



EXTENSION

Popably Popcorn



Description: Learn about popcorn then make a healthy snack using popcorn.



Supplies Needed

- Popably Popcorn Story
- Popably Popcorn Handout
- Crayon, marker, or pencil
- 1/2 cup Popcorn kernels
- 1 teaspoon Vegetable Oil
- 1/2 teaspoon (or to taste) salt
- Small bowl
- Small Brown Paper Sack

Activity Steps:

1. Read the Popably Popcorn story and have child follow along with the handout, circling, writing, and following the instructions listed in the story. Help them write based on their ability.
2. Make microwave popcorn in a brown paper sack.
 - In a small bowl, mix popcorn and oil together so that the oil is coating the popcorn kernels. Pour popcorn into brown paper bag.
 - Sprinkle salt all over the popcorn.
 - Seal the brown paper bag by folding it over twice. Cook in the microwave at full power for 2 1/2 to 3 minutes, or until you hear pauses of about 2 seconds between pops. Carefully open the bag to avoid steam, and pour into a serving bowl.

Popably Popcorn Story

Popcorn is a type of maize or corn, a member of the grass family and is scientifically known as *Zea mays everta*. Popcorn has been around for hundreds of years. It is believed that Native Americans used to grow and eat popcorn. In the past, there were many theories about the reason that popcorn popped, but today, it is not a mystery; it is science!

Nebraska is the number one producer of popcorn in the United States and farmers in 30 counties grow more than 300 million pounds every year. **Write a number one on the state of Nebraska.**

Popcorn is grown in a similar way to sweet corn and field corn, but is the only type of corn that will pop. Popcorn is planted in fields with a tractor, is irrigated or watered, and is sprayed just like other types of corn. **Circle the popcorn plant on your paper.** Once the popcorn plant is fully grown and dried, the popcorn is harvested using a combine. **Put a star by the combine.**

You might be wondering how you can tell a popcorn plant from other types of corn plants. The tassel, or the top part of the plant that is golden in color, is more “fluffy” than the other corn plants. **Write the word “fluffy” beside the popcorn plant’s tassel.**

Once the popcorn is harvested, it is taken by grain truck to the storage facility. Some farmers store their popcorn at a local grain elevator or the grain bins on their farm. **Draw an arrow from the grain truck to the grain bins.** The grain truck is emptied and the popcorn is put into the grain bin or grain elevator where it will be dried with heat and air. **Draw lines showing that there is air moving around in the grain bins.**

After the popcorn is completely dry, it is taken to a food processing plant by a grain truck or train. **Draw an arrow from the grain truck to the food processing plant.**

Because the popcorn was grown in a field, it is exposed to dirt, rain, animals, and insects. When it comes to the food processing plant, it is too dirty for people to eat, so it must be cleaned. **Draw an “X” over the picture of the dirty corn.**

After the corn is cleaned, it is sorted by color and packaged into bags of microwave popcorn and bags for stove top and air poppers. **Circle the packaged popcorn.** Orville Redenbacher is one brand of popcorn that is grown by Nebraska farmers. After the popcorn is packaged. It is transported to the grocery store where you can buy it, pop it, and eat it! **Draw an arrow from the semi-truck to the grocery bag.**

Now, let’s talk about the science of popping corn. You may remember me telling you that popcorn is the only type of corn that will pop. That is because the hull, or the outside shell of the kernel has the exact thickness that will allow it to burst. **Outline the hull of the kernel.**

Each kernel contains a small droplet of water inside of it. **Draw a water droplet inside of the kernel.** When the kernel is heated, the heat turns the water inside to steam. There is no room for the steam inside of the kernel, so it causes the hull to explode turning the kernel into the fluffy popcorn. **Draw steam coming out of the kernel of popcorn.** **How high can popcorn kernels pop? Up to 3 feet in the air.**

Do you know how hot a kernel of popcorn has to get before it pops? It has to be 212 degrees Fahrenheit, but the temperature for the best popping results is 250 degrees Fahrenheit. **Color the thermometer in to reach 250 degrees Fahrenheit.** After popping your popcorn, you may notice that some kernels are left in the bottom of the bowl that didn’t pop. These are called “Old Maids”, they are the kernels that are too dry to pop. You can actually save these and add water back into them.

Compared to most snack foods, popcorn is low in calories. **What is a calorie?** Air popped popcorn has only 30 calories per cup. Oil popped popcorn is only 35 calories per cup. Did you know that popping popcorn is the number one use of microwave ovens? Most microwave ovens have a “popcorn” control button. There are two shapes of popcorn when it is popped. Snowflake – which is used in movie theaters and microwave popcorn because it looks and pops bigger, and Mushroom – which is used in caramel corn and candy shops because it doesn’t crumble.

Popably Popcorn Handout

