

Name: _____

Date: _____

3.6 – Food Safety Crime Game

Greetings,

02/09/25

You've been chosen to be a food safety detective. You will use your food safety knowledge to help solve a food safety mystery. If you are ready to accept this challenge, look at the following puzzles. Each one provides a clue related to a foodborne illness outbreak.



Instructions

Isabelle and her friends spend a lot of time together. Last week they went to school, the movies and a friend's birthday party. Unfortunately, one of these events made them sick with foodborne illness. Can you help them figure out which one caused this foodborne illness outbreak?



Search for clues and solve the puzzles in this handout to help you investigate! Use the "Clue Tracker" to write down any important facts needed to solve this mystery.



Ali



Beck



Isabelle



Dakota





Clue Tracker



Use this clue tracker to add your ideas about how Ali, Beck, Isabelle and Dakota became sick with foodborne illness.

Ask yourself questions like the following:

- Which events did each person attend last week?
- At which event did food stay in the food temperature danger zone for too long?
- At which event did cross-contamination occur?

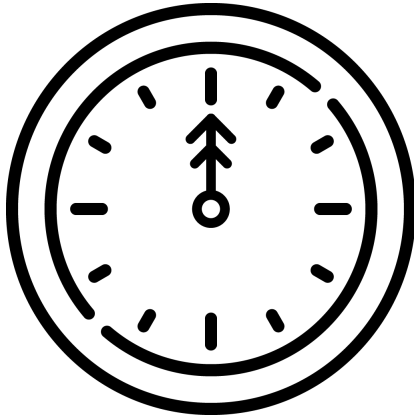
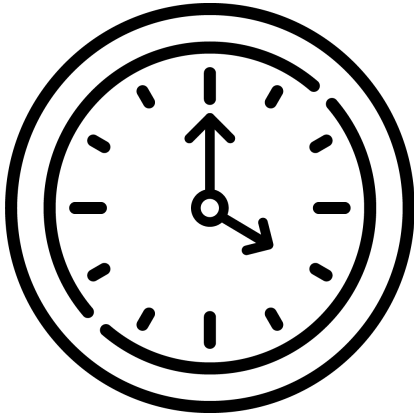
 Ali	
 Beck	
 Isabelle	
 Dakota	

 **Clue 1**  – **Pizza Time Lapse**

At school on Monday, Isabelle’s class was awarded a pizza party! The students ate pizza for lunch and then ate leftover pizza after school! The afternoon was so busy that the pizza was left out on the counter. The classroom microwave was not working, so they didn’t reheat the leftovers. The students were so full after eating pizza twice in one day!





Hint: You will need to know more about the time students ate the pizza to solve this clue.

<p>Clock 1</p>  <p>What time did the pizza arrive?</p> <p>_____</p>	<p>Clock 2</p>  <p>What time did the students eat the leftover pizza?</p> <p>_____</p>
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How long was the pizza left out? _____

What is the recommended time leftovers should be left out? _____

Could this have been the source of the foodborne illness? _____


Clue 2  – **Birthday Party Reflection**

On Tuesday, the kids received a message. It was from the parent who had hosted the party on Saturday. The parent wanted to inform families that a food safety mistake happened during food preparation for the party.



Use the alphabet grid you see below to decode the message. Change each letter in the message to the letter either directly above or below it in the alphabet grid.

Give it a try!

a	b	c	d	e	f	g	h	i	j	k	l	m
↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
n	o	p	q	r	s	t	u	v	w	x	y	z

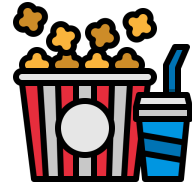
G u r e r j n f p e b f f - p b a g n z v a n g v b a

o r g j r r a e n j o h e t r e f

n a q e n j i r t t v r f


Clue 3  – Theatre Improvements

On Wednesday evening, Isabelle and her friends went to the movies. They were curious to see the local movie theatre after reading an article in last week's paper. It was an interesting article!



Read the article below to find clues about a possible foodborne illness outbreak. Take note of the first letter in each sentence. A message is waiting to be found!

How often do you visit the movies? On Sunday, big improvements were started at the theatre. There will be a new 3-D screen. For kids, there will be a small play area in one of the theatre rooms. Other improvements include a new popcorn machine and a full grill. On the grill, there will be room to make burgers, hot dogs, sausages and nacho meat.

During these improvements, moviegoers should expect changes to normal operations. Some of these changes include no hot food, fewer show times and less seating. Next time you visit the theatre, please show patience as the movie theatre undergoes changes.

Each week, different sections of the theatre will be worked on. Everything will be completed in six weeks. During construction, there will be fewer snack options. The snacks they serve will be prepared before the theatre opens for the day. Options will still include hot dogs, nachos, popcorn, candy and drinks. Be aware that these foods can't be kept hot and will be served cold. Everyone can still enjoy their favourite snacks!

Keep in mind your favourite movies are still on! Everyone is still welcome! Put on your coat and bring your friends. There is room for all of you! Help the theatre stay in business during this time. One last thing—the theatre staff appreciates your business! They are looking forward to seeing you during these improvements.

Message: _____

What food safety mistake has the movie theatre made? _____

Could this have caused a foodborne illness outbreak? _____

 **Clue 4 – Grocery Store Code**

On Thursday, Dakota decided to bring in snacks for the class. They brought homemade blueberry muffins and yogurt drinks. Dakota needed help figuring out how to read the best-before date on the yogurt drinks while at the store. They wanted to know more about the freshness and shelf life of the yogurt. Can you help Dakota decipher the best-before date? Use the three grids below to help you solve the code. Each shape in the code matches a section in one of the grids.

a	b	c
d	e	f
g	h	i

j	k	l
m	n	o
p	q	r

1	2	3
4	5	6
7	8	0

Code:

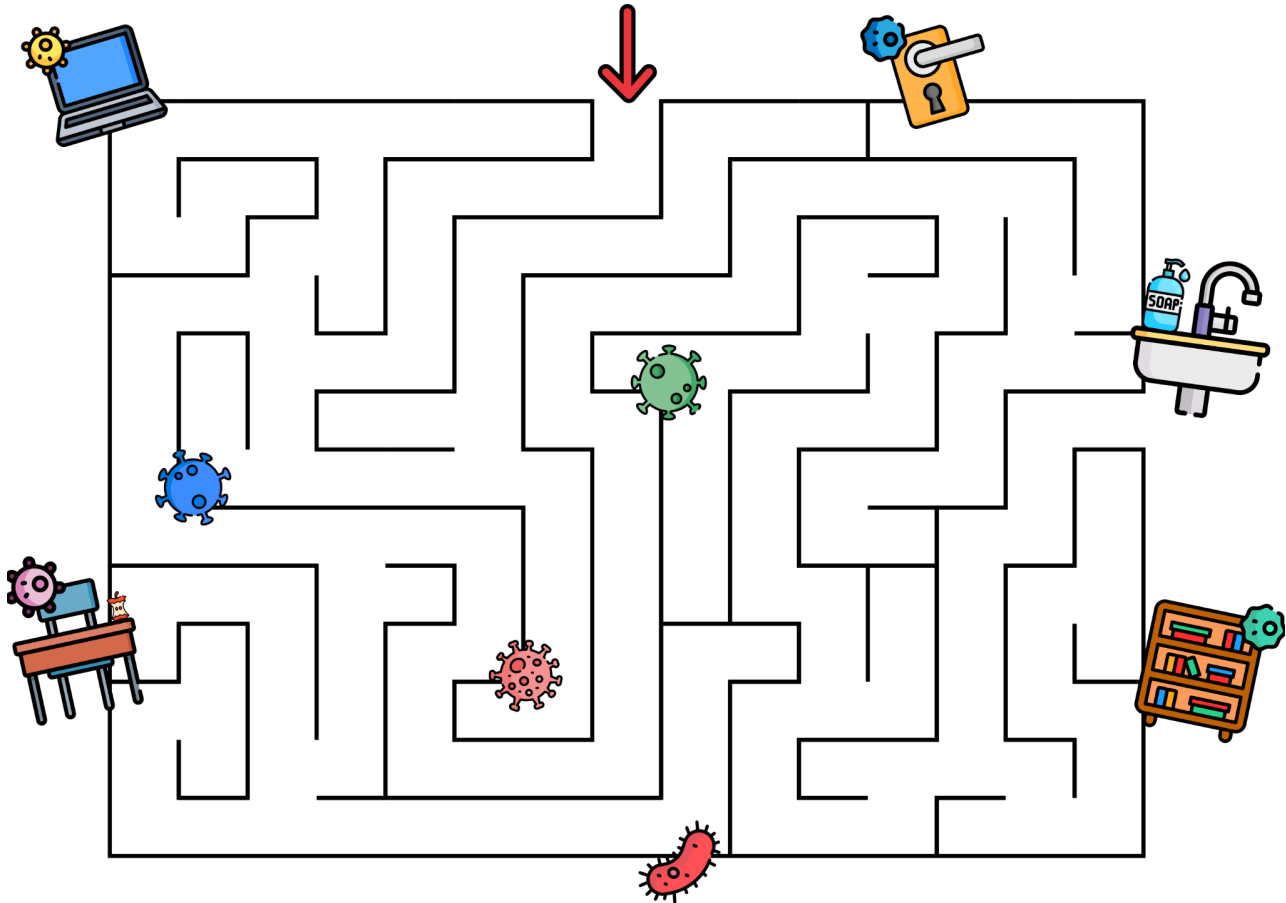
		b					
x	x		.		x		
				1			
		.					
		m					

Had the yogurt drinks passed their best-before date? _____

Is there any evidence that points to Dakota’s snacks causing a foodborne illness outbreak?

Clue 5 – Our Classroom Is a Maze

By Friday, the classroom is a maze! Ali, Beck, Isabelle and Dakota need to enter the maze and make it to the sink with soap before lunchtime. If they're unsuccessful, they risk transferring harmful microorganisms to their lunch food. Can you help them through the maze so they can clean their hands?



What do the surfaces of the items in this maze have in common?

Could the harmful microorganisms found on these surfaces cause a foodborne illness outbreak?

Were you able to make it through the maze and rid the students of the harmful microorganisms?

 **Clue 6**  – **Diary Entries**

You continue your investigation by reading daily journal entries created by Ali, Beck, Isabelle and Dakota. Pay close attention to what they say—you may need this information to help you solve the mystery!

Ali

My favourite foods are fruit and cheese. I do not eat beef or raw veggies. I wish veggies tasted like cheese. On Friday, my aunt took me out for sushi at lunch. I had nigiri for the first time, and it was so good! On Saturday, I attended a birthday party and ate so much cake! Birthday cake is also one of my favourite foods.

Beck

Today is Monday. I had to miss class to go to the dentist. I was a little nervous at first, but the dentist was great! My teeth are clean now, and I got a prize when I was done! I heard that I missed a pizza party at school. I hope my friends saved me a slice!

Dakota

Today was my day to bring snacks to school! I love when it's my turn because I also get to have show and tell. I brought blueberry muffins and yogurt drinks for my snack, and I brought my pet frog (Mr. Hops) for show and tell. The kids in my class thought Mr. Hops was a great pet.

Isabelle

On Wednesday night, I went to the movies with Ali, Beck and Dakota. We watched a great movie about superheroes! There was construction going on at the theatre, so it was a bit of a mess. My friends had nachos, but I chose not to eat them. Cold nachos?! Eww. I did have a hot dog, but it was also cold. I can't wait to go back to the theatre once the improvements are made!

Name: _____

Date: _____

Investigation Report

Where did the foodborne illness outbreak occur?



When did the foodborne illness outbreak occur?

What evidence of a foodborne illness outbreak do you have?

How can we ensure this foodborne illness outbreak does not happen again?