## A Tale of Two Cities: Scene 1

"Man, did you see how nasty the streets were this morning?!" Kevin exclaimed. "I had to practically jump over piles and piles of garbage as I walked to school. It was gross."

"I know, the smell makes me want to puke," his cousin Mabel added, "The garbage collection hasn't come for two weeks." They both walked over to the usual lunch table in the cafeteria and sat down with their trays. Their friends Hoang and Pierre were waiting for them, bursting with excitement.

"Have you heard? They said on Channel 2 Action News this morning that the libraries are all going to be closed!" cried Hoang. "The librarians have all quit their jobs, and now there's no one to sort out all the books. How are we going to do our research for homework with no library?"

Pierre chimed in, "You think that's bad news? Last night my aunt came over with bags of food to keep in our house."

"Why would she do that?" Kevin asked.

"Because the power's been out in Norcross for two days, and her food was going to spoil," Pierre said. "Not only that, but the newspaper said that there would be serious power outages all month, because a power station that serves metro Atlanta isn't working."

Kevin was starting to wonder... "You know what else is weird? It's my job to get the mail every day when I come home from school. But there hasn't been any there for weeks!"

"Well why don't our parents just complain to city hall, like call or write a letter?" asked Mabel. "Don't they manage the entire city from there? Isn't that where all the people in charge are?"

"That's the other thing!" Hoang was really worked up! "They said on the news that city hall was shut down too! They can't write a letter because there's no mail service. They can't call because the phones are out, too."

"Well sheesh!" Pierre said. "What's wrong with our city? It's like all the important things we need are a mess!"

"I'm sure if City Hall gets their act together, all the other problems will be fixed," Kevin proposed. "At least, they can get all these things we need to start working right again."

Mabel was skeptical. "Well I hope so! The smell around here is getting so bad, I think we're going out of town this weekend to escape. If they don't fix it soon, we're all going to have to leave!"

The bell rang, and everyone headed off to their next class.

## A Tale of Two Cities: Scene 2

The sun beat down on the road as Kevin and Mabel watched the highway whiz by in a gray blur. It had been two hours since they left Atlanta, and they were getting bored.

"Are we there yet?" whined Kevin.

"Almost, almost," said Aunt Maria. "Be patient. At least there will be electricity where we're going, and clean streets. They say Plansell is a pretty neat city. They even make all their own food here!"

Finally, the car exited the highway and through the trees, a large structure suddenly became visible.

"Are we going to a castle or something?" asked Mabel, "This place looks like a fortress!" "Wow, look at the size of that thing!" exclaimed Kevin.

Before them, reaching far up into the air, was a very strong-looking wall. The outside was marked "Welcome to Plansell, GA, Where We Stand On Our Own." Kevin and Mabel had never seen a place like this before.

"Aunt Maria, why is there such a large wall around this city? Are they afraid they're going to get attacked or something?" asked Kevin.

"Well, no one really knows why Plansell built this wall. They say it's so that the city can 'stand on its own.' This town is also interesting because of that over there..." As they slowly rolled into the city though one of the large gates in the wall, Aunt Maria pointed at a strange-looking building that took up almost half of the whole city.

"What's in those? Those buildings could store airplanes or something, they're so big! Must be something important..." Mabel wondered.

"Actually," chimed in Uncle Victor, "They're tanks, and they're usually filled with water."

Kevin was surprised. "Water? Why would they want to keep so much water? It rains a lot here, do they really need to keep soooo much?"

As the car rolled down the neat, clean, streets of Plansell, Mabel looked out her window and saw another strange sight.

"Look at all the greenhouses they have here, right there along the streets! We don't have greenhouses like that back in Atlanta," Mabel said. "What are they growing in there?"

"That's where they grow all their food," Uncle Victor said, "They actually don't have to buy any from other cities."

The family spent the weekend having a great time in this funny new city. When they turned on the news, they were eager to hear about what was happening back in Atlanta:

"And today, in breaking news, Chamblee Middle School was nearly burned to the ground. A giant mound of garbage outside the school caught fire, and there was no way to contact the fire department by phone. Fortunately, eighth grader Veena Das was able to sprint over to the station and bring the firefighters to the school in time. This is just one of the many problems facing Atlanta in the past few days. Many say that if city government doesn't do something soon, Atlanta will fall apart! One sign of hope is that the Atlanta City Hall leaders are meeting right now to decide how to fix the city's most important services. Hopefully they will have a solution soon. Coming up next..."

"Whoa, our school almost burned down!" cried Mabel.

"Man, that would have been *horrible*, a whole year vacation!" Kevin sarcastically mused.

"Kevin, don't say that!" Mabel said, disgusted.

"I'm kidding, I'm kidding!" Kevin laughed.

"Well something better be done soon, since we're going back home Sunday!" Mabel was quite upset. "We all depend on our city for daily living. I never realized how important whatever they do at City Hall really is. What do you think will happen next?"

On Sunday night, the family headed home from Plansell back to another busy week in Atlanta. Kevin remembered that he had to finish an assignment for Life Science class the next day.

"Hmm...the assignment is to read about 'organelles.' What are those?"

#### A Tale of Two Cities: Scene 3

"Yaawwwnnnn, it's too early to get up," whined Kevin. He slammed on his alarm clock, rolled out of bed, got dressed, and headed into the kitchen for breakfast. As he sat down at the table with his fruit salad, he flipped the TV on to the news station.

"...in Atlanta are finally looking up! After a successful meeting in City Hall this weekend, the Atlanta government is pleased to report that the postal service will be up and running by this afternoon, and that all librarians have agreed to return to service. While electricity shortages are still an issue, Georgia Power has announced that they should have the problem solved within a few days. More news when we return..."

"About time they straightened this all out!" Kevin grumbled. Still a little grumpy, he gathered up his books and headed to school. Although the awful smell of garbage hung in the air, there was a little less trash on the streets. "Man, I have never appreciated the garbage collectors like I do now!" he said to himself.

Later that morning, he pulled up to his usual table in Life Science class. Pierre and Mabel were flipping through their book to see what today's lesson would be about. They were looking at some pictures of some round things with lots of colors.

"Alright class," Ms. Shizzle called everyone to order, "what can anyone tell us about cells?" She pointed to a large chart of some strange, round blobby-looking things with lots of little blobby-looking things inside of them. One was more square-shaped than round.

"Cells are the building blocks of life," Hoang said, smiling, "and they are the smallest living things."

"Very good, Hoang," Ms. Shizzle said. "Anyone else?"

"Well, cells have little organs inside," Pierre offered, "kind of like how we have organs inside of us. And they each do a different thing. But they're not called organs, they're called *organelles*. Kind of like how in French, we add *–elle* on the end of a word to make it mean something is small. Like Madame, and mademoiselle. Organ, and organelle."

"Excellent, Pierre! Anyone else?"

Kevin didn't really have an answer for Ms. Shizzle right away, but he stared at the picture and he started thinking...He thought about all the weird stuff going on lately in his city, as well as all the different things he saw in the city of Plansell over the weekend. As Ms. Shizzle went on about each of the different organelles, and what they did, things became clearer to him. Finally, he realized that Ms. Shizzle was calling on him.

"Huh?! Oh...Sorry Ms. Shizzle, I wasn't paying attention," Kevin said, "But I think I get these cell things. Think of it like a city..."

# A TALE OF TWO CITIES BOX CHART

Name	Date	Perio	od	_ Scene(s)	<del>_</del>
Other Group Members					_
FACTS (What do we really know after reading the scene the scene tell us?)	What does	true? What are s	that we hoss	nave, what can we g ible explanations fo hat do we <i>think</i> we	r what is
INTERVIEW QUESTIONS (If we could talk to the characters in the scene, we ask them?)	hat would	the case? What v	ed to knowords or	JES w before we can con terms do we need to evaluate our hypoth	define? What

## A Tale of Two Cities: Assignment

Each group will create one of the following products:

- 1. Create a model that includes the major organelles of the cell
- 2. Create a postcard from Plansell that shows what the city looks like from a bird's-eye view
- 3. Create a poster of the different organelles using simile (e.g., the Golgi is "like" the post office)
- 4. Role-play Scene 3 where it leaves off with Kevin explaining cells and organelles
- 5. Create a newspaper story as if you were inside the cell and the same disasters were happening that happened in Atlanta. What would you complain about in your cytoplasmic neighborhood?
- 6. Re-write Scene 1 incorporating more analogs of different organelles. In other words, include centrioles, cytoplasm, and chromatin the way the scene included the post office, city hall, etc.

# A Tale of Two Cities: Grading Rubric

	Poor	Satisfactory	Good	Excellent
Content Mastery	Student is unable to name and describe the function of at least five cell organelles and the primary structure of the cell	Student is able to name and describe the function of at least five cell organelles and the primary structure of the cell	Student is able to name and describe the function of all cell organelles and the primary structure of the cell with detail, and can partially describe the interdependence of the organelles for cell function	Student is able to name and describe the function of all cell organelles and the primary structure of the cell with considerable detail, and can fully describe the interdependence of the organelles for cell function
Scientific Inquiry	Student does not form questions that may help solve the case	Student forms weak questions that marginally help solve the case	Student forms good questions that make key inquiries into the case	Student forms strong questions that display insight into the key factors of the case
Elective Product	Product is not completed or shows no evidence of knowledge of cell structure and organelle function	Product is completed and shows some evidence of knowledge of cell structure and organelle function	Product shows strong evidence of knowledge of cell structure and organelle function	Product shows mastery of cell structure and organelle function
Mandatory Product cell model	Model does not include primary structures of the cell	Model includes some primary structures of the cell, with minimal creativity	Model includes all primary structures of the cell, presented in a creative manner	Model includes all primary structures of the cell with creativity and clear attention to detail
Participation	Student does not participate in discussion, brainstorming, or other inquiry regarding the case	Student makes only minimal contribution to discussion and case-solving	Student makes fair amount of contribution to discussion and case-solving	Student is an active participant in solving the case, offering comments and contributing ideas liberally
Cooperation	Student refuses to work constructively with others	Student makes only minimal effort to work constructively with others	Student makes effort to work constructively with others, being a good listener team member	Students make extra effort to work well with others, being inclusive and open to others' ideas

# **Self/Group Evaluation**

Date							
Your Name:		G	Group #				
Instructions: Ple only be read by ye		-			valuation will		
1. How would yo	ou rate <u>your</u> parti	cipation in grou	up discussion an	nd group work?			
5 Excellent	4 Ve	ry Good	3 Good	2 Fair	1 Poor		
2. How would yo	ou rate <u>your</u> effor	t in completing	the case:				
5 Excellent	4 Very Good		3 Good	2 Fair	1 Poor		
3. Did <u>you</u> comp	lete the assigned	homework?	Yes	No			
If no, explain	why:						
4. How well did	you work with e	veryone in your	group:				
5 Excellent	4 Ve	ry Good	3 Good	2 Fair	1 Poor		
5. Overall, how v	would you rate <u>y</u> o	our performanc	e in this case?				
5 Excellent	4 Ve	ry Good	3 Good	2 Fair	1 Poor		
6. Your total score							
7. Rate each grou			Worked	Overall	Total		
Group Member	Participation in group discussion	Completed Assigned Task	well within group	performance	Score		
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