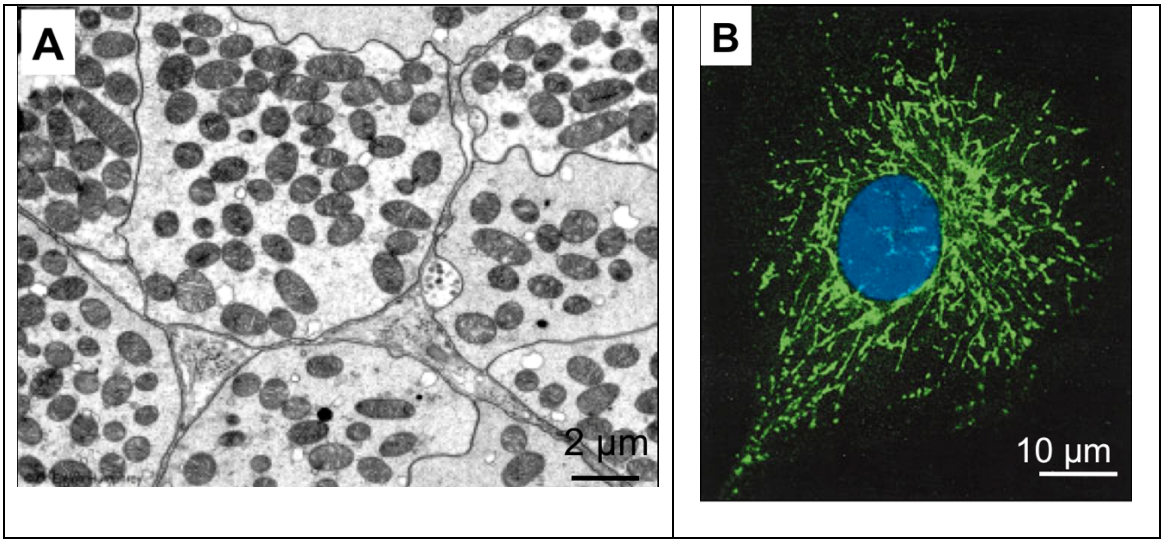
Name: _____ BIOL 200 2020W

Post-Unit Worksheet: Unit 1

(based on Problem Set 1.2.4)

Understanding what you are seeing in micrographs is an essential skill in BIOL 200. Here, we want you to think about the differences in the microscopy techniques used, and how they can generate different perspectives of a cell.

Here we provide two micrographs labeled 'A' and 'B', shown below.



- In the cells in (A), the mitochondria appear to each exist as discrete units.
- In (B) the mitochondria are green and appear to form a network in the cell (the nucleus is stained blue).

To help you get started:

- What kinds of micrographs are shown? What are the distinguishing features in these micrographs that allow you to identify the microscopy technique used to make the micrograph?
- Keep in mind that images can be modified (e.g. expanded, cropped, have false colour, or be in greyscale), so your method of identifying the microscopy technique should hold up to such image modifications.

Questions:

a) Which is a more accurate view of the **distribution** of mitochondria in a cell, A or B? Why?

b) What type of question would be best answered by the image that you did not pick in a)?