Name: _____ Date: _____

Inside a Popping Kernel

Circle group

A popcorn kernel is small and hard. It does not look fluffy. But when it gets hot, it pops!

The kernel has a little water inside. It has a hard shell too. The heat turns the water into steam. The steam pushes on the shell.

The push gets strong. Pop! The shell breaks. The soft white part puffs out.

Popcorn comes from a special corn. Other corn does not pop the same way.

Questions

1. What is inside a popcorn kernel?

_____

_____

2. What does the heat turn the water into?

_____

_____

3. What breaks when the kernel pops?

_____

_____

4. What kind of corn makes popcorn?

_____

_____

5. Why does the kernel need to get hot?

_____

_____

Words to know

kernel: one small seed of corn
steam: the hot gas that water makes when it gets very hot
shell: the hard outside covering of a seed
puffs: swells up and gets big and light

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Inside a Popping Kernel

Triangle group

A popcorn kernel is small and hard. It looks like it could never be fluffy. But when it gets hot, something big happens.

Each kernel has a tiny bit of water inside. It also has a tough shell. When the kernel heats up, the water turns into steam. Steam takes up more room than water, so it pushes on the shell.

The push gets stronger and stronger. Then the shell breaks with a pop! The soft white inside puffs out and turns inside out.

Popcorn comes from a special kind of corn. Other kinds of corn do not pop the same way. That is why a bag of popcorn kernels is made just for popping.

Questions

1. What is inside a popcorn kernel?

_____

_____

2. What does the water turn into when the kernel gets hot?

_____

_____

3. What happens to the shell?

_____

_____

4. What kind of corn is used to make popcorn?

_____

_____

5. Why does the kernel need heat to pop?

_____

_____

Words to know

kernel: one small seed of corn
steam: the hot gas that water makes when it gets very hot
shell: the hard outside covering of a seed
puffs: swells up and gets big and light

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Inside a Popping Kernel

Square group

A popcorn kernel is small, hard, and dry. It seems impossible that it could ever turn into something light and fluffy. But when the kernel gets hot, something remarkable happens.

Inside each kernel is a tiny drop of water, surrounded by a tough shell. As the kernel heats up, the water turns into steam. Steam needs far more room than water does, so it pushes harder and harder against the shell.

Finally the shell bursts open with a pop! The soft, white inside puffs out and turns itself inside out.

Popcorn comes from a special variety of corn. Other kinds of corn do not pop in the same way, which is why popcorn kernels are sold just for popping.

Questions

1. What is inside each popcorn kernel?

_____

_____

2. What does the water become when the kernel heats up?

_____

_____

3. What happens when the steam pushes hard enough against the shell?

_____

_____

4. What kind of corn is used to make popcorn?

_____

_____

5. Why will a kernel not pop if it stays cold?

_____

_____

Words to know

kernel: one small seed of corn
steam: the hot gas that water makes when it gets very hot
shell: the hard outside covering of a seed
puffs: swells up and gets big and light

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

For the teacher: Inside a Popping Kernel

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

Circle: Inside a Popping Kernel

Easier · 73 words · Flesch-Kincaid grade 0.7

1. A little water.
2. Steam.
3. The hard shell.
4. A special corn.
5. The heat makes steam, and the steam pushes the shell open.

Triangle: Inside a Popping Kernel

This passage · 115 words · Flesch-Kincaid grade 2.5

1. A tiny bit of water.
2. Steam.
3. The steam pushes on it until it breaks with a pop.
4. A special kind of corn.
5. Heat turns the water inside into steam, and the steam pushes the shell open.

Square: Inside a Popping Kernel

Harder · 119 words · Flesch-Kincaid grade 5.5

1. A tiny drop of water, surrounded by a tough shell.
2. Steam.
3. The shell bursts open with a pop.
4. A special variety of corn.
5. Without heat, the water cannot turn into steam to push the shell open.