

# Jack and the Cornstalk:

## Educator Guide, Pre-K – 3<sup>rd</sup> Grade

### PreK-Kindergarten

#### *Language:*

Ask the class questions about corn:

Where does corn come from? (a seed, the earth, a farm)

Where does corn grow? (in the ground/dirt, on a farm)

What does corn need to grow? (water, sunlight, nutrients)

How does corn grow? (a seed sprouts, grows leaves, grows one or two ears of corn on the cob of the plant)

What does corn look like? (stalks are firm and green with leaves, husks are green and yellow, corn is white or yellow or can be other colors)

Show the class a few pieces of corn on the cob with husks still on.

Ask students to describe the corn with sensory words that describe the touch, size, color, smell, texture, etc.

Brainstorm with the class:

Which foods and products contain corn? (Popcorn, cereal, whole corn, cornbread, corn muffins, corn nuts, creamed corn, corn dogs, etc.)

Letter sound / word brainstorm:

Make a list of food words that begin with the hard c sound (e.g., corn, carrots, cabbage, candy).

Make a list of other vegetables.

Make a list of words that end with the n sound.

Language Activity - I can do it myself!

Review the part of the story where Jack plants the corn kernels and grows the plants so that he does not have to rely on the giant's wife for food.

Encourage a class discussion about why it is sometimes important to take care of yourself, rather than to always depend on others.

On a large sheet of paper, draw a line down the middle. On the left side of the page, write the words, "I need an adult to help." On the right side of the page, write the words, "I can do it myself!"

Ask children to give examples of activities that require adult help (e.g., drive a car, go shopping, cook a meal, cross the street). After you have several examples, ask children to brainstorm activities they can do without help and write those activities on the right side of the page (e.g., take a bath, eat breakfast, get dressed, brush teeth).

For an extension activity, or for an alternative idea, ask children to draw pictures of activities that they are able to do by themselves. Help children write simple sentences to describe their pictures (e.g., I can tie my shoes.)

### ***Sensory/Science/Fine Motor Skills:***

Add popcorn kernels to the sensory table  
Add different tools for measuring, pouring, and comparing

### ***Music/Movement:***

Listen to a song about popcorn (e.g., "The Popcorn Song" available online at <http://www.youtube.com/watch?v=jx3LslhjMZw>).

Have children hop around the room like popcorn popping.  
Encourage them to make sounds and move in different ways.

Make music shakers:

*What you need:*

Popcorn kernels

Various plastic containers with lids or water bottles with caps

*What to do:*

Ask each child to choose a container or bottle. Have each child place a few corn kernels in the container/bottle, close it tightly, and shake it! Allow children to add more kernels and shake their music shakers in different ways. Encourage them to compare and contrast the sounds made by different containers or by different numbers of kernels inside.

“I can do it by myself” charades:

To build on the themes of self-reliance and personal responsibility introduced in the book, have children stand up and create a safe space around them for moving so they will not bump into one another. Call out an action phrase. If children are able to do it, they should show you with real or pretend body movements.

Example phrases include: I can tie my shoes; I can hop on one foot; I can brush my hair; I can stretch my arms; I can brush my teeth; I can sweep the floor; I can jog in place; I can clap; I can do jumping jacks.

### ***Art Activities:***

Corn painting: Use a piece of corn on the cob, dip in paint, roll on paper. Make corn prints with the paint. Glue a few real husks on the painting, too.

Cornstarch painting: Mix cornstarch and food coloring to make textured paint. Allow children to use their fingers or different tools to make pictures with the paint.

Cornstarch Paint Recipe:

- 2 cups of corn starch
- 1 cup of cold water
- 4 ½ cups of boiling water
- Food coloring

### ***Science, Math, Health/Nutrition:***

Make air popped popcorn in small groups:

1. Wash hands before handling food
2. Measure popcorn kernels
3. Make predictions about what will happen to the kernels in the air popper
4. Make time predictions about how long before the first kernel will pop
5. Make predictions about how much popcorn will come out of the popper
6. Have children describe the sights, smells, tastes, sounds and textures of the popcorn popping process.

## 1<sup>st</sup> grade

**Art:** Provide children with corn kernels to make mosaics. Glue the kernels in various designs and arrangements. Encourage children to glue kernels on to premade shapes, letters, or numbers.

**Math:** Have children use kernels to show addition or subtraction problems. Children can glue the kernels on paper, insert the correct equation symbols and write the answer.

Have children compare groups of kernels to identify which groups of kernels have more or fewer.

### **Science:**

Introduce the class to the parts of a cornstalk.

Draw a simple diagram of a corn stalk and label the parts with the children. Use the following drawing as a sample.

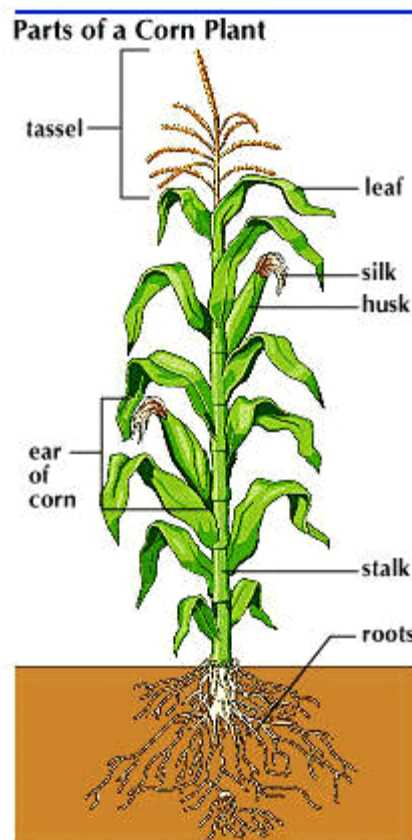


Image Source: <http://kids.britannica.com/comptons/art-53137/At-the-top-of-a-mature-corn-plant-is-the>

Introduce the class to some fun facts about corn:

- There are about 800 kernels in 16 rows on each ear of corn.
- A pound of corn consists of approximately 1,300 kernels.
- Iowa, Illinois, Nebraska and Minnesota account for over 50 percent of the corn grown in the U.S.

Experiment with cornstarch goo:

Mix cornstarch with water, then touch and move the goo to discover its properties. Talk about what's happening and guess about why it happens.

Explanation: The cornstarch is made up of long chains of atoms – it is called a polymer. The chains of atoms move slowly. If you try to pour it, the solution acts like a liquid. If you try to make the atom chains move faster, the chains get tangled and the solution acts like a solid.

**Nutrition:** Have children sample corn products with a simple snack. You may want to have children try sweet corn, corn on the cob, corn tortillas, corn chips, or corn cereal pieces (i.e., Corn Flakes, Corn Chex, etc.). Encourage children to wash hands before making the snack.

**Language:** Have children write and illustrate their own stories about corn.

Ask children to do a little research to learn 3 facts about corn, then ask them to write three sentences about corn.

Retelling story: Have students retell the story of Jack and the Cornstalk by acting it out, using puppets, or drawing their own pictures to tell the story.

## 2<sup>nd</sup> grade and 3<sup>rd</sup> grade

(add these more advanced activities for older children)

### **Language:**

Brainstorm:

Make a list of words that contain the **or** r-controlled vowel sound.

Make a list of other plants that grow on a farm or grow in the ground.

Read: Read the original Jack and the Beanstalk fairy tale.

Compare and contrast: Make a list of similarities and differences between Jack and the Beanstalk and Jack and the Cornstalk.

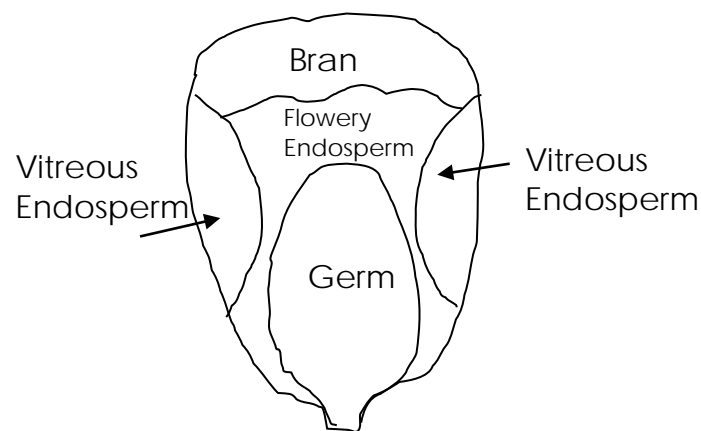
Create a Venn diagram to show the similarities and differences.

### **Math and Nutrition:**

Make or sample different kinds of popcorn, including kettle corn, caramel corn, cheese corn, buttered, and so on. Make a graph to show the class favorites. Compare and contrast the findings.

### **Science:**

Introduce the class to the parts of corn kernel. Draw a large kernel of corn on a piece of poster board or paper. Point to the different parts and write a label for each part. You can use the following image:



Make corn plastic:

*What you need:*

plastic bag, cornstarch, corn oil, water, food coloring

*What to do:*

1. Put 1 tablespoon of cornstarch in a plastic bag.
2. Add 2 drops of corn oil.
3. Add 1 tablespoon of water.
4. Add 2 drops of food coloring.
5. Close the bag and seal it. Mix up by gently squishing the bag.

## **More Corny Resources:**

Illinois Agriculture in the Classroom:

<http://www.agintheclassroom.org/TeacherResources/Lesson%20Booklets/Exploring%20Corn%20Lessons.pdf>

Missouri Corn Growers Association:

<http://www.mocorn.org/resources/education/corn-in-the-classroom/>

And, of course, there are more a-maize-ing resources at

[www.TheFairyTaleTrail.com](http://www.TheFairyTaleTrail.com)!