

Name: _____

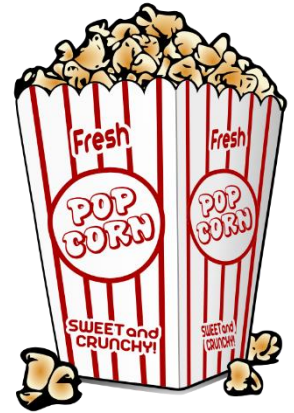
Aligned to the following standards: AG6; CS.06; FFA.PL-C; FFA.PG-J; FFA.CS-N; FFA.CS-O;
FFA.CS-P; CCSS.W.9-10.2; CCSS.MP1; CCSS.MP2; CCSS.MP4; CRP.07; CRP.08; FPP.04

Appendix 5: Popping Off

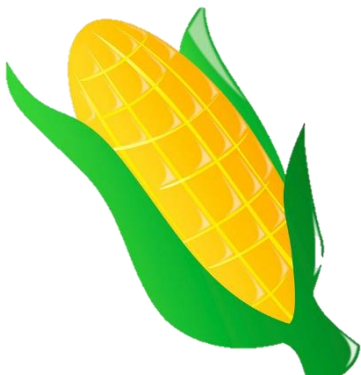
Part 1

Directions:

Read the article “This SAE Popped Off” in the fall/winter 2024 issue of *FFA New Horizons* and answer the questions below.



1. What initially sparked Grant Deaton's interest in growing popcorn?
2. Grant has increased his production to meet the demand of his community. Answer the following questions about that increase.
 - a. How many pounds of packaged popcorn did he sell in 2023?
 - b. How many pounds of packaged popcorn did he sell in the first quarter of 2024?
 - c. Assuming no increase in demand for the rest of 2024, how many pounds of packaged popcorn would he expect to sell by the end of 2024?
 - d. Assuming he produces and sells that much, what percent increase would that be from the 2023 totals to the 2024 totals? (Round to the nearest 100).
3. What did Grant do when he was not happy with his first crop?
4. How does he inspect and test his crop prior to harvest?
5. Name three ways that Deaton Popcorn is sold.



- a.
- b.
- c.
6. What is one lesson that can be taken from Grant's SAE that you or other students in your school could implement in your own SAE?

Name: _____

Part 2

Directions:

Use the various resources on the Popcorn Board's website (<https://www.popcorn.org/>) to learn more about this treat that is enjoyed by millions of people every year.

Different Types of Corn (<https://www.popcorn.org/All-About-Popcorn/Different-Types-of-Corn>)

Draw lines to match the descriptions below to the four basic types of corn.

Dent Corn 	This corn has its own size, shape, starch level and moisture content. It has a hard exterior shell and a soft starchy center. When heated, the natural moisture inside the kernel turns to steam and builds up enough pressure to eventually explode.
Flint Corn 	This corn is almost all soft starch and will never pop. It contains more sugar than other types of corn. Unlike other corns that are picked when the kernels are dry and mature, this corn is picked and eaten while the ears are in the immature milk stage and the kernels are tender.
Popcorn 	This corn has a hard outer shell and is distinguished by a wide range of colors. It is grown mostly in Central and South America and used primarily for decoration in North America around harvest time.
Sweet Corn 	Also called field corn, this is the most widely grown type of corn in the United States. It is mainly used for livestock feed but is also used in some food products. It contains a mix of hard and soft starches that become indented once the corn is dried.

What Makes Popcorn Pop? (<https://www.popcorn.org/All-About-Popcorn/What-Makes-Popcorn-Pop>)

1. What was the explanation early Native Americans had for why popcorn popped?
2. What characteristics actually allow popcorn to pop like it does?
 - a.
 - b.
 - c.
3. How much is the pressure inside a kernel of popcorn before it explodes?

Name: _____

Popcorn History and Corny Facts

(<https://www.popcorn.org/Kids-Corner/Corny-Facts>) (<https://www.popcorn.org/All-About-Popcorn/History-of-Popcorn>)

Below is a simple flyer your FFA chapter produced for an agricultural literacy event at your school for National Popcorn Day. However, it looks like some of the information was transferred incorrectly, and all the pictures got deleted! Use the links above to correct the mistakes, and then draw two or three pictures to fix up and complete the flyer.

Happy National Popcorn Day!

JANUARY 19

AMERICA LOVES POPCORN!

Americans eat about 25 billion quarts of this whole grain, good-for-you treat every year! That's 30 quarts per man, woman and child.

WHERE DOES MY POPCORN COME FROM?

Most U.S. popcorn is grown in the Southwest, primarily in states like Arizona, Indiana, Iowa, Florida, Michigan, Missouri, New Mexico and Oregon.

Did You Know?

POPCORN FOR BREAKFAST!

Popcorn was once a popular breakfast food and was enjoyed at the breakfast table in the 20th and 21st centuries.

MOVIES & THE GREAT DEPRESSION

Unlike other treats, popcorn sales increased during the Great Depression because even economically down families could afford it at 25 or 30 cents per bag.

MICROWAVE POPCORN

In the late 1960s, microwave popcorn made its way into family homes and popcorn consumption increased by hundreds of pounds in the following years.

Name: _____

Part 3

Directions:

Popcorn is enjoyed in many different ways. Many people enjoy it with just butter and salt while watching a movie, but there are also many special treats that use popcorn as a base but add things like cheese, chocolate, pretzels or candies. Use your creativity to create a recipe for a new popcorn treat to enjoy. It can be sweet, savory or both — whatever you would most enjoy! Record the recipe on the notecard below and then design a package for your new treat. Be sure to include a name for your new treat as well as a picture and color on your packaging.

This image shows a blank sheet of white paper with horizontal blue lines for writing. A single vertical red line runs down the left side, creating a margin. The top of the page has a wider white space, likely for a header or title.

1. What is your favorite way to enjoy popcorn? Why is that your favorite?
2. How did you decide what to include in your new recipe?

Name: _____

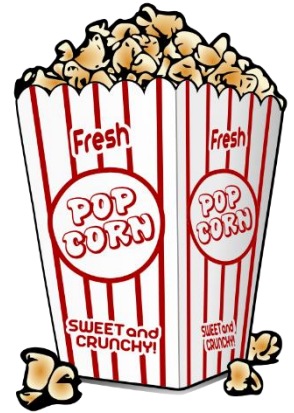
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KEY: Appendix 5: Popping Off

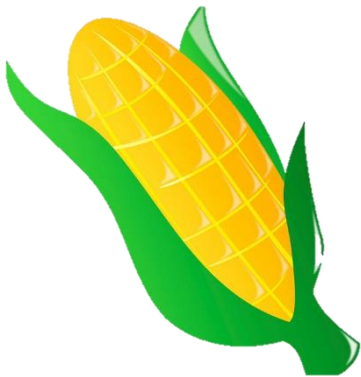
Part 1

Directions:

Read the article "This SAE Popped Off" in the fall/winter 2024 issue of *FFA New Horizons* and answer the questions below.



1. What initially sparked Grant Deaton's interest in growing popcorn?
His dad rented farmland from a man who sold popcorn, and he wanted to do something different and unique for his SAE.
2. Grant has increased his production to meet the demand of his community. Answer the following questions about that increase.
 - a. How many pounds of packaged popcorn did he sell in 2023?
300 pounds
 - b. How many pounds of packaged popcorn did he sell in the first quarter of 2024?
1,000 pounds
 - c. Assuming no increase in demand for the rest of 2024, how many pounds of packaged popcorn would he expect to sell by the end of 2024?
 $1,000 \text{ pounds} \times 4 \text{ quarters} = 4,000 \text{ pounds}$
 - d. Assuming he produces and sells that much, what percent increase would that be from the 2023 totals to the 2024 totals? (Round to the nearest 100).
 $\% \text{ increase} = (\text{final value} - \text{initial value}) / \text{initial value}$
 $\% \text{ increase} = (4,000 - 300) / 300$
1,200% increase
3. What did Grant do when he was not happy with his first crop?
He ordered samples of 15 popcorn varieties, popped all the corn and conducted a taste test to choose the new varieties that he was going to grow.
4. How does he inspect and test his crop prior to harvest?
He picks several ears of corn, tests the kernels in a moisture tester and pops a few test batches before he harvests.
5. Name three ways that Deaton Popcorn is sold.



- a. Answers will vary but could include online, high school concessions, baseball leagues, kettle corn vendors and retailers and the local movie theater.
 - b.
 - c.
6. What is one lesson that can be taken from Grant's SAE that you or other students in your school could implement in your own SAE?

Answers will vary.

Name: _____

Part 2

Directions:

Use the various resources on the Popcorn Board's website (<https://www.popcorn.org/>) to learn more about this treat that is enjoyed by millions of people every year.

Different Types of Corn (<https://www.popcorn.org/All-About-Popcorn/Different-Types-of-Corn>)

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Sweet Corn 	Also called field corn, this is the most widely grown type of corn in the United States. It is mainly used for livestock feed but is also used in some food products. It contains a mix of hard and soft starches that become indented once the corn is dried.

What Makes Popcorn Pop? (<https://www.popcorn.org/All-About-Popcorn/What-Makes-Popcorn-Pop>)

1. What was the explanation early Native Americans had for why popcorn popped?
They believed a spirit lived inside each kernel and when heated, the spirit became angry and exploded out of its home into the air to flee.
2. What characteristics actually allow popcorn to pop like it does?
 - a. Its hull is just the right thickness to allow it to burst open.
 - b. It contains 13.5% to 14% moisture to allow it to pop.
 - c. The starch inside the kernel is soft and becomes gelatinous as it's heated up, building the pressure inside the kernel
3. How much is the pressure inside a kernel of popcorn before it explodes?
135 pounds per square inch

Name: _____

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AMERICA LOVES POPCORN!

Americans eat about ~~25~~¹⁵ billion quarts of this whole grain, good-for-you treat every year! That's ~~30~~⁴⁵ quarts per man, woman and child.

Picture answers will vary.

WHERE DOES MY POPCORN COME FROM?

Most U.S. popcorn is grown in the ~~Southwest~~^{Midwest}, primarily in states like ~~Arizona~~, Indiana, Iowa, ~~Florida~~, Michigan, Missouri, ~~New Mexico~~ and ~~Oregon~~.
Illinois Kentucky Nebraska Ohio

Picture answers will vary.

Did You Know?

POPCORN FOR BREAKFAST!

Popcorn was once a popular breakfast food and was enjoyed at the breakfast table in the

~~20th and 21st~~
^{19th and 20th} centuries.

MOVIES & THE GREAT DEPRESSION

Unlike other treats, popcorn sales increased during the Great Depression because even economically down families could afford it at ~~25 or 30~~^{5 or 10} cents per bag.

MICROWAVE POPCORN

In the late ~~1980s~~^{1980s}, microwave popcorn made its way into family homes and popcorn consumption increased by ~~hundreds~~^{tens of thousands} of pounds in the following years.

Part 3

Directions:

Answers will vary.

The image shows a white rectangular area representing a piece of paper. It features a series of horizontal light blue lines spaced evenly apart. A single vertical red line runs down the left side of the page, creating a margin. The top portion of the page is unlined, serving as a header space.

Answers will vary.

- Answers will vary.

- Answers will vary.