Popping Corn Lab Investigation Activity

Students will investigate how different variables affect the number of kernels that pop.

Equipment (for each lab group):

Hot air popcorn popper

Supplies (for each lab group):

Bags (small)
Large bowls (3)
Pins
Popcorn kernels (300)

- 100 at room temperature, experiment #1
- 100 chilled, experiment #2
- 100 punctured by a pin, experiment #3

Before lab:

1. Divide class into lab groups.
2. Distribute **The Scientific Method for Food Science Experiments** handout.
3. Distribute three small bags and 300 popcorn kernels to each lab group.
4. Instruct the students to label the bags with their group number and experiment #.
5. Student should prepare the popcorn kernels by separating 100 kernels into each bag.
6. Instruct students to identify a problem and state it as a question.
7. Have students come up with a hypothesis.
8. Students should poke a hole in the kernels for experiment #3, place the kernels for experiment #2 in a designated freezer, and the kernels for experiment #1 in a designated place at room temperature.

Day of lab:

1. Experiment - Each group should pop the three bags of kernels using the hot air popcorn popper and count the number of popped kernels for each experiment.
2. Students should record and analyze their data. Create charts, diagrams or graphs.
3. Draw conclusions based on their results.
4. Complete handout.

Copyright © Texas Education Agency, 2015. All rights reserved.