

# Malaria's Life Cycle

## Mosquito phase

(A) **GAMETOCYTES** ingested while feeding on blood develop into male and female **GAMETES (B)** in the mosquito's gut. They sexually merge to produce an **OOKINETE (C)** which grows into an **OOCYST (D)**. After developing for two or three weeks, a **MATURE OOXYST (E)** ruptures to release **SPOROZOITES (F)** which migrate to the mosquito's salivary gland where they wait until the mosquito's next feeding.

## Human phase

(1) **SPOROZOITE** enters the blood stream as a mosquito feeds. It finds its way to a liver cell where it embeds itself to become a (2) **SCHIZONT**. The (3,4) **GROWING SCHIZONT** feeds on the liver cell for five to seven days. A (5) **MATURE SCHIZONT** creates tens of thousands of (6) **MEROZOITES** which are released and go on to start the (7) **RED BLOOD CELL INFECTION CYCLE**. Over the next 48 hours, the merozoite produces approximately a dozen copies of itself (8). The blood cell ruptures (9) releasing merozoites which go on to infect more red blood cells (7,8,9) while a few may go on to develop into **GAMETOCYTES (10)** which can remain in the bloodstream for a few days to be ingested by a mosquito during a subsequent feeding, thus completing the cycle.

