Observing Specialised Cells

# Task: To observe and record observations on the different types of cells provided.

**Materials**

* Microscope
* Prepared slides of’
* Muscle cells (Striated, smooth and cardiac)
* Nerve cells (Cerebellum, spinal cord, optic nerve)
* Reproductive cell (spermatozoa and ovaries)
* Blood Cell (blood smear human)

**Method**

1. Take one prepared slide to your microscope and observe using low power first. (do not write observations at this point)
2. Increase the magnification until the cells are clear and detailed, this may be medium for some of the bigger cells or High for the smaller cells. (Remember the safety rules)
3. Record observations on the **Microscope observation sheet**. These observations should include approximate size, colour, shape and any other features that can be seen.
4. Draw a diagram of what you can see above the description. Be sure to write the name of the slide you are observing.
5. Do this for two of each cell type (except blood, there is only one).
6. When finished with slide please return it to the front for other groups to use.

**Questions:**

Answer these questions in your book or on your device.

1. Most of the cells we observe have a nucleus. Are they prokaryotic or Eukaryotic?
2. Which specialised cell type did we not observe in this lesson? Describe what you think it would look like under a microscope
3. Compare the spermatozoa and the ova. How are they different?
4. Compare the two muscle slides you observed. How are they different? How are they the same?
5. Why do you think the nerve cells did not look like the cells in the pictures you have seen previously?
6. What do all of these cells have in common?