Cell Cities

Use your notes and your book to complete the following assignment.

The parts of a cell are responsible for doing a lot of different jobs. The city where you live works in the exact same way. There are different buildings and people that do jobs to keep the city running. Look at the definitions of the different organelles and think about a person or place in a city that does the same job.

A great example is the nucleus. The nucleus is like the brain of the cell. It makes decisions and tells the rest of the cell what to do. Can you think of who makes decisions for a city? The mayor can do it, or city hall, or the courthouse. There are a lot of answers that can work.

Look at the diagram below and answer the 3 simple questions.



**1.** State the function performed by each numbered structure in the figure.

**2.** Now name a cell structure that performs each of these same functions.

**3.** Does “Cell City” represent a plant cell or an animal cell?

On a separate sheet of paper, draw a map of a city and include people/places that do the same jobs of the cell parts in the diagram on page 525 in your textbook. On the back of the paper explain why you chose the person or place and what organelle they are like.

Here is a list of some people/places in a city to help get you thinking:

**Police Station**

**City Hall**

**Courthouse**

**Wal Mart**

**Water Tank**

**Fence**

**River/Bridge**

**Roads**

**Railroads**

**UPS or FedEx**

**Post Office**

**Factory**

**Rock Quarry**

**Power Plant**

**Nuclear Power Plant**

You won’t use all of these and I suggest you come up with some not on the list. **Anything** can work as long as you explain your choice on the back of the map or in the map key.

**Cell City Rubric**

Grading on a scale of 60-100, your mini project is worth a total of 40 points (each part worth 20). This is your test grade for our brief unit on cells, cell structure, and cell functions.

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| **Grading Element** | **Point Range** | **Point Range** | **Point Range** | **Point Range** | **Points Earned** |
| **City Map (20 pts)** | **15-20**  Map is well drawn, colored, and organized. All parts of the city can be found and are identified using the correct labels. The picture is neat with no eraser marks and no smearing. | **10-15**  Map is complete and most parts are clearly labeled. Some improvements could be made in the organization of the map. There are few stray marks, few eraser marks, and little smearing. | **5-10**  Map appears rushed or is not organized at all. Parts of the city are not labeled or all labels are missing. Project is messy and is covered in smeared lines, eraser marks, or stray marks. | **0-5**  Map is not drawn or is incomplete. |  |
| **Key/ Explanation**  **(20 pts)** | **15-20**  Key/Explanation is well written, nicely organized and makes sense. Explanations are well stated, focused, and relevant. There are little to no mistakes in spelling and grammar. | **10-15**  Key/Explanation is complete with few mistakes in organization. Explanations are complete but could use some improvement in focus and relevance. Few mistakes in spelling and grammar. | **5-10**  Key/Explanation is rushed, not organized, or missing some key components. Explanations include little detail or make no sense. There are many mistakes in spelling and grammar. | **0-5**  Key/Explanation is incomplete or missing. |  |