

Group 1:

1. What type of cell model is your group working on? You don't have to answer this question now, if you are not sure yet. But make a note of set of information that helped you to get to the answer.
2. Did you identify some membrane-bound organelles in your kit? (Hint: the large circular organelle is for storage!)
3. What are the functions of other two organelles?
4. Have you found the answer for question # 1?
5. If yes, which organelle is missing from your kit? Name one function of this missing organelle.
6. Well, now is the time to discuss your results with group # 3!

Group 2:

1. What type of cell model is your group working on? You don't have to answer this question now, if you are not sure yet. But make a note of set of information that helped you to get to the answer.
2. Did you identify few membrane-bound organelles in your kit? (Hint: one of them should not be in your kit!)
3. The brown colored, membrane-bound organelle is cut in half to show an important macromolecule that it carries inside. Identify this organelle and describe one of its functions.
4. Have you found the answer for question # 1?
5. If yes, which organelle is the "odd-one" in your kit? Name the function of this misrepresented organelle.
6. Well, now is the time to discuss your results with groups 1 and 3!

Group 3:

1. What type of cell model is your group working on? You don't have to answer this question now, if you are not sure yet. But make a note of set of information that helped you to get to the answer.
2. Did you identify few membrane-bound organelles in your kit? (Hint: Of the two structures, only one should have been in your kit!)
3. The brown colored, membrane-bound organelle is cut in half to show an important macromolecule that it carries inside. Identify this organelle and describe one of its functions.
4. Have you found the answer for question # 1?
5. If yes, which organelle is missing from your kit? Name one function of this missing organelle.
6. Well, now is the time to discuss your results with group # 1, **BUT** wait for them to initiate the discussion! And, remember to ask them for the **ONLY** membrane-bound organelle that the cell assigned to your group should have (they have one extra)!!!

Group 4:

1. What type of cell model is your group working on? You don't have to answer this question now, if you are not sure yet. But make a note of set of information that helped you to get to the answer.
2. Did you identify few membrane-bound organelles in your kit? (Hint: that thingy with silver stuff inside should not be in your kit! **AND** that is not the only one that should not be there!!!)
3. What are the functions of green-colored and yellow-colored organelles?
4. Have you found the answer for question # 1?
5. If yes, which organelle is missing from your kit? Name one function of this missing organelle.
6. Well, now is the time to discuss your results with group # 5!

Group 5:

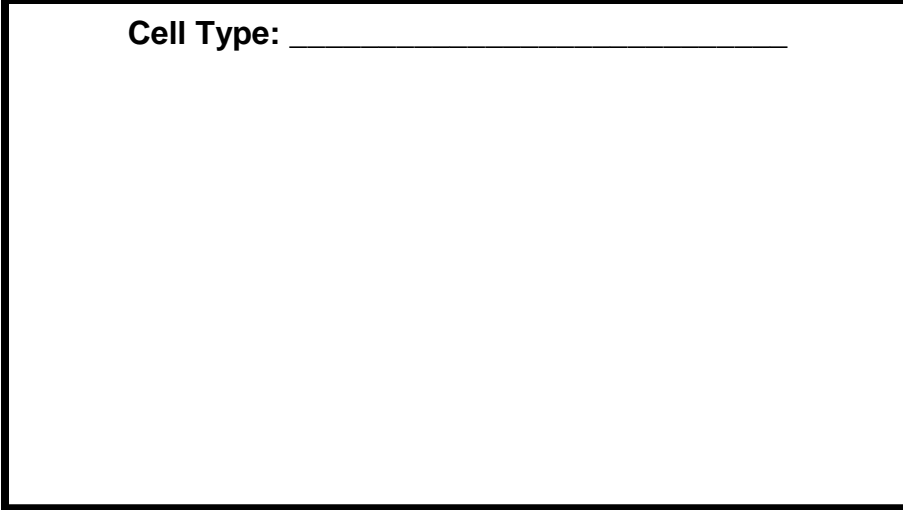
1. What type of cell model is your group working on? You don't have to answer this question now, if you are not sure yet. But make a note of set of information that helped you to get to the answer.
2. Did you identify few membrane-bound organelles in your kit? (Hint: one is missing and one should not be there!)
3. The brown colored, membrane-bound organelle is cut in half to show an important macromolecule that it carries inside. Identify this organelle and describe one of its functions.
4. Have you found the answer for question # 1?
5. If yes, which organelle is missing from your kit? Name one function of this missing organelle.
6. Well, now is the time to discuss your results with group # 4! Hey, you may want to **exchange** more than just information about your assigned cells... organelles, for example?!

Group 6:

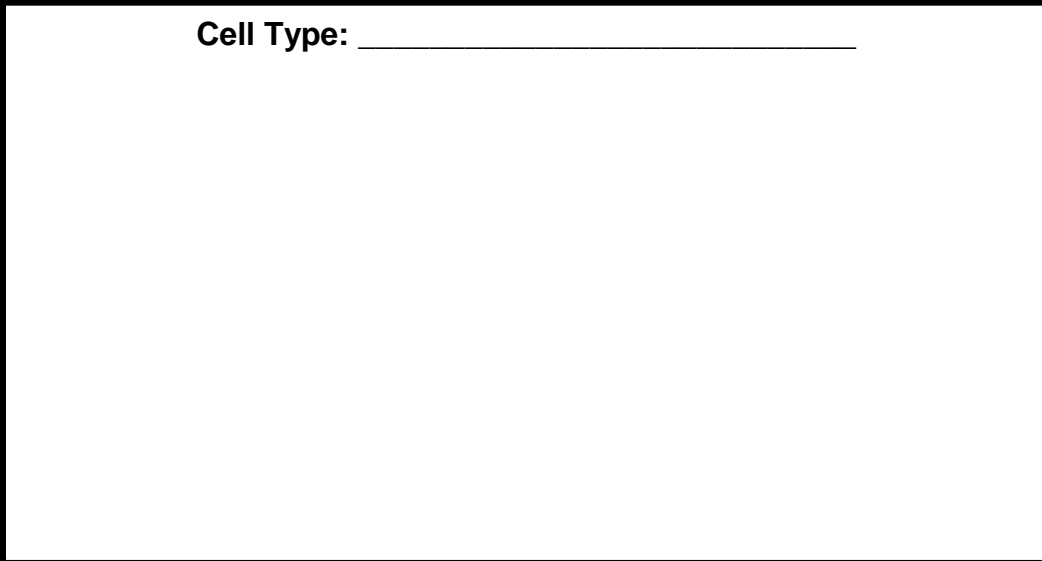
1. What type of cell model is your group working on? You don't have to answer this question now, if you are not sure yet. But make a note of set of information that helped you to get to the answer.
2. Did you identify few membrane-bound organelles in your kit? (Hint: you should not be having one of them!)
3. What is the ONE cellular character ALL living organisms (including prokaryotes like bacteria) share in common? Do you see that in your kit? Feel free to ask me if you are not sure about the question!
4. Have you found the answer for question # 1?
5. If yes, which important structure is missing from your kit? Name one function of this missing structure.
6. Well, now is the time to discuss your results with group # 4!
7. Eventually, also make sure to exchange information with group # 5!

Using the models put together by each group, draw and label all the parts of a bacterial, a plant and an animal cell.

Cell Type: _____



Cell Type: _____



Cell Type: _____

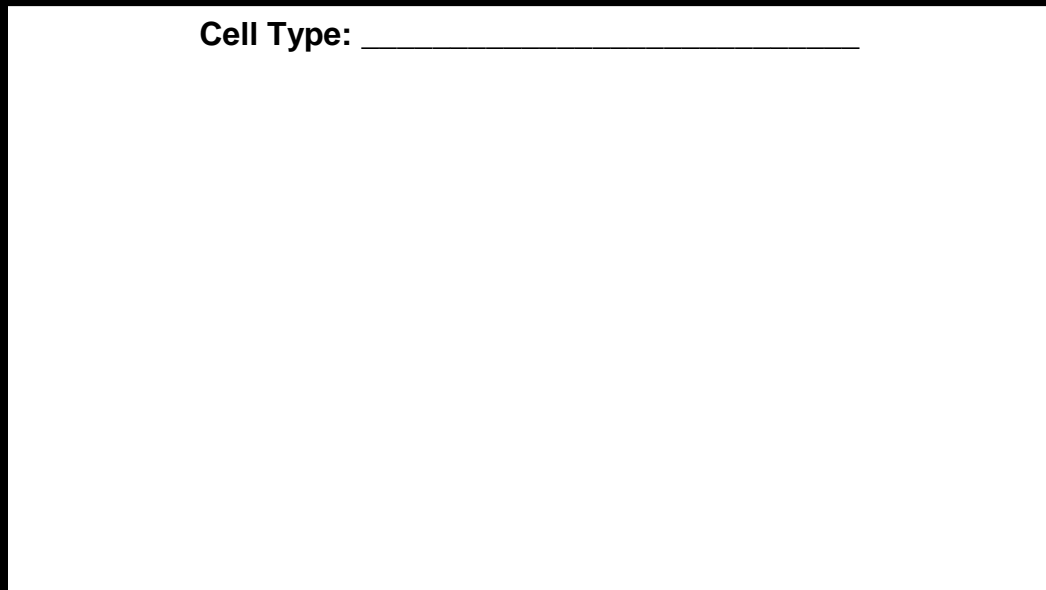


Table 1: Variations in the sizes of IDENTIFIED structures from the models

Organelle	Size (in mm)
Chloroplast	
Mitochondrion	
Vacuole	
Ribosomal subunit	
Vesicle	
Lysosome	
Nucleus	
Plant Cell	
Animal Cell	
Bacterial Cell	

Use the data on measurements of organelles to respond to following questions:

Which organelle is the largest in a plant cell? What is its function?

Which organelle is the smallest in a plant cell? What is its function?

Name two organelles that are found in plant and animal cells.

Name an organelle that is found in all three types of cells. What is its function?

Name any two membrane-bound organelles that were not part of the kit in plant and animal cells.

Identify one or two differences between a prokaryotic and a eukaryotic cell, other than the differences in sizes (Use your diagrams to answer this question).