eventually removed by the enzyme DNA polymerase I. The enzyme DNA
moves away from the origin of replication. Every replication fork has a twin
nucleotides serve as a “primer” off of which the daughter DNA strands can
other able to add nucleotides only in chunks, called Okazaki fragments,
replication fork, moving in the opposite direction from that same internal
nucleotides in the direction of the replication fork (the leading strand), the
adds RNA nucleotides complementary to the parent DNA chain. The RNA
daughter strands synthesize through different methods, one adding

locations called origins of replication. A replication fork is formed as helicase
DNA chain. This characteristic of DNA polymerase III means that the
that make up the helix that is to be copied. Helicase untwists the helix at
(SSBP) keep the parental DNA helix unwound and separated, then primase
be built by the enzyme DNA polymerase III. The RNA primers are
polymerase III can only add new DNA nucleotides to the 3’ end of the new
The first step in DNA replication is the separation of the two DNA strands
location to the DNA strand's opposite end. Single-stranded binding proteins

are then stitched together by DNA ligase, creating a continuous strand.
away from the replication fork (the lagging strand). The Okazaki fragments