

What Caused the Illness?

Name _____

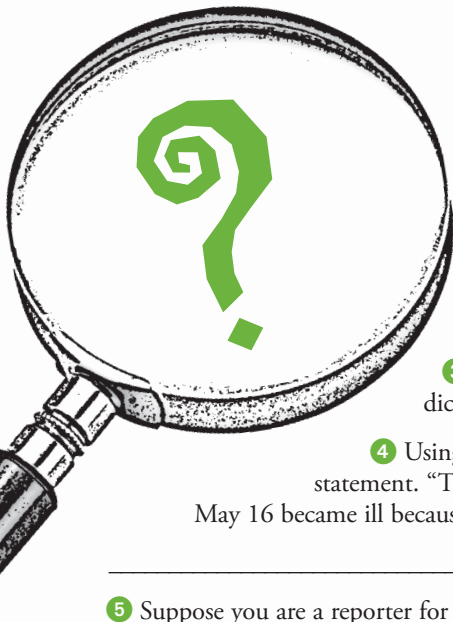
Scenario

The local hospital has treated numerous people for dehydration due to uncontrollable vomiting followed by diarrhea. The county health department is conducting an investigation to determine the causative agent. It was determined that all the patients ate at a community get-together on May 16 and that the illnesses were caused by a foodborne pathogen, a disease-causing microorganism obtained from something the people ate or drank. Look at the data chart above. Each of the 20 people in the chart were hospitalized. Determine what food was responsible for the food poisoning.

PATIENT DATA CHART:

Patient	Hot Chocolate	Fruit Juice	Bottled Water	Granola Bar	Popcorn	Cut Vegetables	Veggie Dip	Watermelon
A	-	+	+	-	-	-	-	-
B	-	-	+	+	+	+	+	+
C	+	+	-	-	-	-	-	-
D	+	+	+	-	-	+	+	+
E	-	+	-	-	-	-	-	-
F	-	-	+	-	+	+	-	+
G	-	+	+	-	-	-	-	-
H	-	+	-	+	-	-	-	-
I	-	+	-	-	-	-	-	-
J	+	+	-	-	+	-	+	+
K	-	+	+	+	-	+	+	+
L	-	+	-	-	+	+	+	-
M	+	+	-	-	-	+	-	-
N	-	+	+	+	-	-	-	-
O	-	+	-	-	-	-	-	+
P	-	+	-	-	-	-	-	+
Q	-	+	-	-	-	-	-	-
R	+	+	-	-	+	-	-	-
S	-	+	-	-	-	-	-	-
T	+	+	-	+	-	+	-	-

+ = that person ate item - = that person did not eat item



1 From the data above, what food do you suspect caused the illness?

2 In one complete sentence, describe your reasoning.

3 Discuss your reasoning with the lead epidemiologist (your teacher) and then obtain the dichotomous key to continue your investigation.

4 Using the dichotomous key, determine the actual source of the illness. Complete the following statement. "Through scientific investigation, my team has determined that the people at the get-together on

May 16 became ill because:

5 Suppose you are a reporter for the local newspaper. Write a three to five paragraph article that describes what happened, why it happened, and how the foodborne illness could have been avoided. Before writing your story, examine a newspaper article to see how it is set up. Make sure your article has:

- a headline
- authors listed
- facts of what happened
- facts about foodborne illnesses in general
- how this incidence could have been avoided
- quotes from experts or witnesses (pretend you interviewed patients, event planners, food handlers, epidemiologists, etc.)
- been proofed for spelling, capitalization, proper punctuation, sentence structure, and flow of story