

# GROW YOUR PALS PROGRAM GUIDE



THE NATIONAL FFA MENTORING PROGRAM

Sponsored by



## LESSON 1.40

*Bird Feeders*

**Unit:**  
**ENVIRONMENTAL SCIENCE**

### PRECEPTS

A. Action

A4. Identify and use resources



**Lesson Type:**  
*Small Group*

### NATIONAL STANDARDS

AS.04.01.01.a. Compare and contrast common types of feedstuffs and the roles they play in the diets of animals.

CS.08.02.01.a. Use the appropriate procedures for the use and operation of specific tools and equipment.

NL.ENG.K-12.12 Applying Language Skills

NSK-4.1. Science as Inquiry

### STUDENT LEARNING OBJECTIVES

As a result of this lesson, the student will ...

- Construct one type of bird feeder.
- Name four *ingredients* commonly found in wild bird food.





## TIME

Instruction time for this lesson: **45 minutes**



## RESOURCES

<http://www.birdsforever.com/chart.html>

<http://www.wbu.com/education/>

National FFA Organization. (2003). LifeKnowledge Precepts and Signs of Success.



## TOOLS, EQUIPMENT AND SUPPLIES

### Milk carton bird feeder

- ✓ Milk carton
- ✓ Thin wooden dowel
- ✓ String
- ✓ Scissors
- ✓ Felt-tip pen
- ✓ Box knife cutter

### Wooden bird feeder

- ✓ Outdoor plywood, about 20" x 12"
- ✓ Thin wooden strips
- ✓ Hammer
- ✓ Nails
- ✓ Saw
- ✓ Tape measure
- ✓ Non-toxic wood preservative
- ✓ Paintbrush

### Plastic bottle bird feeder

- ✓ Two-liter plastic soda bottle with a cap
- ✓ Felt-tip pen
- ✓ Scissors
- ✓ String

## KEY TERMS



The following term is presented in this lesson and appears in ***bold italics***:

***Ingredients***

- ✓ **Two thin sticks**
- ✓ **Box knife cutter**

- ✓ **Bag of wild bird seed** (*with Cracked Corn, Thistle, Millet, Sunflower seeds in it*)  
– at least three of these seeds in the mixture
- ✓ **Sandwich bags**
- ✓ **¼ Measuring cup**
- ✓ **PALS1.40.SG.ASSESS.A** - one per student
- ✓ **PALS1.40.SG.ASSESS.B**
- ✓ **Music** – Rockin’ Robin by Bobby Day



## CONTENT OUTLINE

### Objective 1. | Construct one type of bird feeder.

#### I. Milk carton bird feeder

1. Using the scissors, make two holes in the bottom of the bottle on opposite sides. Thread a string through the holes so you can hang the bottle from a tree
2. Use a felt-tip pen to draw a line around the bottle about half-way. Draw a second line around the bottle at the base of the neck
3. Make slits around the bottle from the line up to the neck. (You may need to help your PALS do this.)
4. Push two thin sticks through the bottle so the birds can get a grip
5. Use a funnel to fill the bottle with peanuts. Hang the bottle upside down from a tree

#### II. Wooden bird feeder

1. Measure each side of the feeder’s plywood base (leave a small gap in one corner to facilitate cleaning)
2. Cut the wooden strips to length. If your PALS is old enough, show him how to safely use the saw
3. Attach the strips to the sides of the feeder using the hammer and nails.
4. Apply a coat of non-toxic preservative to the feeder to prevent it from rotting

#### III. Plastic bottle bird feeder

1. Using the scissors, make two holes in the bottom of the bottle on opposite sides. Thread a string through the holes so you can hang the bottle from a tree
2. Use a felt-tip pen to draw a line around the bottle about half-way. Draw a second line around the bottle at the base of the neck
3. Make slits around the bottle from the line up to the neck. (You may need to help your PALS do this.)

4. Push two thin sticks through the bottle so the birds can get a grip
5. Use a funnel to fill the bottle with peanuts. Hang the bottle upside down from a tree

**Objective 2. | Name four *ingredients* commonly found in wild bird food.**

- I. Look at bird food ingredient list
  1. Write down first four *ingredients*
  2. Look through bird food to find those four *ingredients*

## INTEREST APPROACH

*Prepare for this lesson by having all the materials listed above, and have a piece of paper and writing utensil for the students at their desk before you begin. If the students aren't old enough to write, turn interest approach into a group brain dump on the chalkboard or large poster in front of room.*



Tweet! Tweet! Can you hear that little bird? What bird? Oh you just missed it! I can remember many afternoons at my grandfather's house sitting on the back porch watching the birds fly in and eat from the bird feeders he had placed in the back yard trees. Flap your wings if you have seen birds eat out of bird feeders?

*Model wing flapping for students.*



Great job! I can tell we may have some expert bird watcher!

Today we are going to build our very own bird feeders and also discover what kinds of seeds are in bird feed. Before we get going too quickly, let's think back to the time that we have seen birds in our back yards. When you hear Tweet! Write down a list of all the types of birds you have seen before in your back yard. For example, we could write down a Blue Bird, or a Robin. We will have one minute to think of all the birds we can. We will share one of our birds when you hear the music end in one minute. You can begin when you hear the word tweet!

## TWEET!

*If possible, play the music "Rockin' Robin" by Bobby Day while the students are working.*



Great job bird watchers! It seems we have a good idea of what birds are in our back yards. Who will be first to share a bird from their list?

*Solicit responses.*



Wow, there really are a lot of birds we can feed with our projects today. Well since there are so many birds, let's get to work on our bird feeder projects.

## SUMMARY OF CONTENT AND TEACHING STRATEGIES

### OBJECTIVE 1. | Construct one type of bird feeder.



*Choose the type of bird feeder you would like to construct. Gather appropriate materials for this project, and for the amount of students in your group. For this young group, pre-punch or drill holes for all bird feeders. Pre-measure sticks and string.*

#### I. Milk carton bird feeder

1. Using the scissors, make two holes in the bottom of the bottle on opposite sides. Thread a string through the holes so you can hang the bottle from a tree
2. Use a felt-tip pen to draw a line around the bottle about halfway. Draw a second line around the bottle at the base of the neck
3. Make slits around the bottle from the line up to the neck. (You may need to help your PALS do this. Use a box knife cutter for this.)
4. Push two thin sticks through the bottle so the birds can get a grip.
5. Use a funnel to fill the bottle with birdseed. Hang the bottle upside down from a tree

#### II. Wooden bird feeder

1. Measure each side of the feeder's plywood base (leave a small gap in one corner to facilitate cleaning)
2. Cut the wooden strips to length. If your PALS is old enough, show him how to safely use the saw
3. Attach the strips to the sides of the feeder using the hammer and nails.
4. Apply a coat of non-toxic preservative to the feeder to prevent it from rotting

#### III. Plastic bottle bird feeder

1. Using the scissors, make two holes in the bottom of the bottle on opposite sides. Thread a string through the holes so you can hang the bottle from a tree
2. Use a felt-tip pen to draw a line around the bottle about halfway. Draw a second line around the bottle at the base of the neck
3. Make slits around the bottle from the line up to the neck. (You may need to help your PALS do this. Use a box knife cutter.)



4. Push two thin sticks through the bottle so the birds can get a grip
5. Use a funnel to fill the bottle with birdseed. Hang the bottle upside down from a tree

*Talk students through construction of bird feeder, depending on type being constructed.*

## OBJECTIVE 2. | Name four *ingredients* commonly found in wild bird food.



*Sorting Activity: pre measure one-fourth cup wild bird food into a sandwich, baggie, one for each student.*

*Each student will sort out a baggie of pre-measured wild bird food and identify **ingredients** on a blank sheet of paper.*



We made this wonderful bird feeder and now it is time to discover what will go in the feeder. Each of you will be given a mat and a baggie of bird food. Your job will be to sort the food from your baggie into different columns. When we are done our paper will look like rows of different types of bird food. What questions do you have?

*Allow time for students to sort food.*

How many types of bird food did we find today? What are the names of these types of seeds?

*Allow for answers – Lead to Sunflower, Millet, Thistle, Cracked Corn, etc.*

Choral Response e-Moment®



That's right. Today we have discovered these types of seeds are in our common birdseed. As we point to the seeds in the column, let's say out loud the names. First \_\_\_\_\_. Second \_\_\_\_\_. Third \_\_\_\_\_. Etc. Great! Let's write the names above these bird feed **ingredients**.

*Identify three types of **ingredients** in the wild birdseed and label. Have students label on their charts as well. Demonstrate and assist students.*



You may place your birdseed back into your baggie and take it home to put into your very own bird feeder.



## REVIEW / SUMMARY



Let's look at our bird feeders and think about how good this will make our birds back home feel when they get to have a great dinner in our new bird feeders! Who can remember the names and types of birds that live in our backyards?

*Elicit Responses.*



What **ingredients** are commonly found in bird feed?

*Elicit Responses.*

## APPLICATION



### Large Group Idea

*Use different sized kitchen tongs and birdseed to evaluate what size of beak a bird would have to eat certain types of bird food. You will want to make sure that you have three to four different types of bird food ingredients and a matching sized tong to act as a bird beak.*



### One-on-One Suggestion

*Build a pinecone birdhouse, coating the pinecone with peanut butter and rolling in bird seed. Hang both bird feeders together and graph which bird feeder is used more and what type of bird is using them.*



## **PALS1.40.SG.ASSESS.A | EVALUATION ANSWER KEY**

### **ANSWERS TO EVALUATION:**

PALS1.40.SG.ASSESS.B

Hey let's see if we can remember the seeds that were in our bird feed today. We have a matching worksheet that will help us remember the seeds we sorted today. Draw a line from the picture on the left to the name on the right of the worksheet. When you are done turn them in to your teacher.

**PALS.1.40.SG.ASSESS.A**

Name \_\_\_\_\_

Date \_\_\_\_\_

*Please match the  
bird feed  
ingredients on the  
left with the name  
on the right by  
drawing a line  
between the two.*



**Millet**

**Sunflower**

**Corn**

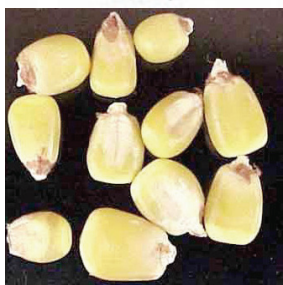
**Thistle (Nyger)**

**PALS.1.40.SG.ASSESS.B**

Name \_\_\_\_\_

Date \_\_\_\_\_

*Please match the  
bird feed  
ingredients on the  
left with the name  
on the right by  
drawing a line  
between the two.*



**Millet**

**Sunflower**

**Corn**

**Thistle (Nyger)**