

# Sunny Sunflowers

## Objective

Students will create models of sunflowers and play a game to demonstrate how plants grow in relation to light.

## Background

### THE BIG SUNFLOWER

I'm just as happy as a big sunflower  
That nods and bends in the breezes,  
My heart's as light as the wind that blows,  
Blowing from off the trees.



I'm just as happy as a butterfly  
That dips and spins in the flowers  
My song's as joyous as the pretty bird's  
Singing to us for hours.

Most of the sunflowers grown in Oklahoma are used as garden flowers or as birdseed. Birds love to eat sunflower seeds. They cause problems for sunflower growers by eating the seeds while the plants are still flowering. Blackbirds are the peskiest.

Sunflowers grow to be very tall, as tall or taller than most adults. Some can grow to be as tall as 15 feet. The face of the sunflower always turns toward the sun when it is growing. Usually the heads will start to droop by the end of the growing season. That's because the hundreds of seeds growing in the flower get heavier as they develop and cause the head to fall over.

Sunflower seeds taste good and are a good source of potassium and protein. They are fast becoming the favorite snack of baseball players and their fans. During one recent baseball season, fans of the Baltimore Orioles professional baseball team ate nearly 3,000 packets of sunflower seeds.

## Visual Art

1. Students will follow these directions to make models of sunflowers.
  - Glue sunflower seeds to a paper plate to cover it.
  - Cut petals from yellow paper and glue around the edge of the plate.
  - Use green paper for leaves and/or stems.

## Science

1. Read and discuss background.
2. Students will use the plates from the Visual Art activity above to demonstrate phototropism in sunflowers.
  - Students will pretend you (the teacher) are the sun.

## Oklahoma Academic Standards

### KINDERGARTEN

Life Science: 1-1  
Visual Art: 3.2,4; 4.3

### GRADE 1

Life Science: 1-1  
Visual Art: 3.2,4; 4.3

### GRADE 2

Life Science: 2-1  
Visual Art: 3.2,4; 4.3

## Materials

(For each student)

2 sheets yellow construction paper  
1 sheet green construction paper  
saucer size paper plate  
sunflower seeds  
glue

## Vocabulary

**flower**—a shoot of a higher plant that is specialized for reproduction and bears modified leaves (as petals)

**petal**—one of the often brightly colored modified leaves that make up the corolla of a flower

**potassium**—a silver-white soft light metallic element that has a low melting point and occurs abundantly in nature especially combined in minerals

**protein**—any of numerous substances that consist of chains of amino acids, contain the elements carbon, hydrogen, nitrogen, oxygen, and often sulfur, include many compounds (as enzymes and hormones) essential for life, and are supplied by various foods (as meat, milk, eggs, nuts, and beans)

**season**—one of the four quarters into which the year is commonly divided

**snack**—a light meal

- Play cheerful music, and move around the room.
  - As you move around the room, students will move their sunflowers to face you.
  - Students take turns being the sun.
3. Bring a birdseed mix to class.
    - Students will separate the seeds in the mixture.
  4. Plant sunflower seeds in containers or outdoors.
    - Students will observe their growth and record observations.

## Extra Reading

Tagliaferro, Linda, *The Life Cycle of a Sunflower*, Capstone, 2007.