

# **Acres of Adventure - Book 2**

## **Agriculture Gone Wild**

### **From Fruit to Leather** -

- Blender
- Oven
- Plastic wrap
- Cookie sheet

#### **Per group of 2-3 students:**

- Fruit (ripe, washed, stems and skins removed) to make 2 cups puree (Peeled apples, berries, bananas, oranges, grapes, and peaches)

### **No-Drip Diapers** -

#### **Per pair of students:**

- 2 diapers (have several different kinds)
- Scissors
- Gallon-size plastic bag
- Measuring cup (in units of ounces)
- Water, plastic plate or bowl
- Optional: Hydrosorb potting soil and cup, stirring stick

### **Bigger, Better Bubbles** -

#### **Per team of student:**

- Timer
- Supplies to make bubble wands (pipe cleaners, thin wire hangers, plastic Six pack holder, two straws, and a string 3—4 feet long)
- 4 ounces of dishwashing detergent (Joy or Dawn is best)
- 1 liter (or quart) water
- 3 tablespoons of glycerin
- Wide-mouthed bowl
- 2-quart bottle with tight lid

### **Carefree Corn Plastic** -

- Cornstarch
- Measuring spoons
- Corn oil
- Water
- Pipette/dropper
- Food Coloring
- Sandwich-size resealable plastic bag
- Microwave
- Poaster board

### **Packing Peanut Play** -

- Biodegradable packing peanuts
- Cups of water
- Big sheets of paper

### **Slippery Stuff** -

- Small foam/paper sandwich plates
- Scissors
- Ruler
- Baking dish or sink full of water
- Liquid dish detergent
- Pepper shakers
- Milk
- Food coloring
- Granular lechithin
- Baking cocoa
- Nesquik

### **Mysterious Mixtures** -

- Baby food jars with lids
- Stir sticks
- Soybean oil
- Vinegar
- Soy lecithin (oil form works best)
- Measuring spoons

### **Food Glue** -

#### **For glue recipes:**

- Bowls, measuring spoons, measuring cups
- Coffee filters
- Flour
- Water
- Vinegar
- Baking Soda
- Dry milk
- Eggs
- Small whisks or utensils for stirring

#### **For glue tests:**

- Construction paper
- Ruler
- Tall 32-ounce cups
- Small paper/plastic cups
- Small paper plates
- String
- Tape
- Scissors
- Peanut butter
- Pennies

### **Veggie Ink** -

#### **Per group of 2-3:**

- 9 ounce plastic cup
- Dish or lid for ink
- 1/3 cup soybean oil
- 2 teaspoons granular soy lecithin
- 2 teaspoons Kool-Aid powder (no sugar or artificial sweetener added)  
or powdered tempera paint
- Stir sticks
- Paper
- Scissors
- Potato, linoleum block, Styrofoam block or packing peanuts for printing

### **Grape Lightning** -

- Microwave
- Marshmallows
- Wax paper
- Paper towels
- Small round seedless red grapes
- Knife

### **Farm Physics**

#### **Bridge the Gap** -

#### **Per pair of students:**

- Plain paper (8½ x 11, 3-5 pieces)
- 5 paper clips
- 2 books or blocks
- Scissors
- Ruler
- 100 pennies or other small weights

**Eggs on the Move** -

- Two eggs per pair of students (one fresh and one hard-boiled)
- Large bowl
- Salt
- Water
- Flashlight

**Flapping Chickens** -

- One bathroom scale per small group of students

**Float Your Boat** -

- 3 kinds of paper
- Plastic cups
- Cardboard
- Scissors
- Tape and glue
- Plastic wrap
- Aluminum foil
- Straws, rubber bands
- Clay
- Navy beans in large bowl
- ¼ measuring cup
- Plastic baby pool with water

**Siphon Solutions** -

**Per pair of students:**

- Two large bowls
- ½ inch transparent tubing - 24 inches long
- Tape
- Marker
- Table and/or desks
- Water

**Dome Dynamics** -

- Newspaper (stack of papers 1-foot high)
- Masking tape
- Scissors

**Tower Transmission** -

**Per team of 3-4 students**

- 3 feet of masking tape
- 10 sheets newspaper
- Scissors
- Meter stick
- Plastic bowl

**Rubber Band Rolling Can** -

**Per pair of students:**

- Coffee can with lid
- Hammer
- Nail
- Two rubber bands
- Four toothpicks
- Twist tie
- Weight (fishing sinker or washer)

**Watering Can Irrigation** -

**Per pair of students:**

- Hammer
- Nail
- Empty pop can
- Length of string
- Water

### **Uphill Motion -**

#### **Per pair of students:**

- Soft drink bottle or bucket that is  $\frac{3}{4}$  full of colored water
- Five clear straws
- Tape
- Small ball of clay
- Chair

### **Frontier Living**

#### **Please Pass the Pancakes -**

- Electric fry pan
- Vegetable oil
- Spatula
- Knives and forks
- Plates, napkins
- Maple syrup

#### **Pancake Ingredients (makes 24 3-inch pancakes)**

- 1 cup bread flour
- 1 egg
- $\frac{1}{2}$  teaspoon of salt
- $\frac{3}{4}$  cup milk
- $\frac{1}{4}$  cup buttermilk from cream

#### **Homemade butter ingredients:**

- $\frac{1}{2}$  pint heavy whipping cream
- $\frac{1}{4}$  teaspoon salt
- Baby food jars with lids

#### **Pumpkin Pie in a Bag -**

#### **Recipe for groups of six:**

- 1 quart-sized zipper-type freezer bag
- $\frac{2}{3}$  cup cold milk
- $\frac{1}{2}$  package (4 serving size) instant vanilla pudding mix
- $\frac{1}{2}$  cup (about  $\frac{1}{4}$  of 15-ounce can of solid-pack pumpkin)
- $\frac{1}{4}$  teaspoon ground cinnamon
- $\frac{1}{8}$  teaspoon ground ginger
- Graham cracker crumbs
- Six small 3-oz. cups
- Scissors
- $\frac{1}{4}$  can whipped topping
- Six spoons

#### **Tortilla in a Bag -**

- Electric griddle
- Vegetable oil

#### **Per group of four (cut these amounts in half to make 4-inch tortillas)**

- 1 gallon zipper-type plastic bag
- $1\frac{1}{2}$  cups all purpose flour
- 1 teaspoon salt
- $\frac{1}{2}$  teaspoon baking powder
- 3 tablespoons shortening
- $\frac{1}{2}$  cup hot water (125-130 degrees F)
- Optional toppings: cheese, salsa, beans, cinnamon, sugar, fruit slices, pie filling

### **Food On the Run** -

- Sandwich bags (one per student)
- Plastic spoons (one per student)
- Grain (whole grain cereals, corn, rice or wheat, pretzels, whole grain crackers, popcorn)
- Vegetables (mini-carrots, celery sticks, green or red pepper strips)
- Fruits (raisins, apple chips, dried cherries)
- Meat/Bean/Fish/Nut (soynuts, walnuts, pecans, jerky)
- Fat/Oil/Sweet (jelly beans, chocolate chips, chocolate-covered raisins, pretzels or soy nuts)
- Milk and Calcium Rich (cheese sticks or cubes, yogurt-covered pretzels, raisins)
- Food group hint cards

### **Home Grown Soap** -

- Soap flakes (If you can't find soap flakes, you can make your own. Finely grate bars of pure soap to make soap powder. This powder may not need as much water. Start with just  $\frac{1}{3}$  to  $\frac{1}{2}$  cup per 3 cups of soap powder. Add more as needed.)
- Liquid food coloring
- Water
- Vegetable oil
- Bowl
- String (if you want soap on a rope)

### **Cargo on the Move** -

- Cardboard, paper, tissue, marshmallows, Styrofoam, cotton balls, bubble wrap, balloons, and other cushioning material
- Raw egg (in its shell inside a plastic resealable bag)
- Tape and glue
- Spring scale
- Students' backpacks

### **Cornhusker Doll** -

#### **For cornhusk doll:**

- Cornhusks, fresh or dried, about eight sections of husk. If you are using dried husks you will need to soak them in water for about 10 minutes to soften them. Fresh husks can be used as is.
- String
- Cotton balls or scraps of batting
- Scraps of cloth, cording or ribbon, beads and buttons

#### **For cornhusk broom:**

- Dried scraps of cornhusk
- Bowl filled with warm water
- Scissors
- String
- Sticks

### **Bread Basket Weaving** -

#### **For two baskets:**

- 2 cups flour
- 1 cup of salt
- 1 cup water
- Zipper-type plastic bags for storage (up to five days)
- Measuring cups
- Mixing bowls
- Bread pans or other ovenproof pans or bowls to frame the basket
- Cooking oil
- Rolling pins
- Ruler
- Knife
- Varnish
- Brushes

### **Finger Weaving** -

- Yarn
- Pencil
- Scissors

### **Playing with Sounds** -

#### **For whistle:**

- Straw
- Scissors

#### **For noisy chicken:**

- 8-ounce plastic drinking cups
- Cotton string cut in 24-inch lengths

#### **For unity sticks:**

- Bamboo sticks
- Vinyl tape (red, yellow, black, white, green and blue)
- Satin cord
- Beads

#### **For other instruments:**

- Paper plates, plastic cups, straws, string, wire, yarn, empty shoeboxes, masking tape, stapler/staples, waxed paper, beans, toothpicks, paper tubes (all sizes).

### **Insect Invasion**

#### **Quit Bugging Me** -

- One small potato (or one-half large potato) per group
- Toothpicks
- Pipe cleaners
- Google eyes
- Raisins
- Construction paper and scissors
- Carrots, celery, radishes and a vegetable peeler
- Leaves, twigs, etc.

#### **Let's Go Ant Watching** -

- Sugar in small plastic bags
- Grass seed in small plastic bags
- Bacon bits in small plastic bags
- Magnifying glasses

#### **Bug Sweep** -

#### **Per Student:**

- Gallon zipper-type plastic bag or panty hose
- Coat hanger
- Tape

### **Buggy Snacks -**

- Recipes and ingredients for each snack students decide to prepare
- Amount of food depends on the number of students
- Poster board and markers

#### **Inchworms:**

- Swiss cheese, thinly sliced (1½ x 3 inches long for feet)
- Grapes (small and large)
- Carrot (slivered)
- Toothpicks

#### **Ants-on-a-Log:**

- Celery stalks
- Peanut butter
- Black raisins, sunflower seeds or currents

#### **Butterfly/Moth snacks:**

- Pretzels
- Caramel candy, softened
- Peanut butter
- Chocolate chips

#### **Bee Bread:**

- 1 cup corn syrup
- 1¼ powdered sugar
- 1 cup peanut butter
- 1¼ cup powdered milk

### **Pest Air Raid -**

- Glider pattern with grasshopper artwork
- Coffee Stirrers/straws
- Markers/crayons
- Tape
- Hole punch
- Ruler
- Sewing thread
- Scissors
- White paper

### **Feast Like A Bug-**

- Sippy sticks, toothpicks, Q-tips, pipettes (eye droppers)
- Fruit roll ups, M&Ms, Jell-O or pudding, juice box, apple sauce, apple slices, orange segments, chips or cracker crumbs.

### **Yucky Dirt -**

- Trowels
- Cans or containers to hold soil
- Small clear cups
- An insect and spider guide-preferably with pictures
- Magnifying glasses
- Microscope
- Science journals

#### **Yucky Dirt Cake:**

- 1 8-ounce package cream cheese
- 1 cup powdered sugar
- 2 3-ounce packages of instant vanilla pudding
- 1 pound Oreo cookies
- 1 8-ounce container Cool Whip
- Gummy worms
- Glass bowl and serving spoons

**Web Hunt** -

- Heavy paper
- Water-based spray paint
- Paper/pencils
- Yarn
- Cooked spaghetti
- Construction paper
- Glue

**If Bugs Could Talk** -

- Costume supplies (optional)  
(ribbon, crepe paper, pipe cleaners and scarves)
- Noisemaker supplies  
(sandpaper, noisemakers to imitate clickers, and paper clips)
- Cotton balls and cologne
- Flashlights
- Message cards

**When Bugs Go Bad** -

- Copies of "Picnic Pest Profiles"
- Costume supplies in large garbage bag (One per group)
- Toilet paper
- Cotton balls
- Pipe cleaners
- Masking tape
- Rubber bands
- Balloons
- Yarn
- Packing peanuts
- Wire hangers
- Paper bags
- Construction paper