There are many other ways to organize and classify anemias. From one simple flow chart you can add and study so many other concepts.

Classifying Anemias

- **Decrease MCV Decrease MCHC**
  - Evaluate RBC morphology, Iron Studies

- **Decrease MCV**
  - Decrease MCHC

- **Decrease MCV Increase MCHC**
  - Evaluate RBC morphology, Iron Studies

- **Increase MCV Decrease MCHC**

- **Normal MCV Normal MCHC**
  - Evaluate Reticulocyte count and Morphology

**Microcytic Hypochromic**

**Normocytic Normochromic**

**Macrocytic Hypochromia**

**Quantitative Hemoglobinopathies**

- Elevated retic
- Erythrocytosis
- Target cells
- Basophilic stippling
  - Evaluate hemoglobin electrophoresis to further differentiate

**Iron Deficiency**

- Anisocytosis
- Poikilocytosis
- Normal to increase platelet
- RBC fragments
- IRON STUDIES

**Chromic Disease/Inflammation**

- MCV nearly normal
- IRON studies

**Sideroblastic Anemia**

- Lead poisoning
- Basophilic stippling
- Pappenheimer bodies
- Iron studies

What are these? What stain do you need? What are they composed of?

Include here how to differentiate between Beta-Thalassemia and Alpha-Thalassemia. That means electrophoresis!

Write down the most important Iron Studies that will differentiate these four.