**P. falciparum**

1. **Gametocytes**
   - **Location:** Border of Platelets and Lymphocyte/Monocyte Layers
   - **Appearance:** Yellow, crescent (or sausage) shaped
   - **What makes it *falciparum*:** Appearance

2. **Schizonts**
   - **Location:** Granulocyte layer
   - **Appearance:** Green, with approximately 8-24 black merozoites
   - **What makes it *falciparum*:** Smaller ratio to immature trophozoites; Not usually seen in peripheral blood except in heavy infections

3. **Mature Trophozoites**
   - **Location:** Granulocyte layer
   - **Appearance:** Orange, with green nuclei
   - **What makes it *falciparum*:** Smaller ratio to immature trophozoites; Not usually seen in peripheral blood except in heavy infections

4. **Immature Trophozoites**
   - **Location:** Throughout Red Blood Cell layer
   - **Appearance:** Green ring or headphone shaped
   - **What makes it *falciparum*:** Larger ratio to mature trophozoites/schizonts; Appearance throughout Red Blood Cell layer; Two parasites may infect the same cell ("double infection")
**P. vivax**

1. **Gametocytes**
   - **Location:** Border of Platelets and Lymphocyte/Monocyte Layers
   - **Appearance:** Green/yellow with small dark markings
   - **What makes it vivax:** Appearance

2. **Schizonts**
   - **Location:** Granulocyte layer
   - **Appearance:** Green, with approximately 12-24 black merozoites
   - **What makes it vivax:** Greater ratio to immature trophozoites

3. **Mature Trophozoites**
   - **Location:** Granulocyte layer
   - **Appearance:** Orange, with green nuclei
   - **What makes it vivax:** Greater ratio to immature trophozoites

4. **Immature Trophozoites**
   - **Location:** Red Blood Cell layer
   - **Appearance:** Green ring shaped
   - **What makes it vivax:** Smaller ratio to mature trophozoites/schizonts; Less distinct ring shape; No double infections; Generally found at the top of the Red Blood Cell layer