Name(s): _____ Block: _____ Date: _____

CELL CITY

In a far away city called Grant City, the main export and production product is the steel widget. Everyone in the town has something to do with steel widget making and the entire town is designed around building and exporting widgets. Widgets come in all shapes and sizes and any citizen of Grant can get a copy of the instructions and begin making their own widgets. The town hall has the instructions for widget making. Widgets are generally produced in small shops around the city; these small shops can be built by the carpenter's union (whose headquarters are in town hall). After each widget is constructed, it is placed on one of many special carts which can deliver the widget anywhere in the city. In order for a widget to be exported, the carts 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 carts from a hydraulic dam that is in the city. Small storage depots scattered around town help hold extra supplies and emergency rations for the town. Finally, regions of Grant not directly involved in widget manufacture are filled with residential areas and parks. The entire city is enclosed by a large wooden fence; only postal trucks (and citizens with proper passports) are allowed outside the city.

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

1. Mitochondria	Hydraulic dam
2. Ribosomes	Small shops
3. Nucleus	Town hall
4. Endoplasmic Reticulum	Special carts
5. Cytoplasm	Residential areas and parks
6. Golgi Apparatus	Postal Office
7. Protein	Widget
8. Cell Membrane	Wooden fence
9. Lysosomes	Scrap yard
10. Nucleolus	Carpenter's union
11. Vacuole	Storage depots

Activity 2: On the back of this page, create your own analogy of the cell using a different model. Be creative! Feel free to include a drawing with your analogy if you think that would help you explain your model.

Challenge: Can you come up with an analogy that covers more (or different) structures than were explained using the Cell City?