

Cell City - Analogy Practice

Name _____ Date _____ core _____



In a far away city called Smileyberg, the main export and product is the steel widget. Everyone in the town has something to do with making the steel widget and the entire town is designed to build and export widgets. The town hall has the instructions for widget making. Widgets come in all shapes and sizes, and any citizen of Smileyberg can get the instructions and begin making their own widgets. Widgets are generally produced in small shops around the city, which are often located along the WITS (Widget Transportation System), a series of subway trains that move widgets around the city for export after it has been constructed. However, to make the widgets, citizens need to purchase access to the water storage reservoir, so they can cool the steel widget after forming it.

In order for a widget to be exported, the WITS take the widget to the postal office, where the widgets are packaged and labeled for export. Sometimes widgets don't turn out right, and the "rejects" are sent to the scrap yard where they are broken down for parts or destroyed altogether. The town powers the widget shops and WITS from a powerplant that is in the city. The entire city is enclosed by a large wooden fence, only the postal trucks (and citizens with proper passports) are allowed outside the city.

PART 1: Match the parts of the city (underlined words) with the parts of the cell.

Organelle (cell part)	Matching Part of a City (<i>underlined words</i>)	Reasoning (<i>explain how the organelle matches with that part of a city</i>)
1. Nucleus		
2. Mitochondria		
3. Ribosomes		
4. Cell Membrane		
5. Golgi Apparatus		
6. Endoplasmic Reticulum		
7. Lysosomes		
8. Vacuole		

PART 2: Critical Thinking Questions

1. Do you think this city best represents a plant or animal cell? **Explain.**

2. What do you think the Widgets represented in this analogy? Why?

3. Analogies, like the Smileyberg city, are used to help relate organelles (parts of a cell) to objects and systems that people are more familiar with. Is this analogy helpful? Explain.

Now it's your turn to come up with your own cell analogy to teach people how the parts of the cell work together!