

Name: _____

Specialized Cell Design Challenge



The shape of a cell reveals its function. Designing and building a model or simulation of a cell will allow you to begin to think about the relationship between a cell's structure and its function.

Specialized cells vary widely with respect to:

- shape, size, number and type of organelles

Challenge:

- Decide what your cell will do.
 - It must be a **NEW** function in the human body.
- Figure out the shape and size required for your cell required to perform its **NEW** function
- Create a **3D model** or **drawing** (only for those very artistically inclined) of your cell



Design Requirements:

- It will include at least **4 organelles** covered in class **and** any new parts you create.
- All parts should be **labeled** clearly. A legend/key may be used.

Written Requirements:

1. Describe the new function of your cell in the human body.
2. Describe the **special** features of your cell.
*Feature → explain (more, longer, larger.... **NOT WHY**)*
3. How do these special features make it suited for its function?
Feature → function, explanation of why required/how helpful

Design	
Main/key organelles (min 4) are present as well as unique parts for specific function.	/5
Clarity: Organelle labels/key/legend is clear and easy to use. Easy to distinguish different parts of cell.	/5
Professionalism (neat, carefully constructed, planning evident...)	/5
Written Answers	
Describe the new function of your cell.	/3
Describe the special features of your cell.	/3
How do these special features make it suited for its function?	/3
Total	/24