Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Per\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Cell City Analogy**

In a far away city called **Cedar 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 to build and export widgets. The **town hall & mayor** has the **instructions** for widget making. Citizens of Cedar can get the instructions and begin making their own widgets. However you have to be a citizen of Cedar to do this. You are required by the **security guards** around the **boundaries** of Cedar City to have a special passport before they will let you in to become a citizen. Also the town’s boundaries are enclosed by a tall **wooden fence** to stop people from sneaking in. This protects and gives the town **structure**.

The town **powers** the widget shops from **solar panels** that are on rooftops of the buildings. The **solar panels capture enery** and send these molecules through **gelatin** to the cities **power plant** where **energy is made**. The citizens of Cedar City are quite unique! They do not breathe air. Their special passports allow them to inhale and exhale **gelatin**! This is a special adaptation of the citizens because where ever there are no solids or liquids the remaining area is filled with this gelatin instead of air!

Match the parts of the city **(bold & underlined)** with the parts of the cell.

1. Cell \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6. Cell Wall \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Chloroplasts \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7. Mitochondria \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Nucleus \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 8. DNA (genetic material) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Cell Membrane \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Cytoplasm \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\*\* Create your own analogy of the cell using a different model. Some ideas might be: a school, a house,

a factory, carnival, car, rodeo or anything you can imagine\*\*

\*\*Include an analogy for all 8 parts listed above!!! (Cell, Mitochondria, Chloroplast, Nucleus, Cell

Membrane, Cytoplasm, Cell Wall, DNA). Make sure and indicate which part each analogy

represents. **Underline the analogy in the story and write the organelle name above that analogy!**

Your Analogy (be Creative):