake, Shake, Shake



- Butter is made by churning or whipping pasteurized cream. The churning process sticks the fat particles together. Some of the other milk solids also cling to the fat. The liquid part remaining is called “buttermilk.”
- Homogenization is shaking milk and cream together to break down the cream. It will not separate again.
- The shade of yellow of the butter is determined by the amount of carotene in the grass/hay the cow ate.
- Butter is as old as King Tut’s tomb. Back then it was probably made from the milk of camels or water buffalo.
- Primitive butter churns were made of hollow logs or leather bags that were swung from trees to create a churning action.
- Before it was used as food, butter was used by the ancient Greeks and Romans as a remedy and as an ingredient of medicines and ointments. The inhabitants of North Europe were the first to use butter as food.
- It takes 21 pounds of cow’s milk to make one pound of butter.
- Some of the most common archaeological finds in Ireland are barrels of butter buried in bogs.
- In early days, a farm wife who was gifted in making butter was said to have a “cool hand,” because kneading butter required swift, firm movements and a low temperature.

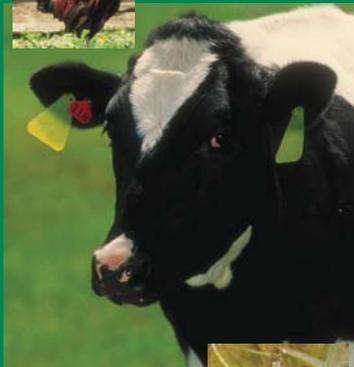
**Skills: Measuring; Phonics; Vocabulary; History; Physical Properties of Matter;  
Observation; Prediction**

# www.agclassroom.org/ok

**Materials: pasteurized heavy whipping cream at room temperature (one pint for 18-20 students); condiment cups with lids (Ask at fast food restaurants. Clear containers work best.); container for pouring off buttermilk.**

1. Fill condiment container about 1/2 full of whipping cream and fasten the lid securely.
2. Tell students to shake horizontally to prevent leakage. Have students chant the following rhyme as they shake. Go around the group, replacing “Mary” with the name of each student in turn.  
Butter, butter, shake, shake, shake.  
Mary’s waiting at the gate.  
Mary’s waiting for her cake.  
Butter, butter, shake, shake, shake.
3. Warn students to keep the lid on the container until the butter is ready and to keep the container moving at all times.
4. The butter goes through three stages. It starts as a liquid. Ask students if they can hear the sloshing sounds. Then it stops sloshing because it has become a solid. Finally, after the particles of fat and milk solids stick together, the solution separates and become solid and liquid. Students should be able to hear a sloshing sound and the butter thumping against the side of the container.
5. Have students pour the liquid off the butter into a container. Explain that the liquid is actually buttermilk.
6. Provide crackers or stick pretzels for students to enjoy with their butter.

**Related Lessons Online: [Chew It Twice](#); [Come Into My Parlor](#); [The Story of Milk](#); [Say Cheese](#)**





# Clucking Chickens

Chickens are a source of both meat and eggs. Most chickens weigh between seven and 10 pounds, although they can weigh as much as 13 pounds or as little as 1.5 pounds.

Hens start laying at 22 weeks of age. Laying hens produce about 240 eggs each year. During the hen's most productive period, she may lay an egg about six out of every seven days. Eggs hatch in 21 days. The hen requires a minimum of 25 hours to produce an egg. Thirty minutes later, she starts all over again.

The chicken life cycle has three states — egg, chick and adult (hen or rooster). A young chick is very small when it hatches. After eight weeks it has grown to weigh about 3 1/2 pounds.

A chicken is different from other birds because it has a comb and two wattles. The comb is the red appendage on top of the head, and wattles are the two appendages under the beak.

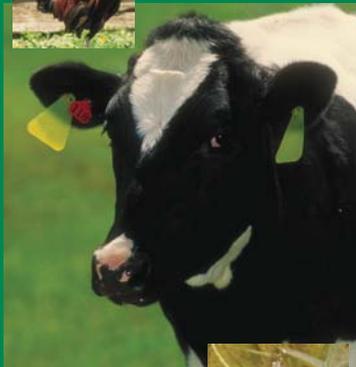
**Related Lessons Online: [Racing Roosters](#); [The Shape of Things](#)**

**Skills: [Experiment and Inquiry](#); [Properties of Objects and Materials \(Sound\)](#);  
[Visual Art Expression](#); [Music \(Pitch\)](#)**

# www.agclassroom.org/ok

**Materials: 8-oz red plastic drinking cups, cotton string cut in 24-in lengths, red felt, low melt glue gun, black felt permanent marker, moistened cloths**

1. Prepare cups ahead of time by using an ice pick to punch two holes, 1/2 inch apart, in the bottom of each cup.
2. Share background material. Find a picture of a hen to show students the chicken's comb and wattle. (A drawing is available in the online lesson "Clucking Chickens".)
3. Hand out the cups and string to students.
4. Have each student lace the string through the holes and tie a slip knot inside the cup. The string should hang down from the cup when it is held upside down. The upside-down cup will form the body of the chicken.
5. To form a beak, cut the felt into long diamond shapes, about 1 1/2 inches long and 1/2 inch wide, and fold the diamond in half. Glue the fold of the beak at the center of the cup's ridges.
6. Use the same red felt to cut a ridged comb, about 3/4 inch wide, and glue the flat side of the comb over the string on the bottom of the cup (the top of the chicken's head).
7. Cut eyes from felt and glue them on, or draw eyes, using the black permanent marker.
8. Once all the glue has dried, show students how to make their chickens cluck. Hold the chicken/cup with one hand, and, using a moistened square of cloth, gently slide the cloth down the string. This will produce a sound similar to that of a clucking chicken.
9. Have students experiment with making sounds with and without the moistened cloth and by tugging at different spots. Ask them to describe the differences. Discuss how sound travels.





# Grass Heads

Of all plants, grasses are the most important to the diets of humans. Corn, wheat, oats, rye, barley, rice, even sugarcane, are all grasses. Before there were people here, Oklahoma was covered with grass that grew taller than most adults. Because there were few trees, the early settlers thought the land was no good. They were wrong. Grasses can withstand environmental extremes that kill trees. So the grasses these pioneers saw were uniquely adapted to the multitude of soil, temperature and precipitation variations and combinations present on the Plains.

Most people who live here now grow grass in their yards. Grass makes things cooler in the summer and keeps out dust in dry weather and mud when it rains. Grass will keep growing back after it is cut, as long as it is not cut too short. About 100 years ago most lawns were “clipped” by goats, cows, sheep or horses.

Grass can be grown from seed or by transplanting strips of turfgrass. Turfgrass is grass that is grown on a turfgrass farm and then cut in strips and rolled for transporting. The turfgrass industry is a growing industry in Oklahoma. Ryegrass is another important crop in Oklahoma. In 2003, Oklahoma led the nation in the production of rye. Rye is a kind of grass that grows quickly and can tolerate shade.

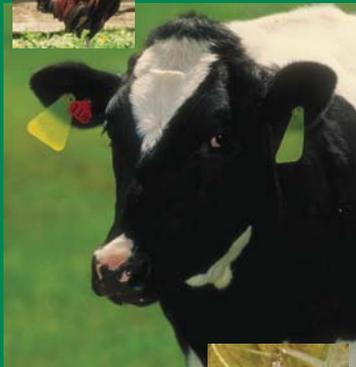
**Skills: Plant Science (Germination); Visual Art Expression**

# www.agclassroom.org/ok

**Materials: Knee-high nylon stocking; grass seed; light-weight potting medium; empty yogurt container, or cup with the bottom cut out, to serve as funnel; felt, google eyes, pom poms and other materials for creating faces; low-melt glue guns; 5-ounce bathroom cups.**

1. Three or four days ahead of time start your own grass head so your students can see what it will look like.
2. For each grass head, slide the yogurt cup funnel through the opening of the hosiery to the toe to hold the hosiery open. Place a generous pinch or two of grass seed in the toe of the hosiery and pack a handful of potting medium on top of the seed. Remove the funnel and pull the mesh tightly over the ball of soil. Tie a knot at the base, keeping the mesh pulled as tightly as possible over the ball of soil.
3. Students should then flip the grass head over so the grass seed is on top and the knot is on bottom.
4. Help students make faces for their grass head using the materials you have provided.
5. After students have finished decorating their grass heads, have them fill the cups halfway with water and set the grass head in it so the end dangles in the water and the head rests on the rim of the cup. Have students check their grass heads periodically and observe how long it takes for the head to become saturated. How much of the water remains in the bottom of the cup? If necessary, have students spritz the head with water to get it started.
6. Have students add water as needed. In 5-10 days the seed should germinate through the hose. After the hair grows to the desired length, students may cut and style it as desired.

**Related Lessons Online: One Hundred Bales of Hay; Dirt Babies; Hairy Caterpillars (in "Food and Fun")**





# Show Ring

Animals need many of the same things we need—food, shelter, water, cleanliness and love. Farm animals are no different, but the people who raise them do not keep them for the same reason you keep your pets. They raise them to help provide food and other products for you and many other people. That doesn't mean they don't care for them, though. Farmers must care for their animals to keep them healthy.

Many animal owners are boys and girls who raise and show animals as projects for 4-H or FFA (Agricultural Education). The best animals win the largest premiums, or cash prizes, for their owners. To determine which animals are best, the owners show them in a show ring. In the show ring, the owner walks his or her animal around so the judges can observe it. Of course, the owner wants the animal to look its best and be on its best behavior. For that reason, the owners spend a lot of time grooming the animals and training them so that they know how to behave in the show ring. They work with the animals to socialize them and get them used to being around people. In the show ring, the person who is showing the animal gets judged along with the animal.

**For more information about 4-H, contact your local OSU Cooperative Extension Service office, listed in the phone directory under “county government,” or go to the Oklahoma 4-H Web site at [www.clover.okstate.edu/fourh/](http://www.clover.okstate.edu/fourh/)**

# www.agclassroom.org/ok

## Livestock Show

Have students bring stuffed animals from home for a livestock show. Every exhibitor gets a ribbon.

## Show Ring

Provide a large pink ball and a fly swatter for each participant. Have team members place their “pigs” on the ground and “walk” them around in a circle, using the flyswatter. The teacher or another adult can act as the judge. Remind students they must keep their eyes on the judge at all times while herding their pigs. They must make eye contact with the judge and smile. They must also show all sides of the pig.

## Team Pig Herding

For a funny version of the above, use pink balloons instead of balls, and have students draw faces on them with a marker. Have team members place their pig balloons on the ground and herd them to a finish line with fly swatters. First team to get its pig to the finish line wins.

**Skills: Motor Skills; Movement; Sportsmanship; Cooperation; Social Skills**

**Related Lessons Online: A Trip to the Animal Fair; Hogs on a Diet; Truth or Hogwash; This Little Pig**





# Stick Horse Rodeo

Rodeo comes from the Spanish word "rodear" which means "to encircle or to surround." To the Spanish in New Spain (now Mexico) in the mid-16th century, a rodeo was simply a cattle roundup.

It's hard to say when rodeos began. Cowboys working on the ranches would compete against one another at roundups and during their free time. Who could rope a calf the fastest? Who could stay on a bucking bronc the longest? Who could perform fancy tricks while riding a horse at full speed?

In the American West, cowboys were responsible for getting huge cattle herds across the open range from ranches in the west to stockyards in Missouri and Kansas, where the nearest trains were available. From there the cattle went by train to slaughter houses in Chicago.

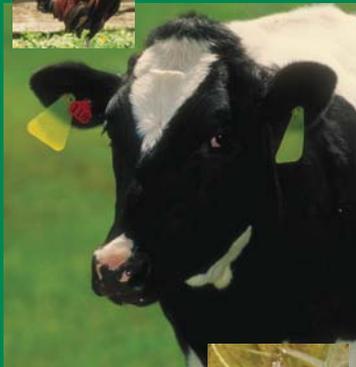
Once the ranges were fenced, many cowboys were out of work. The Wild West Shows gave them a place to show their skills and pick up some pay. Soon rodeos or cowboy contests became part of Western county fairs. Contestants traveled from one competition to another. Some cowboys became rodeo stars and, later, movie stars. Today rodeo cowboys are professional athletes who compete for a living.

For more information about individual rodeo events, go to the online lesson,  
"Stick Horse Rodeo."

Related Lessons Online: Bill Pickett, Bull Doggin' Cowboy; Don't Fence Me In; A Handy Measure

Skills: Visual Art Expression; Movement; Cooperation; American History

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Begin the rodeo with a grand entry. Have students ride in on their stick horses, dressed in the vests they have made.

## Stick Horse

**Materials needed: large brown paper bags (2 per student), tape, stapler, hole punch, markers, tissue paper, cardboard wrapping paper tubes (1 per student), string**

Have students draw a simple horse head on one side of a large brown paper bag (or use the pattern found in the online lesson “Stick Horse Rodeo”) and cut through both sides. Have students cut an additional strip of the paper bag and fringe it to look like the horse’s mane. Staple the two sides of the head together, with the mane, and stuff it with tissue. Tape the head on a cardboard wrapping paper tube. Punch a hole under the mouth to add a string for the reins so the student can hold on to the stick horse.

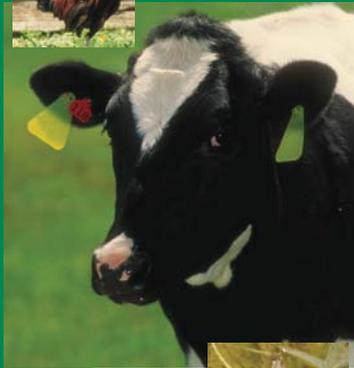
## Western Vest

**Materials needed: large brown paper bag, scissors**

Cut a large paper bag up the middle, and make arm holes so students can slip it on like a coat. Have students cut fringe on the bottom and decorate the vest.

## Saddle Bags

Have students decorate brown lunch bags to serve as “saddle bags.” Provide an assortment of ingredients for trail mix—mini-pretzels, raisins, peanuts, chocolate chips, chex cereal, etc.—and let students choose what they want in their trail mix.



# Look Out, Below

If you dug under the grass in your yard, you would find soil. How far would you have to dig before you ran out? What would you find there?

If you dug far enough, you would hit solid rock. This is called bedrock. But before you got there you would have to dig through three different layers.

The first layer would be organic materials—the layer formed by plants and insects that have died. Just under that is the topsoil, the best place for plants to take root and grow. Topsoil is a mixture of air, water, organic material and minerals. Minerals come from rocks. It can take hundreds of years for rocks to break into pieces that are small enough to form soil. In most places the topsoil is between six and 20 inches thick.

The subsoil is the layer below the topsoil. It is usually lighter in color and less productive than the topsoil. It is made mostly of sand, silt or clay and has very little organic material. Sand has large particles that allow water to move through very quickly. Clay particles are tiny and fit together so closely that water has difficulty flowing through. Silt particles are somewhere between the size of sand particles and clay particles.

Between the subsoil and the bedrock you will find a layer of small rocks that have started to break off the bedrock. This layer is called the parent material of the soil. That's because most of what makes up the soil was once part of the rock.

**Related Lessons Online: [Scrumptious Soil](#); [Let It Rain](#); [Mighty Earth Movers](#);**

**[Mud in the Water](#); [Look Out, Below](#); [The Farmer Cares for the Land](#)**

**Skills: [Science \(Classification, Compare and Contrast, Soil Properties\)](#); [Movement](#)**



## Soil Particle Game

Play this game to help students understand the difference between sand, silt and clay.

–Divide the class in half. One group will represent water, and the other will represent soil.

–First have members of the soil group stand with their arms outstretched so that each particle (student) is touching another (finger tip to finger tip). Explain that they represent sandy soil. Now tell students in the water group to try and work their way through the sand group (under their arms). They should be able to run through with little difficulty.

–Next have members of the soil group stand elbow to elbow to represent silt. Have students in the water group work their way through again.

–Now have members of the soil group stand shoulder to shoulder to represent clay. Have students in the water group try to work their way through.

–Finally, have members of the soil group divide themselves into three groups, with one group acting as sand, one as silt and one as clay. Distribute the three groups evenly, and have the water group work it's way through. Discuss why the last group would provide the best kind of soil for growing plants. (Soil would be porous enough to let water in but tight enough to keep it from moving through too quickly.)

## Edible Soil Profile

**Materials: clear plastic cups; breakfast cereal, some crushed, some whole;  
shredded coconut; milk; plastic spoons**

Build a soil profile from the materials listed above. Explain that the plastic cup represents the parent material, the whole cereal represents the subsoil and the crushed cereal represents the topsoil. Sprinkle coconut on top to represent grass or other plant material. Have students wash their hands and make their own soil profiles. As you pour milk, have students observe to see how water moves through the “soil.”

# How to Have an Ag Day

## Planning

- Start several months in advance, and enlist the help of many partners, including your school staff, teachers and administrators, your PTO, local ag groups, county Extension educators, 4-H and FFA groups, etc. (Hint: Make sure the school secretary is on the planning committee.)
- Apply for an AITC/Pork Council grant to assist with funding (info is on the website). Local businesses and organizations may also be willing to help.
- Enlist teachers and others to make presentations. Suggested activities are included in this packet. Additional activities may be found on the Oklahoma Ag in the Classroom website.
- Make a map of your location showing where each activity will take place. Map the activities so each class goes from station to station in an organized manner (clockwise).
- Work from the map to make a schedule. (See example on flip side.)
- Provide the schedule grid for the presenters and a separate schedule for each classroom.
- Set up a hospitality room for presenters, volunteers and teachers.
- Enlist older students (Jr High/High School) to take made items from each station to classrooms so when students get back to classrooms all the things they have made are waiting for them.



# Sample Schedule Day for Ag Day



	8:40	9:00	9:20	9:40	10:00	10:20	10:40	11:00	11:30	11:50	12:10	12:30	12:50	1:10	1:30	1:50	2:10	2:30	2:50		
1. Rodeo	P/F	P/R	K/B*					Lunch													
2. Clucking Chicks																					
3. Show Ring																					
4. Scatter Square Dancing																					
5. Beans and Wheat Berries																					
6. Corn Cob Dolls																					
7. Making Butter																					
8. Look Out, Below																					
9. Dirt Babies																					

Thanks for your hard work

\* Assign a symbol to each class to indicate which class will be in which activity during which time slot

# Scatter Square Dancing



The square dance began in New England. The first settlers brought with them their various national dances—the schottische, the quadrille, the jigs and reels, the minuet, etc. After a week of toil carving homes out of virgin forest, the settlers would gather on Saturday evening and enjoy dancing their old-world favorites. As the communities grew and people of different backgrounds intermingled, so did their dances. As the repertoire increased, it became increasingly difficult for the average person to remember the various movements.

In almost any group, however, there would be at least one person with a knack for remembering the dance figures. This person would cue or prompt them in case forgot what came next. In due course, this person acquired a repertoire of various colorful sayings that he could intersperse with the cues. Quite often he would learn the dances of other communities and teach them to the group. Some would developed dances of their own, including dances for groups of four couples. This is the manner in which square dancing developed.

As the population spread southward and westward, so did the dances. Lacking the organized recreation of today, the hardworking pioneers felt a need for an activity that would provide recreation as well as social contact with neighbors. Square dancing filled this need. The only requirements were a wooden floor, music and a caller. As far as music was concerned, there was always someone on hand who could play a guitar, a fiddle or an accordion.

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Divide students into pairs (Partners will change many times through the course of the activity), and walk them through the following calls:

*Right Arm Swing* – Lock right arms at elbow, and dance in a circle.

*Left Arm Swing* – Lock left arms at elbow, and dance in a circle.

*Do-Si-Do* – Cross arms in front, and dance around your partner, back to back.

*Right Hand Star* – High five right hands, and dance in a circle.

*Left Hand Star* – High five left hands, and dance in a circle.

*Honor Your Partner* – Curtsy or bow, and say a kind greeting.

*Hit the Trail* – Move about the dance area in time to the music.

Play any music with a quick, steady beat (country/western, pop or rock), and give calls as you wish. There is no correct order.

**Skills: Music (Rhythm, Music History); Cooperation; Movement; American History.**

**Related Lessons Online: [Back to the Farm](#); [Corn Cob Toys](#); [Covered in Quilts](#); [Next Year's Seeds](#)**

