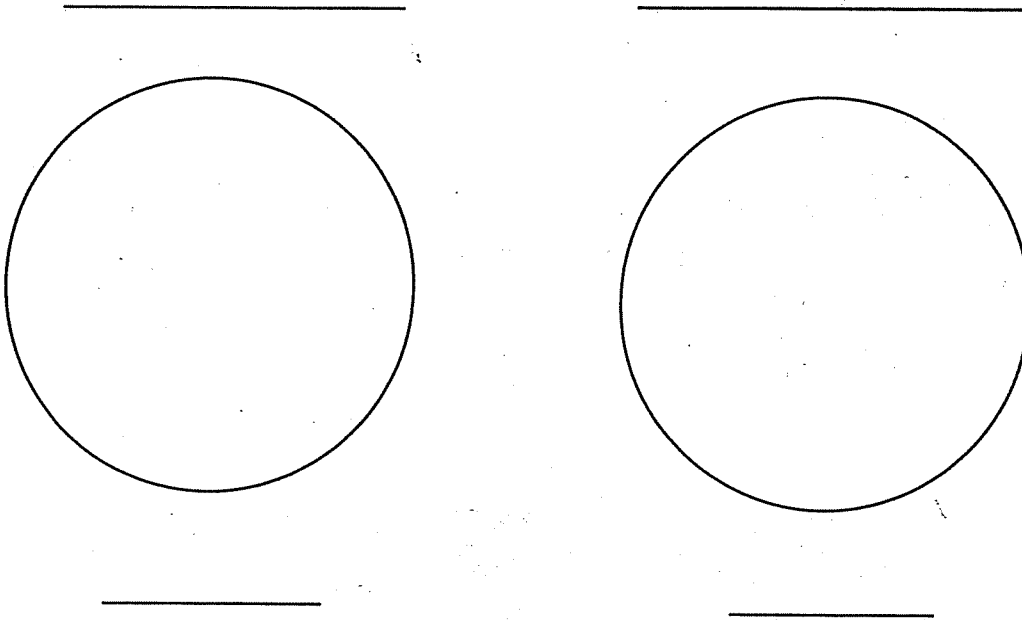


Name \_\_\_\_\_ Date \_\_\_\_\_ LAB 6 Day \_\_\_\_\_  
Classroom Teacher \_\_\_\_\_ Lab Teacher \_\_\_\_\_

**Part 1:**

Draw the teacher's choice of one animal and one plant cell. Begin on low power. Draw on high power. Draw in PENCIL. Draw several cells in the space provided. On the top line, label your drawing and on the line below the circle, give the total magnification. Use pen.



Label the following structures on the drawing you made of a plant and animal cell, if you see them  
cell wall, chloroplasts, cell membrane, nucleus, cytoplasm

Would you expect to see the nucleolus? \_\_\_\_\_ Why or why not? \_\_\_\_\_

Name two things that distinguish animal cells from plant cells

1. \_\_\_\_\_
2. \_\_\_\_\_

Write the formula (words) for computing total magnification

Magnification = \_\_\_\_\_ times \_\_\_\_\_

Calculate the magnification for your microscope on medium power below

Magnification = 4 x 10 = \_\_\_\_\_

Sometimes when you observe a prepared slide the colors are not normal.

What was applied to the slide? \_\_\_\_\_

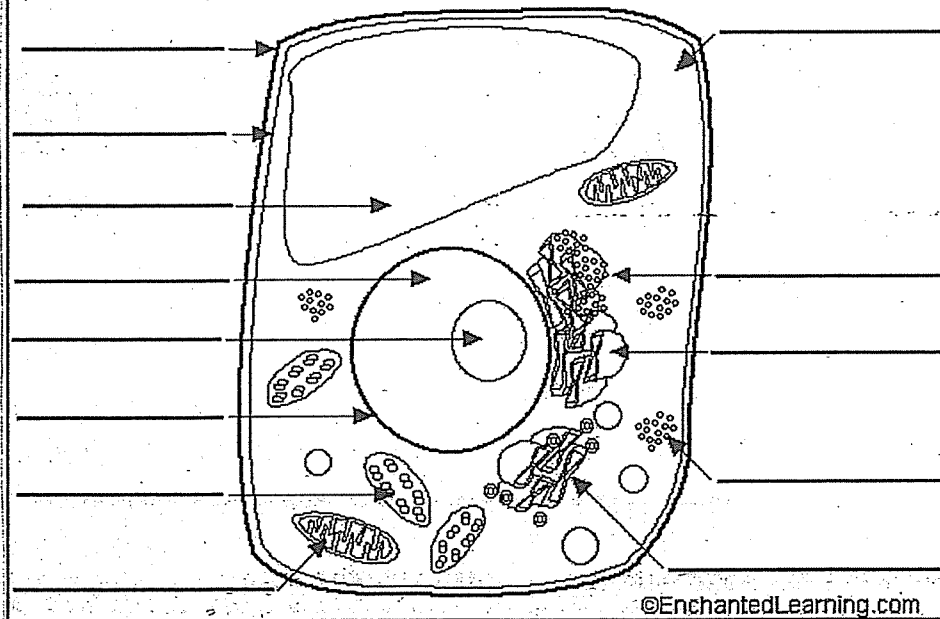
Why? \_\_\_\_\_

Using a textbook or your notes, place the following names in the correct column:

centriole, chloroplast, cell membrane, cell wall, nucleolus, vacuole, nucleus, mitochondria, ribosome

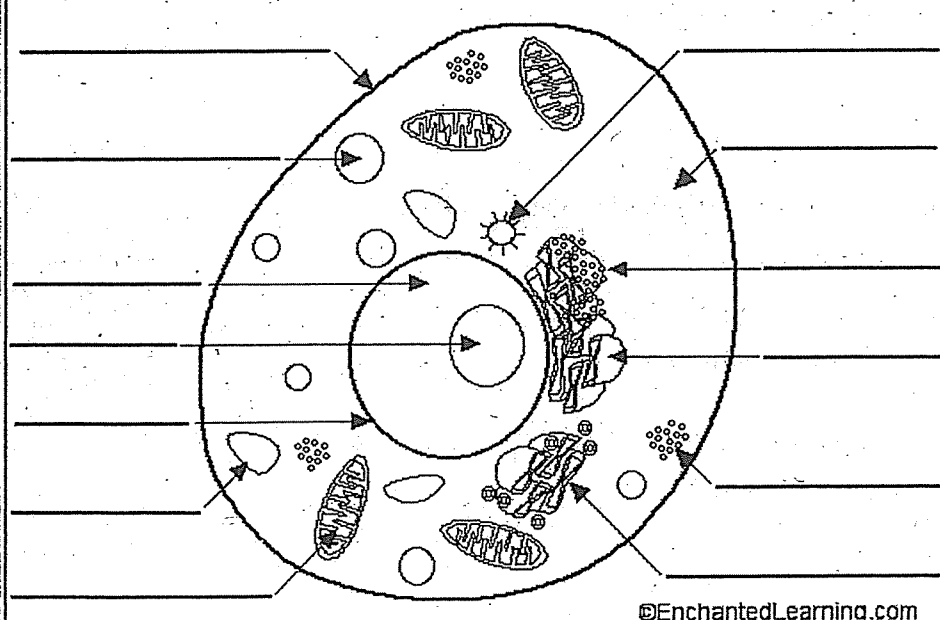
Found in plant only	Found in animal only	Found in both

**Cross-Section of a Plant Cell**



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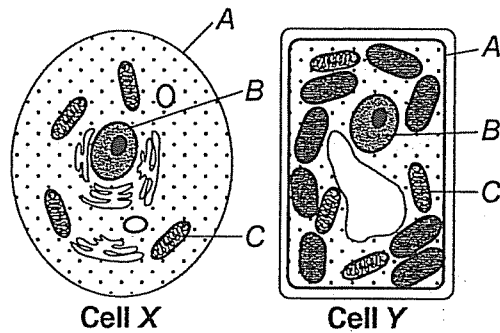
**Cross-Section of an Animal Cell**



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- \_\_\_ 1. Which structure can be found in both plant and animal cells?  
1. chloroplasts    2. cell wall    3. plasma membrane    4. centrioles
- \_\_\_ 2. Which part of the cell contains the heredity material?  
1. chloroplasts    2. nucleus    3. plasma membrane    4. vacuole
- \_\_\_ 3. In which organelle of the cell does photosynthesis normally occur?  
1. chloroplasts    2. cell wall    3. plasma membrane    4. nucleus
- \_\_\_ 4. The cell organelles are found in which part of the cell?  
1. cytoplasm    2. mitochondria    3. vacuoles    4. nucleus
- \_\_\_ 5. Cellular respiration, the production of energy, occurs in which organelle?  
1. cytoplasm    2. mitochondria    3. endoplasmic reticulum    4. nucleus

Questions 6 - 10 refer to the following:  
The diagram below represents two cells, X and Y.



6. Letter X represents a(n) \_\_\_\_\_ cell.  
Letter Y represents a(n) \_\_\_\_\_ cell.
7. Select one lettered organelle and write the letter of the organelle. Then identify the organelle you selected.

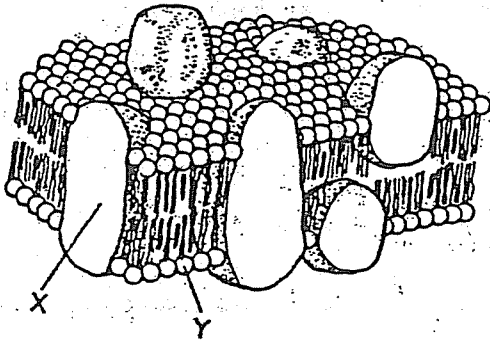
Letter	Name of organelle
--------	-------------------

8. State one function of the organelle that you identified in #7.

9. Name a life process that occurs in that organelle \_\_\_\_\_

10. Identify one process that occurs in cell Y, but not cell X. \_\_\_\_\_

11 - 12 The diagram below represents the fluid mosaic model.



11. What organelle does this represent?

1. chloroplasts
2. cell wall
3. plasma membrane
4. nucleus

12. Molecules X and Y represent a

1. nucleic acid and a carbohydrate
2. protein and a lipid
3. protein and a carbohydrate
4. nucleic acid and a lipid

13 - 14 The photograph below shows a sample of stained frog blood cells viewed under high power.



13. The stain was most likely used to

1. increase the magnification of the cells
2. make cell parts more visible
3. stop meiotic activity in the cells
4. test for the presence of simple sugars

14. Structure A is best described as a

1. lysosome that stores enzymes
2. mitochondria that produce ATP
3. chloroplast that carries out photosynthesis
4. nucleus that regulates cell activity