

Cell Taxonomy: Introduction to tissue/cell observation:

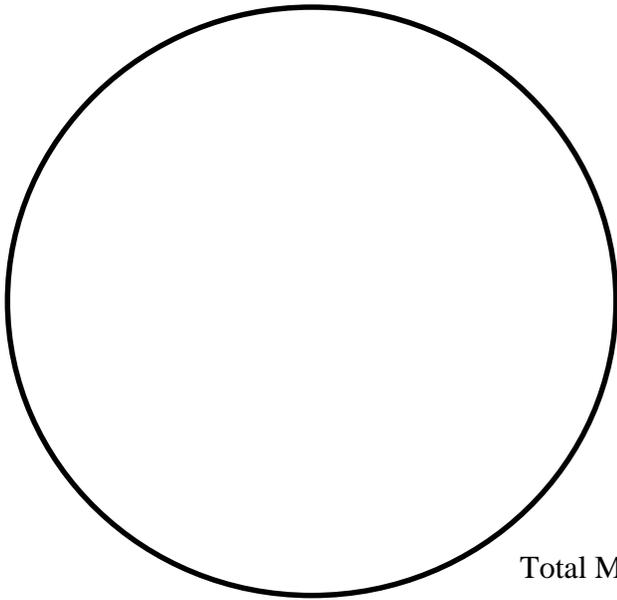
Microscopes allow us to look closely at cells. There are many different types of organisms: three Domains comprised of Bacteria, Eukarya, and Archeae; and 4 Kingdoms of Eukarya: Plantae, Animalia, Fungi, and Protista. Each of the Domains has characteristic cell types, which you have learned about in Biology class. Today, we are going to look at cells from Bacteria, Protists, Fungi, Plants, and Animals. Based on what you've learned about these types of organisms and their cells, your job is to figure out from what type of organism the tissue or cells on your slide were taken.

What we will do today:

1. Your instructor will give your group a slide labeled A, B, C, D, or E. Each group will have a different sample. Your job is to examine the tissue, draw and label (if possible) what you see and take detailed notes. Pay especial attention to the characteristics of the cells that you see.
2. Determine what type of organism was the source of your tissue or cells. You should be able to explain how you came to this conclusion.
3. If you cannot determine the type of organism that was the source of your tissue or cells, why not? What would you need to do to make this determination?
4. Once you have done this for one slide, look at another slide with a different letter.
5. We will share what we find with each other, so be sure to take good notes.

I. What type of organism is this? Write the letter you see on the slide here: _____

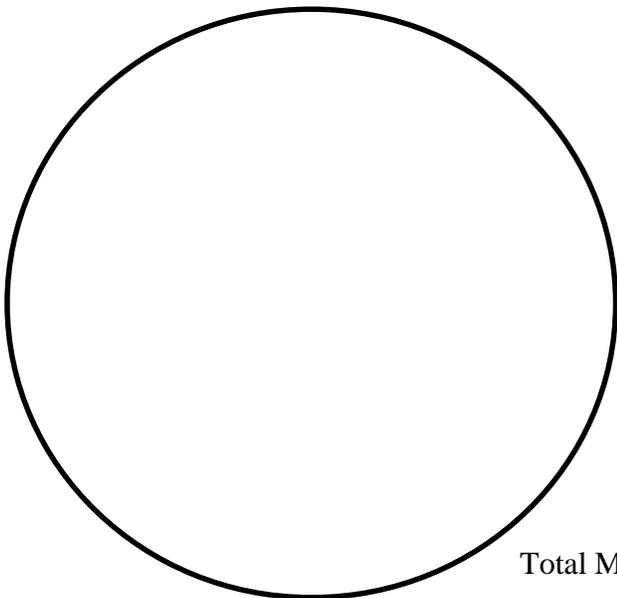
1. Examine the “unknown” tissue or cells given to you by your instructor. Draw what you see at 100x and 400x. **Label at least three structures** and describe what you see in the space beside your drawings.



Notes:

Total Magnification: _____x

Notes:

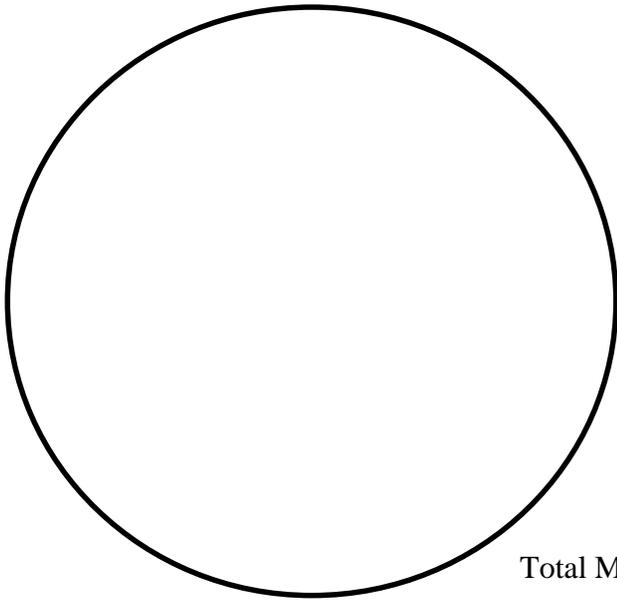


Total Magnification: _____x

2. **What type of organism is this? Circle the parts of your notes (above) that helped you figure it out.**

II. What type of organism is this? Write the letter you see on the slide here: _____

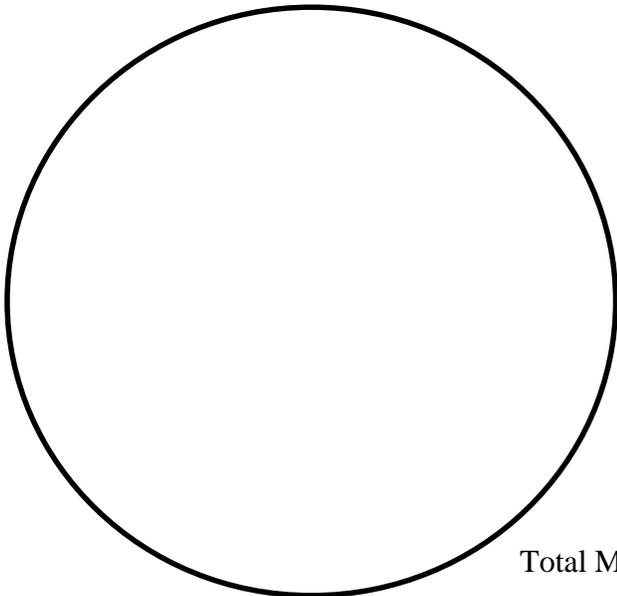
1. Examine another “unknown” tissue or cells given to you by your instructor. Draw what you see at 100x and 400x. **Label at least three structures** and describe what you see in the space beside your drawings.



Notes:

Total Magnification: _____x

Notes:



Total Magnification: _____x

2. **What type of organism is this? Circle the parts of your notes (above) that helped you figure it out.**

III. Solving the mysteries:

1. Were you able to figure out what each of your mystery slides were?
2. If not, why not? What would you need to know or see in order to figure it out?

3. What was A and how could we tell?

4. What was B and how could we tell?

5. What was C and how could we tell?

6. What was D and how could we tell?

7. What was E and how could we tell?