▼ **Adenylation**

- Pyrophosphate group is released, AMP is added to lysine in the enzyme's active site

▼ **Transfer**

Pyrophosphate linker is formed after NDA ligase transfers AMP to 5′ phosphate at the end of DNA

▼ **Ligation**

5′ phosphate combines with 3′ hydroxyl to create a phosphodiester bond

▼ DNA Replication Full Process

- Starts at centre of replication
- DNA strands unwind and create replication fork
- RNA primase makes RNA primers
- DNA polymerase III places DNA on leading strand
- New RNA primer is made as replication fork moves along lagging strand
- DNA polymerase III extend the RNA primers
- Fragments made in the process are called okazaki fragments
- DNA polymerase I replaces RNA primer with DNA
- DNA ligase joins the fragments together