



Educational Resource Packet

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Jack and the Cornstalk:

Educator Guide, Pre-K – 3rd 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.

1st 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.

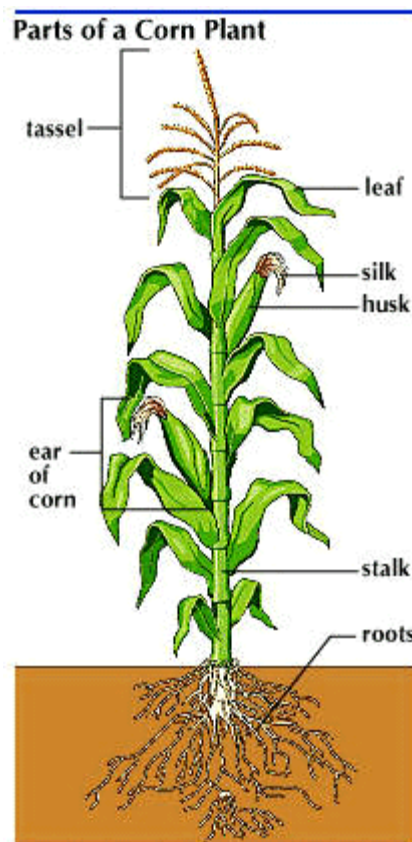


Image Source: <http://kids.britannica.com/comptons/art-53137/At-the-top-of-a-mature-corn-plant-is-the>

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.

2nd grade and 3rd 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.

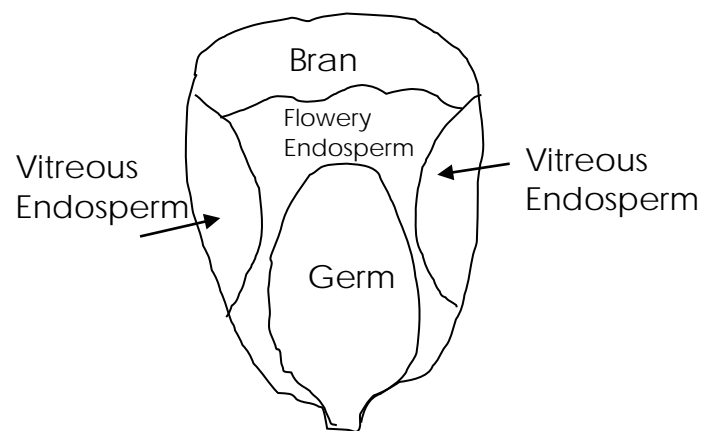
Create a Venn diagram to show the similarities and differences.

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:

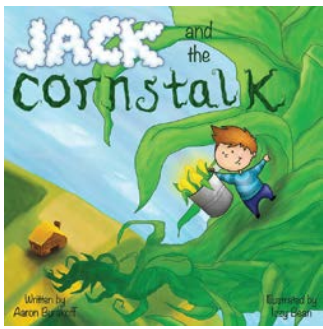
<http://www.agintheclassroom.org/TeacherResources/Lesson%20Booklets/Exploring%20Corn%20Lessons.pdf>

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!



Educator Resources for *Jack and the Cornstalk*:

Discussion Guide and “Magic Corn Kernel” Growing Activity

This lesson plan has been developed by farmer and educator Debra Kearney. Debra is the owner and operator of [Dan-D Farms](#), a second-generation agritourism farm in Knoxville, IA. Debra is also a regional representative for the Nutrients for Life Foundation, a non-profit educational organization.

Discussion Guide for *Jack and the Cornstalk*

- Before reading the story:
 - Ask students if any of them have visited a farm, and give a few students the opportunity to share some of the things they saw at the farm (e.g., cows, chickens, plants, tractors, etc).
 - Ask students if they are familiar with the fairy tale, *Jack and the Beanstalk*. Explain that this story is similar to *Jack and the Beanstalk* but takes place on a farm and helps us learn about corn.
- After the reading the story, you can discuss the following topics with your students:
 - *Plant lifecycle and the importance of patience.* Ask students if they really think they can plant seeds one day and see the plants fully grown by the next day. Explain that farmers need to be patient and wait a long time for their seeds to develop into plants that produce food for us to eat.
 - *Corn as an ingredient in foods.* Ask students how many different foods Jack ate with corn in them. Then, ask students if they can think of other foods they like to eat with corn in them. Create a list and explain that corn is an ingredient in a lot of the food we eat, even when we don't realize it.

Follow-up Activity: Grow Your Own Magic Corn Kernels!

- Ensure that you have the following supplies:
 - “Magic corn kernels”; (if you want to be consistent with story, “five magic corn kernels” per student); these can be popcorn kernels purchased by the jar, typically used for home popping.
 - Mini Ziploc bags, one per student.
 - Moistening supplies (e.g., cotton balls, paper towels, or Soil Moist, which can be purchased at your local home gardening store). Enough for each Ziploc bag.
 - OPTIONAL: string to make necklaces for the students to wear their Ziploc bags
- Explain to your students that you have something very special to give them – “magic corn kernels” – just like in the story! As you hand out the supplies, remind your students that farmers are very patient and that, like farmers, they need to be very patient and wait their turn 😊.
- Give each student a handful of corn kernels, a Ziploc baggie, and moistening supplies
- Explain to the students that, with a little warmth and moisture, the “magic corn kernel” can germinate (and explain that germinate means that the seed will sprout and the plant will start to grow)
- Instruct each student to place his/her magic corn kernels into the Ziploc bag, insert the moistening supplies (e.g., wet cotton ball, moist paper towel, etc) and lock the Ziploc bag shut.
 - Instruct older students to put the bag in their pockets; younger students, who may not wear pockets, can place the Ziploc on a necklace and wear it under their shirt
- Check in with students over next 3-to-5 days until seeds germinate; wow, it's magic!!!!
- After the kernels have germinated, ask students what else they think the seeds will need to keep growing (e.g., sun, water, etc). If students forget to mention the soil, ask them where Jack planted his magic corn kernels and explain that plants need nutrients from the soil to grow big and strong. Tell students that they can take their sprouted kernels home to plant in the soil with their parents' permission.

Corn Themed Art Projects

Painting with corn



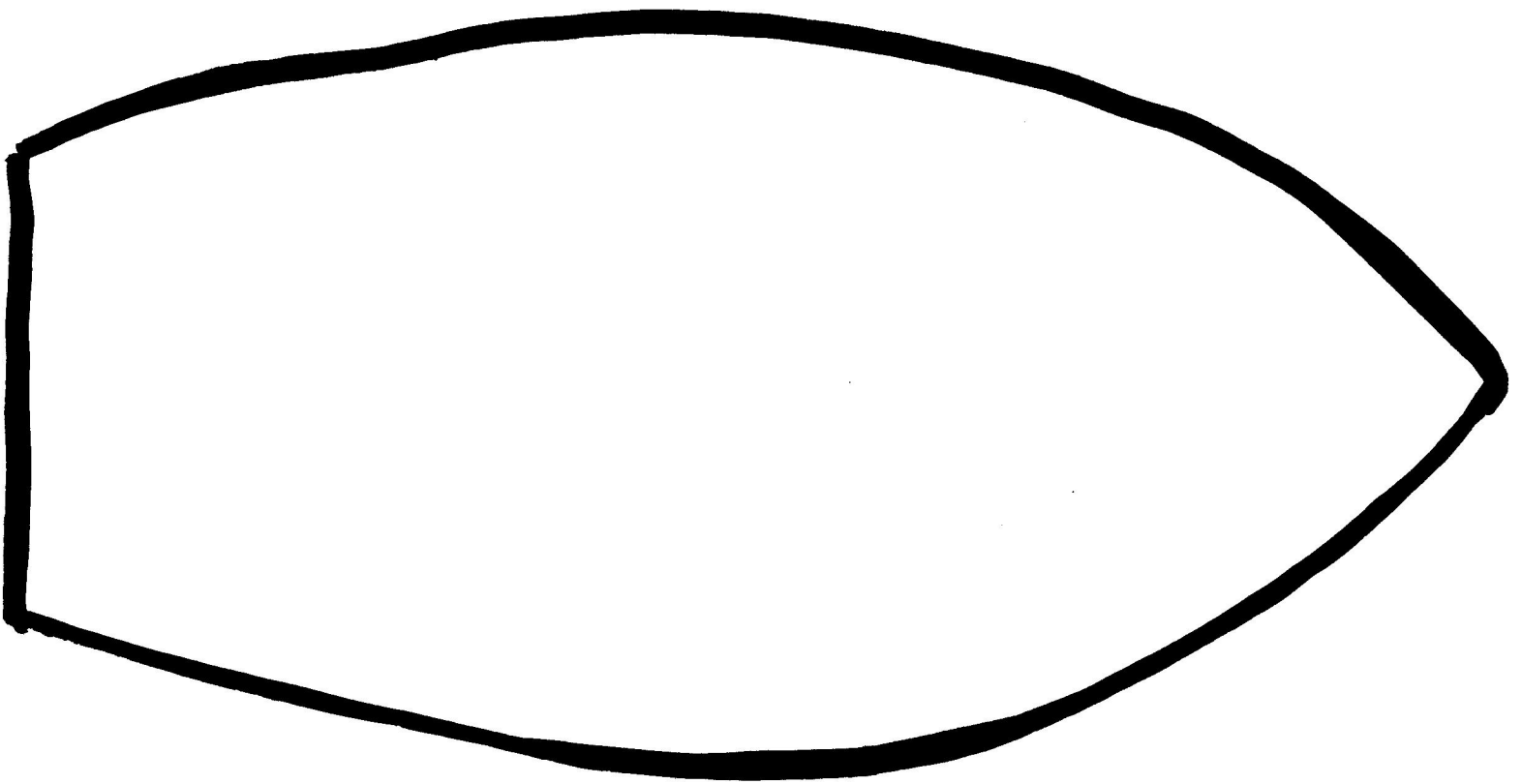
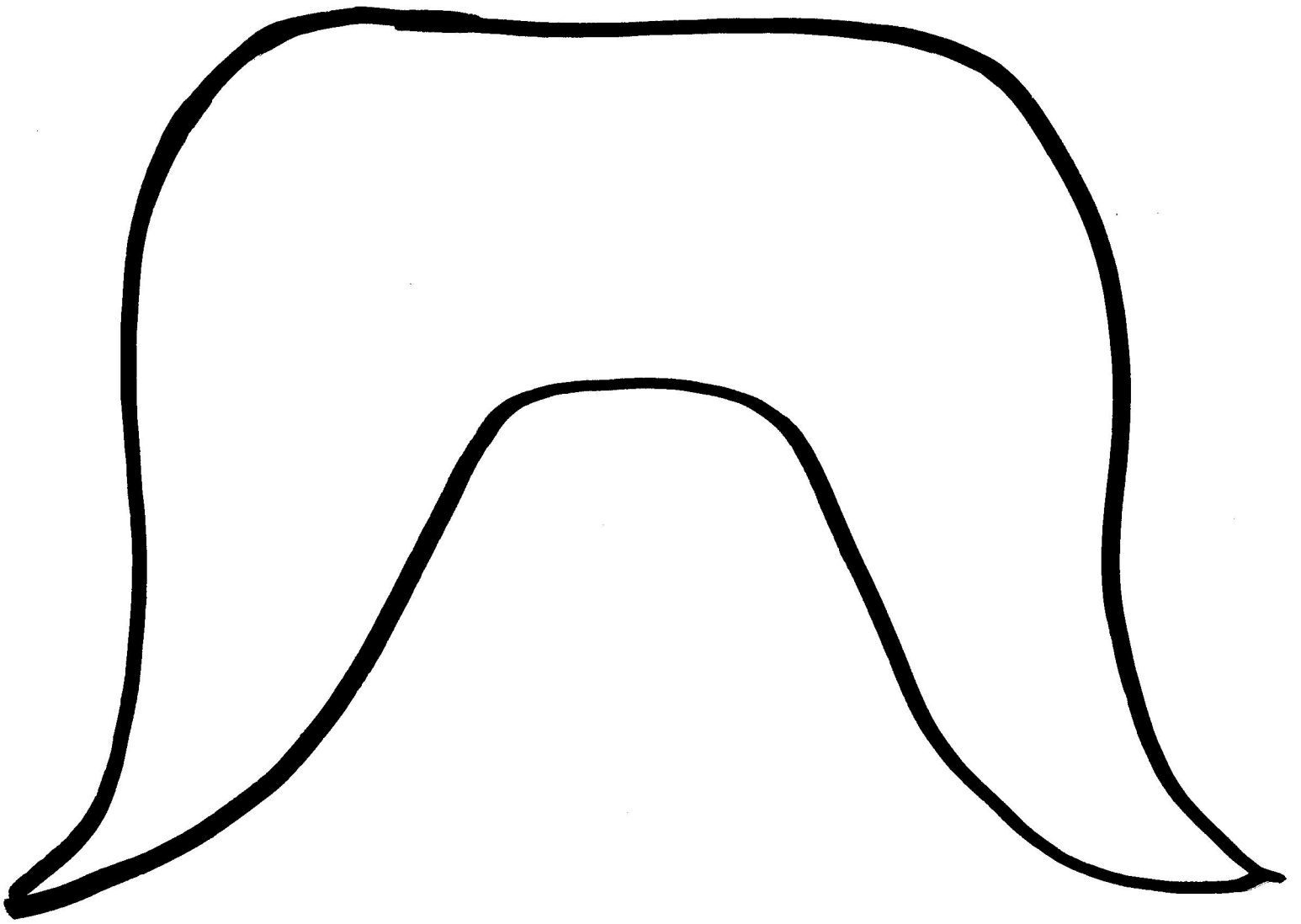
Crayon rubbing



Create a corn cob (template on next page)

Use buttons, corn kernels, popcorn, fingerprints...be creative!





Can you spot the eight differences between the two pictures?



1. _____

5. _____

2. _____

6. _____

3. _____

7. _____

4. _____

8. _____

Answers: (1) Giant's tooth missing, (2) bow in woman's hair, (3) muffin in woman's hand, (4) apple on table, (5) glass standing up straight, (6) corn hanging on cornstalk, (7) Jack's shirt design, and (8) Jack holding a watering can.

Visit www.thefairytailetrail.com for more magical, farm-friendly fun!

Can you help Jack find his bucket of sweet corn by leading him through the corn maze?



Start



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Jack and the Cornstalk © and TM Evergreen Creations LLC.

Can you find the hidden words?



Words:

- | | | | |
|----------|-----------|--------------|------------|
| 1. Jack | 4. Giant | 7. Cornstalk | 10. Bucket |
| 2. Magic | 5. Kernel | 8. Muffin | 11. Maze |
| 3. Farm | 6. Cows | 9. Plant | 12. Grow |

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JACK

carefully planted
the kernels and watered the soil.



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Jack and the Cornstalk © and TM Evergreen Creations LLC.

E-I-E-I-O

I smell someone
I do not know!



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